PERCEPTIONS AND CONTRIBUTIONS OF HEALTH POLICYMAKERS ON THE MANAGEMENT OF INTERPROFESSIONAL GROUP CONFLICTS IN THE NIGERIAN HEALTH SYSTEM

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Dedication

Glory be to God in the highest who works in me to will and do His good pleasures. I dedicate this thesis to the Eternal Love, Master of the Universe and merciful King who controls seasons and times.

This thesis is dedicated to my late father. Mr Samuel Bola Bello, a man committed to service and to loving his family. Your memory is forever blessed in my heart.

To serve as encouragement for my children, I also dedicate this thesis to Joseph Adeyinka Bello and Emmanuel Adekunle Bello. It is my desire that you do the will of God and achieve your purpose in life. Never give up and remember to always think positive, look positive and act positive. I love you so much.
Abstract

Conflict in healthcare is ubiquitous and unavoidable due to the complexity of interactions, relationships and processes required for care delivery. Health policymakers confronted with this reality often perceive conflict as a threat and thereby seek to eliminate it. However, there is a growing awareness of functional or constructive conflict as a management approach that helps convert conflicts into benefits. The Nigerian health system has consistently faced dysfunctional Interprofessional Group Conflicts (IGCs) that have become synonymous to industrial action. Inequities in salary, career advancement, and leadership of hospitals are widely reported as causes of IPGCs between the often-conflicting parties, the Nigerian Medical Association (NMA) and the Joint Health Sector Union (JOHESU). Evidence to date has focused on the perspectives of frontline health workers, leaving a knowledge gap relating to the perceptions and contributions of policymakers who formulate key decisions that shape the entire health system. Hence, this thesis seeks to understand the perceptions and contributions of health policymakers on the management of IPGCs in the Nigerian health system.

This study is grounded in qualitative health policy and systems research methodology. Data collection include 20 key informant interviews and 18 official documents which were analysed using reflexive thematic analysis and content/documentary analysis, respectively. Policymakers’ analysis was also conducted to identify policymakers’ roles, interests, and contributions to management of IPGCs.

Causes of IPGCs were disputed and found to be complex and multifactorial including unregulated professionalisation, organisational, economic, historical, political, and human factors underpinning interprofessional relationships in the health system. Although social dialogue is reportedly used to resolve conflicts by policymakers, current management approaches tend to be reactionary without a comprehensive policy. Policymakers recommend management strategies to functionalise IPGCs including regulating professionalisation, interprofessional education/training, transparent job evaluation/salary review, complete reform of the health system, and establishing a conflict management system within the framework of interprofessional teamwork.
The findings discussed in this thesis can significantly contribute to policies and management efforts at effective and sustainable management of IPGCs in the health system. This thesis reveals a need for future research in sociology of profession in Nigeria and its relations to interprofessional teamworking.
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<tr>
<td>CATA</td>
<td>Computer Aided Text Analysis</td>
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<tr>
<td>CDS</td>
<td>Clinical Decision Support</td>
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<tr>
<td>Covid-19</td>
<td>Corona Virus Disease 2019</td>
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<tr>
<td>CMAC</td>
<td>Chairman Medical Advisory Committee</td>
</tr>
<tr>
<td>CMD</td>
<td>Chief Medical Director</td>
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<td>CMF</td>
<td>Conflict Management Framework</td>
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<td>CMS</td>
<td>Conflict Management System</td>
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<tr>
<td>CONHESS</td>
<td>Consolidated Health Salary Structure</td>
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<tr>
<td>CONMESS</td>
<td>Consolidated Medical Salary Structure</td>
</tr>
<tr>
<td>CPOE</td>
<td>Computerised Physician Order Entry</td>
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<tr>
<td>CSO</td>
<td>Civil Society Organisation</td>
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<tr>
<td>ERs</td>
<td>Employee Representatives</td>
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<tr>
<td>FCT</td>
<td>Federal Capital Territory</td>
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<tr>
<td>FG</td>
<td>Federal Government</td>
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<td>Fig.</td>
<td>Figure</td>
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<tr>
<td>FMOH</td>
<td>Federal Ministry of Health</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GH</td>
<td>General Hospital</td>
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<tr>
<td>GMC</td>
<td>General Medical Council</td>
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<tr>
<td>HPRAC</td>
<td>Health Professions Regulatory Advisory Council</td>
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<tr>
<td>HPSR</td>
<td>Health Policy and Systems Research</td>
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<tr>
<td>ICT</td>
<td>Information and Communications Technology</td>
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<td>IPC</td>
<td>Interprofessional Collaboration</td>
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<td>IPGCs</td>
<td>Interprofessional Group Conflicts</td>
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<td>IPT</td>
<td>Interprofessional Teamworking</td>
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<td>JOHESU</td>
<td>Joint Health Workers' Union</td>
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<td>KII</td>
<td>Key Informant Interview</td>
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<tr>
<td>LMICs</td>
<td>Low-and-Middle Income Countries</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>MHWUN</td>
<td>Medical and Health Workers' Union of Nigeria</td>
</tr>
<tr>
<td>NANNM</td>
<td>National Association of Nigerian Nurses and Midwives</td>
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<tr>
<td>NARD</td>
<td>National Association of Resident Doctors</td>
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<tr>
<td>NASU</td>
<td>Non-Academic Staff Union</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>NHA</td>
<td>National Health Act</td>
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<td>NMA</td>
<td>Nigerian Medical Association</td>
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<tr>
<td>NPM</td>
<td>New Public Management</td>
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<tr>
<td>NSHDP</td>
<td>National Strategic Health Development Plan</td>
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<tr>
<td>NUHAHP</td>
<td>Nigeria Union of Allied Health Professional</td>
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<tr>
<td>PhD</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>PIS</td>
<td>Participant Information Sheet</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>RC-ET</td>
<td>Rational Choice-Exchange Theory</td>
</tr>
<tr>
<td>RTA</td>
<td>Reflexive Thematic Analysis</td>
</tr>
<tr>
<td>ScHARR</td>
<td>School of Health and Related Research</td>
</tr>
<tr>
<td>SMOH</td>
<td>State Ministry of Health</td>
</tr>
<tr>
<td>SMR</td>
<td>Systematic Mapping Review</td>
</tr>
<tr>
<td>SSAUTHRIAI</td>
<td>Senior Staff Association of Universities, Teaching Hospitals Research Institutes and Associated Institutions</td>
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<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>USA</td>
<td>United States of America</td>
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<tr>
<td>WHO</td>
<td>World Health Organisation</td>
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<tr>
<td>YAPCEPRPH</td>
<td>Yahyale Ahmed Presidential Committee of Experts on Professional</td>
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CHAPTER ONE

INTRODUCTION

1.1 Personal motivation

My idea of a PhD thesis is to conduct, write, and disseminate a research project that contributes meaningfully to the epistemological and pedagogical narrative of a discipline, and generates evidence that positively impacts society. Many health systems in Low-and-Middle Income Countries (LMICs) are confronted with myriad of challenges such as inadequate funding, lack of comprehensive and inclusive health insurance, insufficient and maldistributed health workers, epidemics, and recently, the need to respond to an unexpected regional and global pandemic such as Ebola and Covid-19. These challenges present opportunities for doctoral candidates to showcase their creativity through research towards improving the health systems.

In Nigeria, health policymakers are working relentlessly to overcome the challenges bedevilling the health system, but their efforts have not produced significant results. Interprofessional conflict has been noted as a major impediment to a functional health system in Nigeria (Olajide et al., 2015a, Mayaki and Stewart, 2020, Oleribe et al., 2016).

In this background, I reflect on my personal motivation for conducting research on interprofessional conflict among health workers in Nigeria health system as a prologue to the story told by this thesis. I also highlight how my concept of knowledge has evolved during this journey. Using the three stages of transformational change by Senge et al. (2005) which is highlighted in their book titled “Presence: An Exploration of Profound Change in People, Organisation and Society”, I explored my shift in perspectives on methodology which shaped the choice of qualitative method applied in this thesis.

Armed with background knowledge in natural science and management; and a PTDF scholarship, I was excited about my admission to the University of Sheffield. The journey was indeed challenging, but I have been lucky to have an understanding supervisory team who guided me through highs and lows to produce this thesis.
In 2008, my dad had a road traffic accident and became unconscious. There was no ambulance, and it took several hours to reach the hospital. Upon reaching the hospital, he could not receive emergency treatment because there was an industrial action due to conflicts in the health system. So, my dad died in a poorly equipped private hospital with auxiliary nurses attempting to save his life. My father is one of many who have lost their lives in a similar situation. As a young undergraduate student, it was difficult for me to process the events that led to my father’s demise. I wondered if someone failed in their responsibility to manage the health system effectively or, more specifically, to manage interprofessional conflicts in the health system effectively. Since I started my PhD, these situations are not essentially changed. While stakeholders in the health system continue to work tirelessly, I count myself responsible for contributing to a better health system in this area.

During my undergraduate days, my exposure to scientific/positivist research method gave me a single perspective on how knowledge is constructed. Essentially, I was only familiar with the method of constructing knowledge through a careful observation of phenomenon and the precise measurement of specific variables against controls using scientific instruments. My understanding was that such model of scientific knowledge could be applied in any field, whether natural science or social research.

This phase of my life corresponds to the sensing phase towards personal change. As described by Senge et al. (2005), this phase is an initial stage where I develop curiosity toward personal and social phenomena in my environment. It also corresponds to a phase where I observed the world around me for meaning and with a desire for better understanding. Although I experienced intense emotional reactions to how my society positively or negatively impacts me, that moment was critical to developing inquisitive cognition, which prompted my desire to advance knowledge beyond my first degree.

My first exposure to qualitative methods was during my Master’s degree. I had taken modules in qualitative methods, which improved my basic understanding of conducting qualitative research. Despite this exposure, I still chose to undertake quantitative investigation for my Master’s dissertation due to limited understanding of the philosophical perspectives and paradigms guiding qualitative research.
However, during my first year of PhD, I took more courses on qualitative methods and read a broad set of journal articles and books on methodology. That became an eye opener for me – a shift in paradigm in my understanding of epistemological and ontological constructs of qualitative methodology. I realised that human emotions, values, politics, and ideology can be studied, not only in numbers but by connecting with participants’ experiences and drawing valid interpretations based on these connections. I learned that my work as a public health researcher is conducted within a broader historical, social, and theoretical context. As I dived deeper in my newfound passion, I transitioned from being a positivist empiricist to a post-positivist interpretivist.

In my role as a member of staff at Federal Ministry of Health in Nigeria and as a citizen, I have witnessed first-hand, the challenges posed by interprofessional conflicts to the health system and how these challenges appear difficult to resolve. This experience has further strengthened my resolve to seek understanding of the complexity and dynamics of people, power, and politics unique to health organisation. At this time, I have transitioned to the presencing stage which according to Senge et al. (2005) is characterised by an ability to “see from the deepest source and becoming a vehicle for that source”. A state where an individual retreats and reflects to allow his/her inner knowing to emerge.

Finally, my initial belief that I must conduct a research project that solves societal problems has changed fundamentally. My cumulative learning has enabled me to gain better understandings that my role is more of investigating than problem solving. While research paradigms designed to solve problems such as critical theory and action research, to which I remain very much aligned, do exist, problem setting is equally valuable for a post-positivist researcher who rather than only searching for the right answers, now places equivalent value on asking the right questions.

Furthermore, I’m fascinated by the fact that post-positivist researchers are poised to seek truth through an ongoing process of dialogue. The concept of truth is not unidimensional in qualitative studies as interpretations are varied thereby promoting flexibility and dynamism in the way truth is constructed. To me, this means developing the consciousness that truth has different meanings to different people based on their experiences or perspectives. It also matches the reality that the only thing constant in life is change itself, hence, people’s perspectives, passions, experiences, and social values can change over time.
At this stage, I have transitioned to the realising stage. This stage features the clarity of the next steps towards the future; the articulation of inner visions and convictions which drives actions.

I can say that my exposure to different methodologies frames my transition from positivist epistemological perspective to interpretivist paradigm and my interests in qualitative paradigms have significantly increased. This thesis is conducted based on the foundations of this knowledge shift and since change is constant, the only attribute I plan to sustain as a researcher is that of continuous learning and acting.

My own journey in Global Health (GH) research reflects that of the discipline overall. Historically, GH research emerged from biomedical sciences which are grounded in positivist methods and institutionalised by colonialism. However, post-cold war developments organised by United Nations (UN), World Health Organisation (WHO) and World Bank created a need for post-positivist interdisciplinary methods that reflect the nature of research and policy discourse as well as the diversity of actors contributing to them (Fig. 1). Weisz and Tousignant (2019) posited that the new research programmes focusing on tropical diseases in 1970s and the primary health care debates of 1980s are foundational to the GH we have today.

Many GH programmes are focused on health improvements in the global south by leveraging investments from diverse disciplines and actors. Recent covid-19 global pandemic has reinvigorated the relevance of GH as a necessary praxis for planetary health beyond health investments in the global south.
1.2 Introduction

The health system is a highly dynamic and complex environment within the matrix of structures, communications and relationships that make health care delivery possible (Marshall et al., 2015, Tørring et al., 2019). By implication, conflicts in health system occur ubiquitously, and have been described as unavoidable (Olajide et al., 2015a, Kaitelidou et al., 2012).

Generally, conflict is described as a dynamic human experience in which the benefits or opportunities of an individual or a group are perceived to be under threat from another (Broukhim et al., 2019, Rahim, 2003). The emergence of conflicts is sometimes due to limited resources and the natural human instinct for survival. However, conflicts also originate from a forceful exertion of positional power and control by one individual or group over another (Coleman, 2014).

Conflicts occur at different levels or scales (Fig. 2). The greatest and most catastrophic level of conflict recorded in history is war between two or more countries (Keegan, 2011, Parker, 2021). War can be categorised as violent conflict involving mass deployment of countries’ military resources. There are other different levels of violent conflicts including civil war between two or more conflicting parties within a country or violent conflicts in an organisation (Blattman and Miguel, 2010).

Another level of conflict is organisational/industrial conflict which occur among employees or between employees and employer (Kim et al., 2017). Conflict in an organisation can also
be interpersonal or relational, occurring between two or more individuals due to differences in their personal attributes or interests. On the other hand, IPGCs refers to conflicts among autonomous professional groups working together interdependently to achieve organisational objectives. This level of conflict combines the attributes of both interprofessional and industrial conflicts.

![Figure 2: Level of Conflicts](image)

Although conflict is often perceived as a negative experience, there is a growing awareness of the positive side of conflicts (Kim et al., 2017). Functional or constructive conflicts has been described as task-oriented resulting in better methods and practices (Wobodo et al., 2020, Kim et al., 2017). Such conflicts are usually short lived and mostly occur to challenge the status quo (Ma et al., 2017).

On the contrary, dysfunctional conflicts focus on dialectical and relational differences among people thereby resulting in disruptions and hinderances to workflows (Kelly and Al-Rawi, 2021). Dysfunctional conflicts are often driven by emotional response to perceived threat either to an individual or group rather than logical reasoning of the situations at hand (Pitsillidou et al., 2018, Rahim, 2002). Dysfunctional or destructive conflicts tend to take longer to resolve due to difficulties in getting the conflicting parties to share common perspectives (Kim et al., 2017).
When conflicts in health system are not managed functionally, they negatively affect staff’s mental health (Wing et al., 2015, Shanafelt and Dyrbye, 2012). They can also lead to personal and organizational wastage of valuable resources such as time, medication, material and financial resources (Azoulay et al., 2009, Aturaka et al., 2018b), as well as creating distractions from the crucial health system goals (De Wit et al., 2012). Ultimately, dysfunctional conflicts increase mortality and morbidity rates, negatively impact quality of care, and subvert the performance of the health system (Aturaka et al., 2018b, Mayaki and Stewart, 2020).

The existence of Interprofessional Group Conflicts (IPGCs) in Nigeria health system is widely reported in literature (Oleribe et al., 2016, Oleribe et al., 2018, Alubo and Hunduh, 2017, Olajide et al., 2015a). IPGCs among healthcare workers are mostly prosecuted by professional associations and unions especially between Nigeria Medical Association (NMA) and Joint Health Workers’ Union (JOHESU). The conflicts have gained attention among stakeholders within the sector because they are largely dysfunctional, most of which have resulted in industrial actions (Oleribe et al., 2018, Alubo and Hunduh, 2017). Scholars have reported conflict of interests between doctors and other health workers in areas such as salary, headship of hospitals, job roles, career advancement and supremacy challenge (Adeloye et al., 2017, Oluyemi and Adejoke, 2020, Ogbonnaya et al., 2007). Interprofessional conflicts (IPCs) at the frontlines where healthcare services are delivered have evolved into IPGCs and industrial crisis. Boundaries, scope and direction of the conflicts are often unclear making them difficult to manage (Olajide et al., 2015a).

This thesis focuses on IPGCs between NMA - the professional association of medical practitioners in Nigeria and JOHESU - a union of five professional associations including Medical and Health Workers’ Union of Nigeria (MHWUN), National Association of Nigeria Nurses and Midwives (NANNM), Senior Staff Association of Universities, Teaching Hospitals, Research Institutes and Associated Institutions (SSAUTHRIA), Nigeria Union of Allied Health Professionals (NUAHP) and Non-Academic Staff Union of Educational and Associated Institutions (NASU) (Adeloye et al., 2017).

Although professions are different from occupations because they have significant control over the conditions of their work (Coburn, 2006, Friedson, 1970), the formation of JOHESU accommodates other occupations that are yet to achieve professional status hence
profession as used in this study refers to all occupational groups present in the Nigeria health system.

Several efforts have been implemented to overcome the perennial dysfunctional conflicts in Nigeria health system. For instance, the National Health Act was signed into law in 2014 which provides a legal framework for the roles and responsibilities of key health system actors including the Minister of Health (NHA, 2014b). Also, two Presidential committees were constituted in 2011 and 2014 to find sustainable solution to the problems (Alubo and Hunduh, 2017). These efforts have not effectively addressed the incidence of IPGCs thereby making it one of the biggest public health concerns in the Nigerian health system (Alubo and Hunduh, 2017).

To identify gaps in literature around interprofessional relationship dynamics in Low-and Middle-Income Countries, I conducted a Systematic Mapping Review (SMR) of associations between interprofessional teamworking and patient safety in this setting towards the writing of this thesis. This SMR, which is presented in chapter two, technically guides the research questions addressed in this thesis.

While researchers in this setting have generated empirical evidence on the causes and consequences of IPGCs among the frontline health workers (Olajide et al., 2015a, Oleribe et al., 2016, Oleribe et al., 2018, Omisore et al., 2017a, Okhakhu et al., 2014, Alubo and Hunduh, 2017, Oluymi and Adejoke, 2020), little evidence is available on what health policymakers perceive as the causes of these conflicts and their contributions towards the management of the conflicts.

This thesis is designed to serve a dual purpose. First, it aims to generate practical evidence-based recommendations for sustainable management of interprofessional conflicts in Nigeria health system through ideation. Secondly, it seeks to contribute to the epistemic development of the field of interprofessional teamworking which can be described as an aspect of public health that studies the relationship dynamics among the different professionals in health system and how such relationships impact upon staff and/or patient outcomes (Reeves et al., 2018). Interprofessional teamworking in this context refers to diverse terms such as teamwork, collaboration, communication, and conflicts. While this
field is rapidly expanding and gaining momentum in global health, more research efforts in LMICs will help to capture contextual issues in this setting.

Furthermore, this thesis is aligned with Health Policy and Systems Research (HPSR). Gilson (2012) posited that HPSR integrates health policy and systems research into one field to address practical situations in the health system by combining methods and frameworks across multiple disciplines. HPSR can help to identify why health systems do or do not produce desired outcomes which makes it appropriate for this thesis.

According to Remme et al. (2010), HPSR aims to strengthen health system and thus offers great benefits at health system leadership and governance level where a broad range of decisions on health system are considered. To address the threats of dysfunctional conflicts and to contribute to the wider HPSR knowledge and action, a set of research questions have been developed as outlined below.

1.3 Primary research questions

1.3.1 What are the perceptions of health policymakers on interprofessional group conflicts in Nigeria health system?

1.3.2 How do health policymakers contribute to managing interprofessional group conflicts in Nigeria health system?

1.4 Secondary research questions

A. What do health policymakers perceive as the causes of interprofessional group conflicts especially between NMA and JOHESU?

B. How are health policymakers positioned in terms of power, roles, and interests in the management of interprofessional group conflicts in Nigeria health system?

C. What are the existing national strategies for managing interprofessional group conflicts and how effective are they?

D. How can interprofessional group conflicts be sustainably and effectively managed?
1.5 Justification

Nigeria is the most populous country in Africa with over 180 million people (Commission, 2006, NPC, 2019). Although, the country has manoeuvred in and out of economic recession recently, Nigeria is still one of Africa’s largest economies, having experienced a decade-long increase in average prosperity (Bank, 2013). Despite the economic potentials, the country’s public health system is one of the worst performing globally (FMOH, 2009), having ranked 187th out of 191 countries. The World Health Organisation (WHO) has expressed constant concerns over poor public health indices in Nigeria including high maternal and child mortality rates (FMOH, 2009).

Poor management of human resource for health in Nigeria has manifested as intense interprofessional conflicts, staff shortage and maldistribution of healthcare professionals (Adeloye et al., 2017). The consequent loss of job satisfaction has resulted in mass migration of healthcare professionals to high income countries in search of better working conditions and opportunities for career advancements (Olajide et al., 2015b, Oleribe et al., 2016, Adeloye et al., 2017).

In the face of these challenges, Nigeria is increasingly developing its public health strategies for achieving Universal Health Coverage (UHC) which is one of the primary objectives of the Sustainable Development Goals (SDG 3.8) (Barasa et al., 2018). Addressing the issues relating to interprofessional teamwork in the health sector will complement strategic efforts at improving staff motivation, retention and satisfaction (WHO, 2016a).

In recognition of the importance of harmonious interprofessional harmony in Nigeria health system, the Yahyale Ahmed Presidential Committee of Experts on Professional Relationships in Nigeria Public Health system (YAPCEPRPH) reported about 50 contentious issues among different cadres of health professionals (Omisore et al., 2017b). One of these issues is dysfunctional interprofessional rivalry between NMA and JOHESU. The rivalry is caused by remuneration disparity, imbalance professional power, lack of leadership opportunities for JOHESU members as well as poor distribution of inadequate resources in the health sector (Omisore et al., 2017b). It is the aim of this study to generate practical recommendations through ideation on organisational level interventions for resolving these challenges.
Furthermore, industrial actions in Nigeria health system are reportedly caused by poor management of IPGCs and consequentially an intermittent closure of hospitals (Oleribe et al., 2016). In their studies, Oleribe et al. (2016) highlighted leadership and management lapses as one of the top causes of industrial actions by health workers. Disruptions in critical health care services have had a negative impact on patient safety, quality of care and the economy (Oleribe et al., 2018).

While many studies on interprofessional teamwork in LMICs focus on the health workers, their interactions with meso level management and patients in the hospital settings, little is known about the perceptions and contributions of health policymakers on interprofessional relationships within the Nigeria health system. The leadership and governance of the health system occur at the macro level where fiscal, policy and regulatory decisions that shape the entire health system are determined (Gilson and Agyepong, 2018b, Mathole et al., 2018, WHO, 2016b, Frenk, 2010). Hence, to generate ideas for policies and management blueprints that can effectively functionalise interprofessional conflicts, this thesis focuses on health policymakers at the leadership and governance level where national health policies are formulated.

1.6 Thesis structure

In chapter two of this thesis, I present the manuscript of the systematic Mapping Review (SMR) conducted in the build up to writing this thesis. The review characterises available evidence on interprofessional teamwork and its associations with patient safety. Through the SMR, I explore the gaps in literature around interprofessional teamwork which informs the specific focus area of this thesis.

In chapter three, I present a narrative review of literature on theories and empirical evidence relating to interprofessional conflicts from around the world. This enabled me to understand basic issues around interprofessional conflicts corresponding to the objectives of this thesis.

Chapter four is a structured review which explores evidence on interprofessional conflict within the context of Nigeria health system.
Chapter five is the methodology chapter which I started by explaining the relevant details of Health Policy and Systems Research (HPSR), how they relate to interprofessional group conflicts and their alignment with qualitative methods applied in this study.

Next, I describe the study design beginning with the philosophical perspectives this study aligns with, and which informs other methodological decisions. Furthermore, I explain the process of data collection and analysis. I arrived at the selected methods and approaches by engaging with literatures to see available alternatives before selecting a suitable method or approach.

I present the results of thematic and content/documentary analysis in chapter six, seven and eight by arranging the themes and sub-themes in strata. I placed relevant excerpts from the data in bold italics to differentiate them from the accompanying descriptions and interpretations. The results are presented to tell a story in line with the praxis of Reflexive Thematic Analysis (RTA). Each chapter begins with an overview of major findings for easy navigation.

In chapter six, I present the results on causes and contributing factors to IPGCs in Nigeria health system beginning with a short introduction, awareness, and impacts of IPGCs. Apart from “unregulated professionalisation”, I denote the overarching themes with factors for easy categorisation and comprehension. I also present the results of the content analysis separately which are later integrated with other results in the discussion chapter.

Chapter seven also begins with a short introduction followed by a section on the current conflict management strategies and availability of resources for managing IPGCs. I also present policymakers’ views on protracted dysfunctional conflicts at the end of the chapter.

In chapter eight, I present the results of policymakers’ analysis, sub-sectioned into organisation and office holders. I ended the chapter with a table of policymakers’ analysis matrix which highlighted the roles, interests, power, and contributions of policymakers in the health system.
I present the results on management of IPGCs in chapter nine based on policymakers’ suggestions and recommendations. Also, methods suggested for sustaining the management efforts and the front-end initiatives for managing IPGCs were discussed later in the chapter.

Chapter ten is the discussion and recommendation. Here, I integrate theoretical and empirical data to explicate the causes and management of IPGCs in the health system. I also compared the results with findings of relevant studies or development in other health system globally. I focused my attention on discussing results that are novel or rare to accentuate the original contributions of this work to literature. I developed recommendations on management of IPGCs via mind-mapping ideation to upend ambiguity and enhance practical applications. Later in this chapter, I discuss reflexivity including how rigour has been achieved and my reflections on positionality using the social identity map posited by Jacobson and Mustafa (2019).

In chapter eleven, I present a brief conclusion of the whole thesis. The chapter is a short commentary on key findings and recommendations to bring a closure to the thesis.
Table 1: Thesis Structure

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE Numbers</th>
<th>STRUCTURE</th>
</tr>
</thead>
<tbody>
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<td>Two</td>
<td>15-50</td>
<td>Introduction, systematic mapping review.</td>
</tr>
<tr>
<td>Three</td>
<td>51-85</td>
<td>Narrative review of theories and evidence on interprofessional conflicts from global perspective.</td>
</tr>
<tr>
<td>Four</td>
<td>86-104</td>
<td>Structured review on interprofessional group conflicts from Nigeria context</td>
</tr>
<tr>
<td>Five</td>
<td>138-152</td>
<td>Background on HPSR, Description of study context, Study design, Data collection, Data analysis, Ethical consideration</td>
</tr>
<tr>
<td>Six</td>
<td>153-161</td>
<td>Introduction, Demographic results and characteristics of policymakers, Awareness of interprofessional group conflicts, impacts of interprofessional group conflicts, causes of interprofessional group conflicts, Results of content analysis/document analysis.</td>
</tr>
<tr>
<td>Seven</td>
<td>169-193</td>
<td>Introduction, Current conflict management strategies, Availability of resources for managing interprofessional group conflicts, Protracted dysfunctional conflicts.</td>
</tr>
<tr>
<td>Eight</td>
<td>194-220</td>
<td>Introduction, Organisation, office holders, policymakers’ analysis matrix.</td>
</tr>
<tr>
<td>Nine</td>
<td>221-223</td>
<td>Introduction, Approaches for managing interprofessional group conflicts, sustaining efforts at managing interprofessional group conflicts, Factors mitigating against effective implementation of management strategies, Front-end initiatives for managing interprofessional group conflicts, Benefits of managing interprofessional group conflicts.</td>
</tr>
<tr>
<td>Ten</td>
<td></td>
<td>Introduction, Discussions on causes of interprofessional group conflicts, current management strategies, Ideation, Reflexivity, Limitations of the study, Limitations of the study.</td>
</tr>
<tr>
<td>Eleven</td>
<td></td>
<td>Conclusions.</td>
</tr>
<tr>
<td>References</td>
<td>244-237</td>
<td></td>
</tr>
<tr>
<td>Appendix</td>
<td>238</td>
<td>1, 2, 3, 4, 5</td>
</tr>
</tbody>
</table>
CHAPTER TWO

SYSTEMATIC MAPPING REVIEW OF ASSOCIATIONS BETWEEN INTERPROFESSIONAL TEAMWORKING AND PATIENT SAFETY IN LOW-AND-MIDDLE INCOME COUNTRIES

2.1 Background

Before attempting the objectives of this thesis, I undertook a Systematic Mapping Review (SMR) on the associations between interprofessional teamwork and patient safety in Low-and-Middle-Income Countries (LMICs). This is to characterise available evidence on interprofessional teamwork and the mechanisms by which Interprofessional Teamworking (IPT) is associated with patient safety. Indeed, the review enabled me to identify gaps in literature that inform the specific area of interprofessional teamwork (i.e., policymakers’ perspectives on interprofessional group conflicts) where I concentrate my efforts.

I present the systematic mapping review in this chapter as an opening to the other reviews in this thesis and a guiding compass to navigate how my research questions evolved/are refined. Also, I refer to the SMR throughout the thesis where necessary, to explicate key areas and enrich the content.

2.2 Introduction

Over the past 2 decades, patient safety has become a highly topical issue in global health (Brandis et al., 2017, Tsuchikawa et al., 2012). An estimated 10% of global annual hospitalizations in 2018 experienced patient safety issues (Sabry and Farid, 2014, WHO, 2017), making hospital acquired patient harm the 14th leading cause of global burden of disease (WHO, 2017). A combination of different factors is responsible for patient harm in the health system including inadequate structures, lack of basic equipment, medicine, infrastructures, technology integration, and errors due to the infallible nature of human resources in the hospitals (WHO, 2017, Donaldson, 1995). Poor management of the relationship dynamics among health care professionals has been found to significantly contribute to preventable errors causing patient harm (Brandis et al., 2017, Manser, 2009).
For health systems to operate in ways that guarantee safe and quality care, human resources for health at the sharp-end (where health care services are delivered to patients) and blunt-end (where the management of health system takes place), must work together within teams and collaboratively, irrespective of any differences (Manser, 2009, Reeves et al., 2017, Catchpole and Wiegmann, 2012).

To explain this further, health systems are highly complex and dynamic (Manser, 2009), yet a high demand is placed on safety and quality given that human lives are at stake. Additionally, the different professions within the health system (such as doctors, nurses, midwives, dentists, pharmacists, physiotherapists, and other allied health professionals such as radiologists, physiotherapists, medical laboratory scientists, and non-technical staff such as secretaries, receptionists, supervisors, managers, etc.) are becoming more specialized thereby creating a sense of independence among professional groups within the health system with the potential to create fragmentation (D'Amour et al., 2005). This fragmentation is one of the leading causes of interprofessional conflicts, interprofessional rivalry, work related stress, burnout, loss of job satisfaction, patient harm, wastage, and loss of performance in the health system (Scotten et al., 2015, Örgütü, 2010).

Furthermore, management of patients throughout the entire continuum of care requires the expertise of all professional groups within an interdependent structure (Rose, 2011). For example, doctors alone cannot treat patients successfully given that some aspects of treatment lie within the nursing specialisation or require input from nurses’ professional knowledge and experience. It appears there is no substitute for good interprofessional relationship that fosters quality and safe care.

From the management perspective, teamwork improves health system operational efficiency by preventing wastage, avoiding duplication of efforts, and promoting high performance work with staff who are readily committed towards the achievement of organizational goals and objectives (Johnson et al., 2003).

Awareness of the importance of interprofessional working has inspired many research efforts in the healthcare industry, however, certain gaps in knowledge have been identified. For instance, available evidence tends to focus on interprofessional education or training (Watters et al., 2015, Ponzer et al., 2004, Hylin et al., 2007) more than the understanding of
how interprofessional teamwork (or lack of it) affects patient safety or how to structure interprofessional teamwork for quality care and better health system performance. While there are abundant evidence on interprofessional education or training, more efforts are needed to understand the dynamics of interprofessional teamworking itself and how they are associated with staff and patient outcomes (Ravet, 2012).

Secondly, inconsistency in terminology has emerged as a new challenge to follow up progress and harmonise findings (Nancarrow et al., 2013, Reeves et al., 2018, Reeves et al., 2011, Xyrichis et al., 2018). Terms such as interprofessional, multidisciplinary and interdisciplinary have been used inconsistently to describe the team composition while teamwork, collaboration and relationship have been used to characterise relationships among professionals with respect to how they interact to deliver care. Some authors have posited that the differences in terminology relate to either the scope or nature of relationships within the team (McCallin, 2003, Uchejeso et al., 2020). For example, interprofessional denotes relationships between two professional groups such as between doctors and nurses, while multi-professional means consisting of more than one professional group such as teams consisting of doctors, nurses, midwives and other professional; often organised for the delivery of specific medical intervention (Nancarrow et al., 2013, Thylefors, 2012). Interdisciplinary or multidisciplinary are broader terms often used to describe relationships among two or more disciplines including non-professional health care workers. The differences in these terms have been argued to relate more to attitudes than structural compositions (Thylefors, 2012).

Generally, health system research in developing countries have not adequately explored leadership and management of human resource for health (Dieleman et al., 2009). Research on interprofessional teamworking is still very limited in low-and-middle income countries (LMICs) relative to High-Income countries (HICs) (Tsuchikawa et al., 2012). Amidst other priorities, it is important to study the different aspects of interprofessional teamworking in this setting, especially in the wake of the Covid-19 global pandemic that has challenged the resilience of health systems around the globe (Shanafelt et al., 2020, Blumenthal et al., 2020). This review seeks to contribute to existing efforts and broaden foundational literature for future studies.
This study adopts a systematic mapping review methodology to address some of the identified gaps. A systematic mapping review can be valuable in characterizing available evidence within a field (Fernandez et al., 2020). By categorizing the existing literature, a systematic mapping review can help to identify epistemic patterns in literature around a topic such that gaps can be identified to frame questions for further review or to guide the conduct of a primary research (Clapton et al., 2009). In response to some of the identified challenges, this systematic mapping review is designed to answer the following questions:

2.2.1 Primary review question

What are the characteristics of available evidence on interprofessional teamworking in Low-and-Middle-Income Countries?

2.2.2 Secondary review question

a. What are the characteristics of available primary studies that explore the associations between interprofessional teamwork and patient safety in LMICs?
b. What are the putative associations between interprofessional teamwork and patient safety and to what extent are these supported by empirical evidence?
c. What mechanisms have been suggested to explain potential associations between interprofessional teamwork and patient safety?

2.3 Methods

Systematic literature searches were carried out on MEDLINE (via Ovid), Web of Knowledge (formally Web of Science), EMBASE, CINAHL, Emerald Insight and Scopus using a combination of index terms and keywords (see search strategy on appendix 1). The World Bank classification of countries based on income and lending was used to determine inclusion of countries within the LMICs category. Searches of grey literature were also conducted using Google Scholar, institutional repositories such as archives of Universities in Africa, Asia and South America. Rigorous forward and backward citation tracking were also utilized to capture relevant studies and alerts for relevant new studies were registered on the databases. A protocol guiding the literature searches was published on PROSPERO (Reference number: CRD42018089208). A CIMO (Context, Intervention, Mechanism and
Outcomes) model (Denyer and Tranfield, 2009) was used to develop eligibility criteria and studies were included if they contained index terms and keywords such as interprofessional/interdisciplinary/multidisciplinary teamwork, practice, collaboration, communication, relationship, harmony, crisis or conflict at all levels of the health system together with some form of links to patient safety, medical errors, adverse events, medication error or quality of care was suggested (Booth et al., 2013).

Table 2: CIMO Model for Systematic Mapping Review

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context</td>
<td>Interprofessional teamworking including inter/multi/trans/cross professional plus teamwork/collaboration/communication/harmony/crisis/conflicts/relationship/practice/ health system at all levels in LMICs</td>
</tr>
<tr>
<td>Intervention</td>
<td>Interprofessional Teamworking</td>
</tr>
<tr>
<td>Mechanism</td>
<td>Mediators/Links/Implicit or Explicit associations</td>
</tr>
<tr>
<td>Outcome</td>
<td>Patient Safety/medical errors/adverse events/medication errors/quality of care</td>
</tr>
</tbody>
</table>

This review excluded studies on interpersonal or intra-professional variants of professional interactions/relationships given its focus on the dynamics of relationships among different professional groups (e.g., doctors and nurses) and how these affect patient outcomes.

Studies on interprofessional education, simulation, and training/learning as well as studies which assessed patient safety culture in which teamwork is simply one of the elements to measure patient safety climate/culture were also excluded because they usually lack depth/focus on interprofessional teamworking.

I limited searches to studies in English language, published between year 2000 and 2020. Time constraints prohibited translation of articles published in languages other than English. The scope was limited to publications from within the most recent two decades to capture important studies in this field given that I could not identify a previous review attempting to
explore the associations between interprofessional teamworking and patient safety in low to middle-income countries during the initial scoping process.

References from individual database were managed using Endnote version X9 and Excel Spread Sheet. Duplicates were removed during title and abstract screening and included studies were subjected to full-text review. Results were codified into clusters of interprofessional teamwork adapted from a combination of frameworks on interprofessional teamwork by Mickan and Rodger (2005) and Reeves et al., (2010). Thematic analysis was used to capture other aspects of interprofessional teamworking emerging from the mapped studies. Afterwards, mechanisms of associations between interprofessional teamwork and patient safety were mapped out.

2.4 Results

As shown in figure 1 below, the search strategy yielded a total of 1781 articles (Medline-271), (EMBASE- 356), (CINAHL- 151), (Scopus- 520), (Emerald Insight- 465), and (Web of Knowledge - 18). An additional 28 articles were identified from manual searches of grey literature. There were 1,809 articles after removal of duplicates out of which 1,517 were excluded at first screening. The remaining 292 articles were subjected to a second screening and another 34 studies were excluded for reasons such as lack of depth in the topic of focus and studies conducted in settings other than LMICs. There were 74 studies subjected to full-text review with an additional 28 studies identified through rigorous reference list and citation chain tracing. A total of 101 studies were therefore subjected to eligibility criteria using the purpose-designed form guided by the research objectives out of which 95 studies were finally included for mapping.
2.4.1 Characteristics of the Studies

Table 4 provides a summary of the 95 studies included in this review. There were 46 quantitative and 32 qualitative studies hence majority of the authors adopt quantitative approach to studying different aspects of interprofessional teamworking. Other methods include mixed (8), intervention (6), and reports (3). Most of the studies included for mapping were carried out at the tertiary health care level (n = 73). Only 9 studies assessed interprofessional teamworking at the primary health care level, 2 studies at secondary health care level, 1 study focuses on private, 2 studies on system level while 4 studies were carried out in more than one health care level. The level of care was not certain in 4 studies. Most of the studies were carried out in Nigeria (n = 22), followed by Iran (n = 16), Brazil (n =
11) Indonesia (n = 7), South Africa (n = 4), South Korea (n = 3) and others (n = 31) including one study that was carried out across multiple countries including 6 African countries and Argentina. Majority of the studies were carried out between year 2016 and 2020 (n = 60) followed by year 2011 and 2015 (n = 27). Years between 2006 and 2010 also had more studies (n = 6) than between 2000 and 2005 (n = 2).

Table 3: Characteristics of the Mapped Studies

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Characteristics</th>
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<tr>
<td>Countries</td>
<td>Nigeria (23); Iran (16); Brazil (11); Indonesia (7); South Africa (4); South Korea (3); Others (31).</td>
</tr>
<tr>
<td>Level of care</td>
<td>Tertiary (73); Secondary (2); Primary (9); Multilevel (4); System level (1); Private (1); uncertain (5).</td>
</tr>
<tr>
<td>Methods</td>
<td>Quantitative (46); Qualitative (32); Mixed (8); Others (9).</td>
</tr>
</tbody>
</table>

Table 4: Characteristics of Extracted Studies

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Method</th>
<th>Country</th>
<th>Population</th>
<th>Level of care</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Adjekukor et al., 2016)</td>
<td>2016</td>
<td>Quantitative</td>
<td>Nigeria</td>
<td>204 Health Workers</td>
<td>Uncertain</td>
</tr>
<tr>
<td>(Afolayan et al.)</td>
<td>2012</td>
<td>Quantitative</td>
<td>Nigeria</td>
<td>250 Nurses</td>
<td>Tertiary</td>
</tr>
<tr>
<td>(Aghamohamadi et al., 2019)</td>
<td>2019</td>
<td>Quantitative</td>
<td>Iran</td>
<td>126 Nurses</td>
<td>Tertiary</td>
</tr>
<tr>
<td>(Aghamolaei et al., 2012)</td>
<td>2012</td>
<td>Quantitative</td>
<td>Iran</td>
<td>155 Nurses</td>
<td>Tertiary</td>
</tr>
<tr>
<td>(Agreli et al., 2016)</td>
<td>2016</td>
<td>Mixed</td>
<td>Brazil</td>
<td>159 Health Workers</td>
<td>Tertiary</td>
</tr>
<tr>
<td>Year</td>
<td>Type</td>
<td>Country</td>
<td>Study Population</td>
<td>Setting</td>
<td></td>
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<td>------------</td>
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<td></td>
</tr>
<tr>
<td>2017</td>
<td>Quantitative</td>
<td>Nigeria</td>
<td>200 Patients</td>
<td>Tertiary</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>Quantitative</td>
<td>Lebanon</td>
<td>89 Physician, 245 Nurses</td>
<td>Tertiary</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Mixed</td>
<td>Brazil</td>
<td>Health workers, Patients, and families of patients</td>
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<tr>
<td>2020</td>
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<td>Nigeria</td>
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<tr>
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<td>2018</td>
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</tr>
<tr>
<td>2017</td>
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<tr>
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<td>(Bassey et al., 2017)</td>
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<td>226 Health Workers</td>
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<td>(Biasibetti et al., 2019)</td>
<td>2019</td>
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<td></td>
<td>2019</td>
<td>Intervention Report</td>
<td>Brazil</td>
<td>34 Patients, Health workers</td>
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<tr>
<td>(Choi et al., 2019)</td>
<td>2019</td>
<td>Quantitative</td>
<td>South Korea</td>
<td>Physicians</td>
<td>Tertiary</td>
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<tr>
<td>(Chua et al., 2020)</td>
<td>2020</td>
<td>Qualitative</td>
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<td>2019</td>
<td>Intervention (Development of Trio-Guide) through FDG, Training of students</td>
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<td>(Elithy et al., 2011)</td>
<td>2011</td>
<td>Mixed</td>
<td>Egypt</td>
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<td>(Elsous et al., 2017a)</td>
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<td>Palestine</td>
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<td>Tertiary and Secondary</td>
</tr>
<tr>
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<td>Qualitative</td>
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<td>Primary</td>
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<td>(Escalda and Parreira, 2018)</td>
<td>2018</td>
<td>Qualitative</td>
<td>Brazil</td>
<td>Uncertain</td>
<td>Primary</td>
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<td>South Africa</td>
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<td>(Falamić et al., 2018)</td>
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<td>Quantitative</td>
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<td>Tertiary</td>
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<tr>
<td>(Farzi et al., 2017a)</td>
<td>2017</td>
<td>Qualitative</td>
<td>Iran</td>
<td>19 health workers</td>
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<tr>
<td>(Georgiou et al.)</td>
<td>2015</td>
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<td>Cyprus</td>
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<tr>
<td>(Ghahramanian et al., 2017)</td>
<td>2017</td>
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<td>Iran</td>
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<td>Tertiary</td>
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<td></td>
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<td>Iran</td>
<td>58 Health Workers and patients</td>
<td>Tertiary</td>
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<td>2015</td>
<td>Qualitative</td>
<td>South Korea</td>
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<td>Kenya</td>
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<td>Qualitative</td>
<td>Indonesia</td>
<td>88 Health Workers</td>
<td>Tertiary</td>
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<td>(Kydona et al., 2010)</td>
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<td>Quantitative</td>
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<td>Quantitative</td>
<td>Nigeria</td>
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<td>Quazi-experimental study (Pharmacotherapy)</td>
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<td>Pharmacists and Physicians</td>
<td>Tertiary</td>
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<td>(Momennasab et al., 2019)</td>
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<td>Iran</td>
<td>10 nurses 35 Patients</td>
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<td>Qualitative</td>
<td>Brazil</td>
<td>29 Health Workers</td>
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<td>Qualitative</td>
<td>Iran</td>
<td>5 Physicians, 7 Nurses</td>
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<td>(Ntinga, 2020)</td>
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<td>Qualitative</td>
<td>South Africa</td>
<td>22 junior and 17 senior physiotherapists</td>
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<td>Qualitative</td>
<td>Nigeria</td>
<td>Nurses</td>
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<td>(Okoh et al., 2020)</td>
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<td>Nigeria</td>
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<td>(Okonta and Okonta, 2018)</td>
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<td>Nigeria</td>
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<td>Tertiary</td>
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<tr>
<td>(Olajide et al., 2015a)</td>
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<td>Mixed</td>
<td>Nigeria</td>
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<td>Tertiary</td>
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<td>(Oliver et al., 2005)</td>
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<td>Nigeria</td>
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<td>Quantitative</td>
<td>Nigeria</td>
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<td>(Onyango-Ouma et al., 2001)</td>
<td>2001</td>
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<td>Nigeria</td>
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<td>Nigeria</td>
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<td>(Pakpour et al., 2019)</td>
<td>2019</td>
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<td>Iran</td>
<td>232 Nurses</td>
<td>Tertiary</td>
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<tr>
<td>(Park et al., 2018b)</td>
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<td>Qualitative</td>
<td>South Korea</td>
<td>10 Physicians</td>
<td>Tertiary</td>
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<tr>
<td>(Peduzzi and</td>
<td>2018</td>
<td>Qualitative</td>
<td>Brazil</td>
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<td>(Pires Lemos et al., 2019)</td>
<td>2006</td>
<td>Qualitative</td>
<td>South Africa</td>
<td>5 Doctors, 5 Nurses</td>
<td>Primary</td>
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<td>(Pires Lemos et al., 2019)</td>
<td>2014</td>
<td>Quantitative</td>
<td>Egypt</td>
<td>538 Physicians</td>
<td>Tertiary</td>
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<td>(Sabry and Farid, 2014)</td>
<td>2011</td>
<td>Intervention (Management training)</td>
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<td>Indonesia</td>
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<td>Tertiary</td>
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<td>(Sari et al., 2018)</td>
<td>2016</td>
<td>Quantitative</td>
<td>Croatia</td>
<td>513 Pharmacists and Physicians, 365 Students</td>
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<td>(Shaha, 2014)</td>
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<td>Intervention + Evaluation</td>
<td>Saudi Arabia</td>
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<td>Quantitative</td>
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<td>Qualitative</td>
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<td>Teslim and Ayodele, 2014</td>
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<td>Nigeria</td>
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<td>Brazil</td>
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<td>Qualitative</td>
<td>Iran</td>
<td>22 Nurses</td>
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<td>Vaismoradi et al., 2014</td>
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<td>Mixed</td>
<td>Iran</td>
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<td>Zare et al., 2020</td>
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<td>Iran</td>
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2.4.2 Interprofessional Teamworking

A total of seven themes and 25 sub-themes were identified in existing and newly generated concepts as depicted in Figure 2 below.

Figure 4: Theme Map Tree

Four themes in the predefined categories or concepts of interprofessional teamworking were identified including: **Relational factors, Process factors, Contextual factors, and Organisational factors**. Also, three themes in the new categories of interprofessional teamworking were identified including: **Knowledge, Attitudes, Perceptions and Expectations (KAPE), Interprofessional conflicts and Patients/family contributions**. While themes in the predefined categories were identified through a combination of framework by Mickan and Rogers (2005) and Reeves et al., (2010), themes in the new categories were identified through identification of themes that do not fit within the predefined frameworks.
2.4.2.1 Theme 1 (Relational Factors)

This theme identifies how the different studies in LMICs describe the power dynamics in health systems and the factors that place one professional at advantage over the others. Different terms are used to describe interprofessional power dynamics in this theme. A total of 5 sub-themes were identified under this theme including:

i. **Decision making:** Subtheme decision making is frequently reported in the literature. Results showed lack of equal access to decision making in the health system with physicians reportedly position themselves as the primary decision makers who make orders for other health workers at different levels (Jayasuriya-Illiesinghe et al., 2016, Nakhaee and Nasiri, 2017, Ifeyinwa et al., 2016, Omisore et al., 2017a, Qolohle et al., 2006, Oweis and Diabat, 2005). Sometimes, decision making was believed to be the exclusive role of physicians (Omisore et al., 2017a), or that other professionals offer minimal contributions (Jayasuriya-Illiesinghe et al., 2016, Nakhaee and Nasiri, 2017).

The uneven distribution of power is believed to be one of the hinderances to Interprofessional Collaborative Practice (ICP) (Okoronkwo et al., 2013, Emmanuel and Olajide, 2011) as it leads to rivalry or supremacy tussle between physicians and other health workers at the frontlines and industrial crisis at health system level.

Physicians are believed to influence the health system with the aim of protecting their superiority and dominance. One study however reported that physicians, nurses, and pharmacists experienced the freedom to act autonomously and participate in decision making, except medical laboratory scientists who believed other health workers discriminate against them. Most of the studies reported that nurses and pharmacists do not enjoy as much professional autonomy as physicians. This situation has become the norm or characteristics of interprofessional teamworking in health care systems within LMICs (Ifeyinwa et al., 2016, Darvishpour et al., 2016, Akpabio and Ogunbode, 2020, Vaismoradi et al., 2013, Valizadeh et al., 2015). Physicians were also reported to adopt a non-participatory approach towards nurses while at the same time expanding their dominance and self-weakening nurses’ professional authority (Jayasuriya-Illiesinghe et al., 2016) with implications on patient safety. For instance, at the expense of patient safety, nurses must wait until physicians give orders before they can intervene in critical situations (Darvishpour
et al., 2016). At the policy making level, physician superiority was registered as an idea of physicians and a major hinderance to policies that empower nurses to prescribe treatments for patients (Escalda and Parreira, 2018).

ii. **Professional hierarchy:** Majority of studies which reported on professional hierarchy agreed that professional hierarchy is a norm and a characteristic of the health care system in LMICs (Qolohle et al., 2006, Vaismoradi et al., 2013, Darvishpour et al., 2016). At the top of the characteristic hierarchical structure are physicians who issue orders which must be followed by other health care professionals. This characteristic hierarchical structure is also predominant in transplant professionals (Darvishpour et al., 2016) and it caused a perception of unclear approaches in treatment with constructable implications on patient safety (Busari et al., 2017).

iii. **Socialization:** Socialization is a very important factor that is often overlooked in studies around interprofessional dynamics. The relationship among different professionals in the health system was shown to be enhanced by social interactions (Jayasuriya-Illesinghe et al., 2016, Etheredge et al., 2017, Busari et al., 2017, Okhakhu et al., 2014). Relationships between doctors and nurses were enhanced through socialization (Qolohle et al., 2006). However, most physicians rarely interact with pharmacists and the few who interacted only discussed issues around drug availability (Alipour et al., 2018, Tahaineh et al., 2011). Interactions around drug safety such as drug interaction, dosage and side effects were rarely discussed.

iv. **Interpersonal relationships/Interactions:** The dynamics of interpersonal relationship were reported to influence interprofessional teamwork (Jafary et al., 2017) including individual peculiar behavior or personality (Oliver et al., 2005, Oweis and Diabat, 2005).

v. **Mutual trust and respect:** Mutual trust and respect are key factors in the physician-nurse interprofessional relationship (Qolohle et al., 2006). Ethical shortcomings, competency weakness and shirking of responsibilities reportedly destroyed mutual trust (Nakhaee and Nasiri, 2017). While nurses expected physicians to trust their capacity to make valuable contributions to patient care (Vaismoradi et al., 2013), physicians perceived that nurses lack competence, hence they do not trust that nurses should be involved in clinical decision making (Nakhaee and Nasiri, 2017). Perception of incompetence which destroys mutual
trust is sometimes due to gaps in knowledge of other professionals’ capabilities and high expectations by virtue of disciplinary differences (Busari et al., 2017). Mutual trust was shown to be highly associated with team cohesiveness (Onyekwere, 2013). In one study, most professionals were reported to enjoy mutual trust and participation except Medical Laboratory Scientists who were dissatisfied with the level of recognition accorded them in the health system.

2.4.2.2 Theme 2 (Process Factors):

This theme describes the components and processes that make teamworking successful (or not). A total of 6 sub-themes were identified under this theme including common purpose (Jayasuriya-Illesinghe et al., 2016, Nakhaee and Nasiri, 2017, Agwo et al., 2014, Etheredge et al., 2017), measurable goal, effective leadership (Ifeyinwa et al., 2016, Okonta and Okonta, 2018), effective communication (Vaismoradi et al., 2014, Okoronkwo et al., 2013, Santrić Milicevic et al., 2011, Hailu et al., 2016, Aires-Moreno et al., 2020, Qolohle et al., 2006, Aghamolaei et al., 2012, Etheredge et al., 2017, Busari et al., 2017, Korpela et al., 2015, Alipour et al., 2018), effective cooperation/cohesion/coordination (Qolohle et al., 2006, Oliver et al., 2005, Busari et al., 2017, Onyekwere, 2013), mutual trust/respect (Nakhaee and Nasiri, 2017, Agwo et al., 2014, Qolohle et al., 2006, Vaismoradi et al., 2013, Valizadeh et al., 2015, Busari et al., 2017) and Competency/years of experience (Onyekwere, 2013, Mino-León et al., 2012) (Okoronkwo et al., 2013, Shaha, 2014, Etheredge et al., 2017, Vaismoradi et al., 2013, Darvishpour et al., 2016).

i. **Effective communication**: This sub-theme is frequently reported in LMIC literature. Effective communication is perceived to enhance interprofessional teamworking among doctors and nurses (Okoronkwo et al., 2013, Qolohle et al., 2006). One study found that physician-nurse communications differ at Primary Health Care (PHC) level as largely experienced by physicians because physicians depend more on nurses to communicate with patients in this setting than at higher levels of care (Qolohle et al., 2006). This is contrary to the views of nurses who feel frustrated and dissatisfied with physicians’ attitudes towards communicating with them (Hailu et al., 2016, Aghamolaei et al., 2012). Similarly, doctors were reported to be abusive to nurses as well as constantly judging and criticizing them, hence exerting emotional response of anger, shame, humiliation, and frustration (Oweis and
Diabat, 2005). Communicating in manners that do not foster respect was reported to constrain knowledge sharing among professional teams (Busari et al., 2017) and hinder mutual understanding (Hailu et al., 2016). One study reported that nurses’ assertiveness led to correct diagnosis (Escalda and Parreira, 2018) and another study reported that nurses with good communication skill are more likely to report clinical errors (Hwang et al., 2018), hence emphasising the importance of effective communication in interprofessional teamwork and patient safety.

ii. Common purpose: Reports of the mapped studies in this sub-theme were varied. For instance, some studies focused on the lack of common identity among team members (Olajide et al., 2015a, Adjekukor et al., 2016). In most cases, physicians and pharmacists agreed that patient’s rights and expectations supersede their professional differences thereby suggesting an intention to pursue a common patient safety goal (Emmanuel and Olajide, 2011). Paradoxically, physicians’ perceptions of the responsibilities of pharmacists prevent the sharing of a common goal (Agwo et al., 2014). While pharmacists agreed that patient management is a shared responsibility, physicians do not intend to share this goal with pharmacists.

iii. Effective cooperation/cohesion/coordination: Physicians perceived low level of nurse cooperation (Qolohle et al., 2006, Oliver et al., 2005). While a study reported the presence of team cohesiveness (Onyekwere, 2013), physicians were reported to hinder team cohesion by seeking solutions to problems at uni-professional level rather than collectively at interprofessional team level.

iv. Competency/Years of experience: Years of experience of both physicians and nurses were significantly associated with their perception of interdisciplinary collaborative practice (Etheredge et al., 2017). Specifically, those with 6 years or more working experience had positive perceptions of interprofessional collaborative practice. Nurses with less years of experience however are more likely to be technology compliant however, technology rather than years of experience supported nurse-physician communication. Lack of experience in transplant teams has the potential to create stress with consequences on patient safety, hence experience is an important factor in the success of organ transplant operations (Etheredge et al., 2017). While physicians do not believe in nurses’ knowledge and skills, perception of physician competence compel nurses to accept orders from physicians.
Low level of competency among nurses was reported to be a source of hindrance to nurses’ professional autonomy particularly, their ability to prescribe medication (Darvishpour et al., 2016). Also, a combination of conflict resolution and teamwork was linked to doctors’ ability to trust nurses’ professional judgment due to long years of working relationship (Escalda and Parreira, 2018).

**v. Time and Space:** Time is a very critical resource in the health system which impacts interprofessional teamworking and patient safety. Space refers to the spatial arrangement of office, desks, and the distance between health workers. Time was unavailable for non-technical skills training (such as training in communication and leadership) by physicians as reported by (Jayasuriya-Ilesinghe et al., 2016). As such, physicians in this study might have been limited in their abilities to communicate effectiveness or lead effectively when opportunity arises. Nurses are usually frustrated by physician lateness in communicating written prescriptions thereby causing unnecessary delays in continuity of care with negative implications on patient safety (Etheredge et al., 2017). However, average time loss was decreased as a result of interprofessional preoperative briefings (Thanapongsathorn et al., 2012). Physicians and other allied health professionals were reported to be critical of transplant coordinators due to untimely receipt of information on transplants (Etheredge et al., 2017).

**vi. Information Technology:** Computerized Physician Order Entry (CPOE) allow easier access to patient medication records as well as providing complete and legible drug prescriptions thereby enhancing patient safety (Shaha, 2014). This study also report that CPOE increased physician contact or communication with nurses including follow up by phone calls regarding certain prescriptions.

**vii. Team roles/Job description:** Lack of clear job descriptions/blurring job roles among the interprofessional team has been reported to be a source of conflicts that has the potential to negatively affect patient safety (Espinoza et al., 2016, Agwo et al., 2014, Jayasuriya-Ilesinghe et al., 2016, Nakhaee and Nasiri, 2017, Ghahramanian et al., 2017, Vaismoradi et al., 2013, Busari et al., 2017). Conflict of roles during surgical operations between physicians and anesthetists was reported as the latter perceived their roles are threatened by the former (Jayasuriya-Ilesinghe et al., 2016). In the same study, physicians believe the role of nurses is primarily to support them. Lack of clear role descriptions generates a perception of
physician superiority and sometimes abdication of duties (Nakhaee and Nasiri, 2017, Vaismoradi et al., 2013). In some cases, physicians are reported to be averse to pharmacists’ direct contributions to patient management (Agwo et al., 2014) as they believe the role of pharmacists should only be to dispense medication or educate patients on drug use (Agwo et al., 2014). Specifically, only one-third of physicians in their study consider pharmacists as a reliable source of clinical information with the capacity to spot clinical problems relating to medication or provide information on medication cost-effectiveness (Agwo et al., 2014). This suggests that majority of the physicians have not fully come to appreciate pharmacists’ roles other than their traditional roles. However, physicians’ prescriptions could be faulty without pharmacists, and this could lead to patient harm (Agwo et al., 2014). Another study reported a contrary view indicating that mutual appreciation of roles exists between nurses, anesthesiologist and doctors in intraoperative and postoperative surgical team (Espinoza et al., 2016). Although professions differ in the services they render, working in clear job roles/responsibilities is needed to clarify overlapping areas (WHO, arch2019) which have potentials to generate conflicts.

viii: Interdependency: This sub-theme describes whether professionals understand the interdependent nature of their roles despite their autonomous professional roles. Although, most studies suggest interdependency in their assessment of interprofessional teamworking, only few studies explicitly reported on this very important aspect (Oliver et al., 2005, Etheredge et al., 2017, Onyekwere, 2013). Health workers have a common understanding of the interdependent nature of patient management (Etheredge et al., 2017, Oliver et al., 2005) and professional interdependence was significantly associated with team cohesiveness and patient satisfaction (Onyekwere, 2013).

2.4.2.2 Theme 3 (Contextual factors)

I report 4 sub-themes in this theme. These include patriarchy (Jayasuriya-Illisinghe et al., 2016) and cultural demand for respect (Oliver et al., 2005), diversity (Oliver et al., 2005, Onyekwere, 2013), gender (Jayasuriya-Illisinghe et al., 2016, Okoronkwo et al., 2013, Santric Milicevic et al., 2011, Seselja-Perisin et al., 2016) and economic cost (3, 6, 7, 10 and 27).
i. Patriarchy and cultural demand for respect: This sub-theme was shown to influence interprofessional collaboration (Jayasuriya-Illesinghe et al., 2016, Oliver et al., 2005). Medicine is a profession largely dominated by males with nursing being a profession largely dominated by females in LMICs. The cultural demand for respect in LMIC is reported to promote uneven distribution of power between physicians and nurses.

ii. Diversity: In LMICs, cultural and professional diversity are inherent nature of a health organization and can potentially influence the way health workers relate with each other. Tribal differences were reported to insignificantly affect interprofessional teamworking (Onyekwere, 2013). However, there is an inverse relationship between professional diversity and team cohesiveness (Onyekwere, 2013).

iii. Gender: Female health workers are reported to support interprofessional collaborative practice better than their male counterparts (Santrić Milicevic et al., 2011). Also, there are differences in how male and female health workers perceive the importance of communications in management teams.

iv. Economic costs: With respect to costs, doctors and pharmacists perceived time and costs associated with interprofessional collaboration differently (Agwo et al., 2014). Similarly, issues relating to treatment costs for patients were reported to be a major conflict area among professionals especially in the private sector (Emmanuel and Olajide, 2011).

2.4.2.3 Theme 4 (Organisational Factors)

This theme describes how organisational factors impact interprofessional teamworking and the links to patient safety. 4 sub-themes were identified including organizational support (Jayasuriya-Illesinghe et al., 2016, Okonta and Okonta, 2018, Arevian, 2005, Vaismoradi et al., 2013, Valizadeh et al., 2015, Darvishpour et al., 2016), professional representation (Ahmadieh et al., 2020, Aires-Moreno et al., 2020, Okonta and Okonta, 2018, Omisore et al., 2017a, Okoronkwo et al., 2013), fear of litigation (Nakhaee and Nasiri, 2017, Vaismoradi et al., 2013) and effective leadership.

i. Organizational support: Lack of organisational support for training in non-technical skills which can potentially facilitate effective interprofessional teamworking was reported (Jayasuriya-Illesinghe et al., 2016, Okonta and Okonta, 2018). Meanwhile, organisational
support provided by care management teams of diabetic mellitus patients led to improved patient outcomes through improvements in documentation, continuity of care and laboratory analysis (Arevian, 2005). Nurses were reported to lament unfair organisational support between them and physicians (Valizadeh et al., 2015, Vaismoradi et al., 2013). Physicians were found to influence organisational culture which in turn poses barriers to support for nurse prescribing by health organisation authorities (Darvishpour et al., 2016). Ineffective organisational environment characterised by poor support for personnel was also found to negatively impact interprofessional team knowledge and patient safety (Zare et al., 2020).

ii Professional representation: Professional representatives were reported to interpret events in the health system in favor of their own profession as a demonstration of loyalty to their profession over their team (Okoronkwo et al., 2013). Professional group interests and loyalty was reported to be a leading cause of interprofessional conflict (Okoronkwo et al., 2013). Also, hoarding of professional knowledge and fear of loss of professional image hindered interprofessional collaborative practice between doctors and nurses.

iii. Fear of litigation: Interprofessional teamworking was reported to be affected by physicians' fear of litigation as they weigh their decisions based on the perception that litigations occur more frequently among physicians than nurses (Vaismoradi et al., 2013). Fear of blame was also reported to compel nurses into accepting physicians' orders without applying their professional judgement (Vaismoradi et al., 2013).

iv. Effective Leadership: Only 2 studies on effective leadership are mapped and they both reported poor leadership as the leading cause of interprofessional conflicts among health care workers (Adjekukor et al., 2016, Olajide et al., 2015a). Poor leadership is consistently being reported as a factor militating against interprofessional teamworking in LMICs (Olajide et al., 2015a).

2.4.3.4 Theme 5 (Knowledge, Attitudes, Perceptions and Expectations (KAPE))

Studies which explored the knowledge, attitudes, perceptions, and expectations of interprofessional teamworking are grouped together in this theme and each of these terms were mapped as sub-themes.
i. Knowledge: Physicians’ understanding of good teamwork influences surgical outcomes for patients (Jayasuriya-Illasinghe et al., 2016). Although physicians in this study perceived their role as more important than other professionals on the team, understanding of the interdependence nature of surgical operation was reported among physicians. Health workers were reported to have more knowledge of intraprofessional team rather than interprofessional teams (Adjekukor et al., 2016, Zamanzadeh et al., 2014). Knowledge of competencies require for effective health care delivery was more to be cooperative behavior (87.7%), facilitation of participation (73.5%) and courage to disagree (50%) (Adjekukor et al., 2016).

ii. Attitudes: Divergent attitudes towards interprofessional teamworking among health workers was reported (Seselja-Perisin et al., 2016, Qolohle et al., 2006, Elsous et al., 2017b). On attitudes towards interprofessional teamworking, pharmacists consistently showed a more positive attitude towards interdisciplinary collaboration than physicians (Seselja-Perisin et al., 2016). Similarly, there is a significant difference in the attitudes of nurses and physicians to interprofessional collaboration with nurses showing more positive attitudes than physicians (Elsous et al., 2017a). This study also report that physicians in internal medicine showed more positive attitudes to nurse-physician collaboration than colleagues in surgery and maternity wards (Elsous et al., 2017a). Favorable attitudes including enthusiasm and willingness to work between doctors and nurses were reported in the same study (Elsous et al., 2017a).

iii. Perception: On perception, both physicians and nurses perceive interdisciplinary collaboration as a team approach and the skills of both are needed to plan appropriate care for patients (Okoronkwo et al., 2013). Positive perceptions about interdisciplinary collaboration influenced industrial harmony. Other studies report statistically significant difference in the perception of all dimensions of nurse-physician interprofessional relationship (Elithy et al., 2011), with physicians scoring higher than nurses in coordination, cooperation, relationship, and conflict while nurses scoring higher than physicians in mutual trust, understanding of roles and communications (Elithy et al., 2011, Okoronkwo et al., 2013, Aghamolaei et al., 2012).

iv. Expectations: On expectations, nurses expect clinical pharmacists to perform more roles that impact on patient safety, such as providing information on drug interactions that may
cause damage or therapeutic failure, incompatibility between drug and diluent, drug stability and infusion time; and provision of pharmaceutical care for patients at hospital discharge (Ungari et al., 2016). Conversely, physicians expect clinical pharmacists should only be limited to traditional role of pharmacy such as reporting drug allergies, information on validity of medicines and evaluation of drug administration (Ungari et al., 2016). Similarly, 63.1% of physicians in one study do not expect pharmacists are given the right to provide repeat medication independently and most of the physicians expect pharmacists’ roles to be restricted to general information on dosage and administration of medications (Alipour et al., 2018).

2.4.3.5 Theme 6 (Interprofessional Conflict)

No sub-theme is mapped for this theme. Ten studies reported on interprofessional conflicts (Olajide et al., 2015a, Jayasuriya-Iliesinghe et al., 2016, Ifeyinwa et al., 2016, Okonta and Okonta, 2018, Bassey et al., 2017, Omisore et al., 2017a, Okhakhu et al., 2014, Onyango-Ouma et al., 2001, Agwo et al., 2014) and they are mostly from Nigeria. Tension and conflicts ensue when one profession does not stick within its professional role (Jayasuriya-Iliesinghe et al., 2016) or when the contributions of one profession is underestimated (Nakhaee and Nasiri, 2017). Dialogue usually fails in conflict resolution because of previous abuse of agreement, high demands by physicians’ professional associations and poor leadership at government and professional organisation levels (Alipour et al., 2018, Olajide et al., 2015a, Oleribe et al., 2016). More resident doctors believed that strikes in the health system affects them than patients (Okonta and Okonta, 2018). Significant influence of interunion conflicts on industrial harmony was reported in Nigeria (Bassey et al., 2017, Oleribe et al., 2018) while professional group interests and loyalty was reported as a leading cause of interprofessional conflicts (Omisore et al., 2017a). Furthermore, physicians’ inconsistencies during clinic visits caused interprofessional conflicts and negatively affects nurses’ morale (Qolohle et al., 2006). Causes of conflicts as perceived by doctors and nurses were reported as differences in wages, social status, poor interpersonal/intergroup communication, limited opportunities for staff interaction, desire for more autonomy by physicians and desire for more influence by nurses (Olajide et al., 2015a). Training intervention that fostered improved communication was reported to be an effective conflict management strategy (Onyango-Ouma et al., 2001).
2.4.3.6 Theme 7 (Patient Perspectives)

No sub-theme is mapped here also. 3 studies reported on patient’s perspectives of interprofessional teamworking. Patients, in one study, appreciate the differences in the role of physicians from pharmacists and the need for interprofessional collaborative working (Agwo et al., 2014). Another study reported that patients expressed positive opinions about nurses’ ability to prescribe medication despite nurses not believing they have sufficient knowledge to do so (Binkowska-Bury et al., 2016). Patients also support the view that pharmacists are given prescription rights against doctor’s contrary views (Auta et al., 2016). Patient perceptions of quality care are predicted by the frequency of reported errors by health care professionals and more strongly by the respect and sharing of information between physicians and nurses (Ghahramanian et al., 2017).

2.5 Mechanism of associations between Interprofessional Teamworking and Patient Safety

Majority of the studies mapped did not explicitly report associations between interprofessional teamworking and patient safety or quality of care. However, few studies markedly report the associations between interprofessional teamworking and patient safety (Farzi et al., 2017b, Farzi et al., 2017a, Biasibetti et al., 2019, Khoshab et al., 2018, Moreira et al., 2019, Pires Lemos et al., 2019, Busari et al., 2017, Ghahramanian et al., 2017, Hailu et al., 2016, Arevian, 2005, Sulistyaningsih et al., 2020, Etheredge et al., 2017, Okhakhu et al., 2014, Ungari et al., 2016, Vaismoradi et al., 2014) and almost all the studies implicitly mentioned the relevance of interprofessional teamworking to patient safety.

As illustrated in Figures 4, 5 and 6, studies showed that the mechanism of associations between interprofessional teamworking and patient safety are complex and multifactorial. Whether explicitly or implicitly linked, studies consistently showed that the presence of effective interprofessional teamworking leads to improved patient safety outcomes and vice-versa.
In this study, I demonstrate a link between interprofessional teamworking and the different mediators from both positive and negative perspectives. Positive perspectives show how effective interprofessional teamworking is linked to patient safety and mediating points in-between as reported by the mapped studies while negative perspectives show how lack of/ineffective interprofessional teamworking cause patient harm as well as the mediating points in-between, as reported by the mapped studies (Figures 6 & 7). It can be inferred from the diagram that more studies reported on the negative associations than the positive associations in LMICs.

Figure 5: Mechanism of Association between Interprofessional Teamworking and Patient Safety
Figure 6: Single pathway mechanism of association (Negative)

1. Negative Associations
   - Physician dominance
2. Lack of respect
3. Loss of job satisfaction
4. Lack of motivation/enthusiasm
5. Stress/Burnout
6. Medication errors
7. Patient Harm

Figure 7: Single pathway mechanism of association (Positive)

1. Positive Associations
   - Strong leadership
2. Regular staff meetings
3. Role appreciation
4. Assertiveness
5. Double-checking
6. Patient Safety
2.6 Discussions and Recommendations

The aim of this review is to characterise available studies on interprofessional teamworking in LMICs and to explore the mechanisms of associations between interprofessional teamworking and patient safety in this setting. A total of 95 studies were identified for mapping, from which 7 themes and 25 sub-themes were extrapolated. These themes were categorised into new concepts (developed through thematic analysis) and existing concepts (adapted from a combination of previous frameworks of interprofessional teamwork by Mickan and Rodger (2005) and Reeves et al. (2010).

New categories of themes in the field of interprofessional teamworking identified in this review include KAPE, interprofessional conflicts and patient contributions to interprofessional teamworking. While these themes are not new in the literature, this systematic mapping review takes a step further to deepen perspectives on their positions in the field of interprofessional teamworking beyond the existing frameworks.

Researchers and practitioners in LMICs appear to consider interprofessional teamworking from the perspectives of frontline health workers where patient treatments occur. Adopting a system-wide approach to studying interprofessional teamworking which includes how blunt end activities, politics, networks, and technology contribute to interprofessional teamworking will benefit epistemic construct of the field since effective collaboration requires the interplay of several factors within relational and organisational domains (D'Amour et al., 2005, Infante, 2006).

Considering interprofessional teamworking from the perspectives of frontline professionals or between few categories of frontline professionals alone either in research or practice may underplay the contributions of system level activities on how teamworking in the health system can improve patient outcomes (Infante, 2006).

Also, this review reflects an increasing awareness of the contributions of patients and their families to interprofessional teamworking. Health systems exist to care for patients and their family, hence it is helpful to factor in their experiences when measuring the performance of interprofessional teamworking (Donnelly et al., 2019). This review was able to identify and subsequently map a new theme to accommodate this very important, but
often forgotten, aspect. Patients and their families usually bear the cost of treatments in LMICs hence securing their satisfaction, enhanced through effective interprofessional teamworking, is important. More so, the cooperation of patients and their families is invaluable to achieving patient safety, hence, patients and their families should not only be recognised as service users but a part of the ‘team’ whose collaboration and participation are necessary to achieve safe/quality care (D'Amour et al., 2005, Binkowska-Bury et al., 2016). Future research might explore if inviting patients/relatives to interprofessional teamworking meetings can make a difference in how health care services are delivered and utilised as well as the challenges that can limit such practice.

This review revealed limited and uneven knowledge of interprofessional teamworking in LMICs. First, the literature in this setting is dominated by quantitative studies with more studies conducted among front line health workers compared to studies among policy makers. The concept of teamworking was originally established as a necessity to improve patient outcomes given the complex nature of treatment requirements, increasing specialisation and the dynamic nature of health system at the sharp end (Örgütü, 2010, Nancarrow et al., 2013), hence researchers have adopted quantitative approach to measure interprofessional teamworking variables. However, increasing awareness of the advantage of qualitative research methods is demonstrated by increasing numbers of qualitative methods between 2018 and 2020 (Table 3).

Quantitative studies adopt a positivist philosophical perspective which involves measuring certain parameters to understand the phenomenon being studied. Adopting quantitative methods for phenomena such as interprofessional teamworking may not adequately capture the realities of the interprofessional working relationships among health workers. Compared to qualitative methods, quantitative methods usually limit researchers’ abilities to constructing meaning from emotions, experiences, behaviors, and attitudes of research participants which cannot be measured numerically (Burns and Grove, 2005). However, methodologists have highlighted limitations and challenges of conducting qualitative research including small sample size which limits external validity and rigour as well as the need to overcome the inherent subjective bias associated with qualitative methods (Braun and Clarke, 2013).
Mixed methods approach adds multiple perspectives to data by combining the complementary advantages of both quantitative and qualitative methods (Johnson et al., 2007). However, challenges with conducting mixed method studies must also be considered. For instance, conducting mixed methods research requires more time, funds, and other forms of resources as well as the need for a combination of quantitative and qualitative skills, which may require teamwork. To create a balance, I recommend that future studies consider qualitative or mixed method approach for better validity and reliability.

Also, I identify a characteristic hierarchical structure in the health systems with Doctors/Physicians at the top of the hierarchy who exert dominance on other professions leading to professional rivalry and interpersonal tensions. This finding is consistent with other studies from other regions indicating that hierarchical physician-dominated structures in health systems is a global phenomenal. Although less pronounced in high-income health systems, it is believed that such hierarchical structure is transgenerational and reflects historical gender divisions given how medicine is largely a male dominated profession with nursing being a female dominated profession (Bell et al., 2014, Green et al., 2017, Hall, 2005). Hierarchical structures in health system and high-power distance among professionals are recognised as major causes of fragmentation, interprofessional group conflicts, stress, loss of job satisfaction, poor communication and, consequently, patient harm (Green et al., 2017, Peter et al., 2020, Todorova et al., 2014, Thylefors, 2012).

Interprofessional teamworking is revealed as a complex field in public health with inconsistent and sometimes ambiguous use of terms such as interprofessional/interdisciplinary and teamwork/collaboration/communication/relationship/practice. The absence of a unifying term, makes it challenging to review evidence and harmonise findings (Reeves et al., 2018, Nancarrow et al., 2013). Similar concerns with inconsistent use of terms are recognised by scholars who suggest a need for distinctions between narrower terms such as “interprofessional” and broader terms such as “interdisciplinary” for better understanding (Nancarrow and Borthwick, 2005). They also highlight the importance of making distinctions between the different terms used to describe teamwork either as a type of team or as the processes that take place within teams.
This review adopts the term “interprofessional teamworking” to harmonize the different terms used to describe interprofessional relationships in literature because it reflects the dynamic reality of a constantly expanding and evolving field. Other authors have also adopted interprofessional teamworking to harmonize the different terms in this field (Xyrichis et al., 2018).

I also report a complex, multifactorial association between interprofessional teamworking and patient safety which are mostly implicitly stated. Linking interprofessional teamworking to patient safety is not usually the focus of studies using either interprofessional teamworking or patient safety except, of course, for studies on patient safety culture/climate in which teamwork is a key domain for measurement. As shown in the map (Figures 5, 6 and 7), the associations between interprofessional teamworking and patient safety can be considered from positive and negative perspectives. Positive perspectives show how interprofessional teamworking facilitates patient safety while negative perspectives show how lack of interprofessional teamworking causes patient harm. In this map, I was able to construct the mediators between interprofessional teamworking and patient safety. Each junction or mediator point represent potential opportunities for researchers and health system policy makers to act towards reducing patient harm arising from poor interprofessional teamworking management.

For example, some of the most frequently recurring subthemes in the relational domain of interprofessional teamworking are physician dominance, together with a lack of respect and recognition for other professionals in the health system. These factors can lead to loss of job satisfaction for health professionals, leading in turn to lack of enthusiasm and motivation among healthcare workers which can subsequently lead to stress, high personnel turn over and ultimately patient harm. These mediators along the path from interprofessional teamworking to patient safety have research and practice implications in LMICs.

2.7 Limitations of the study

Most of the studies included for this review are obtained from additional searches of literature other than the databases. Poor organisation of studies from LMICs into accessible databases portends to make review from this region somewhat challenging. Hence, there
are possibilities that some articles are not included in this mapping which would have been qualified for inclusion.

2.8 Gaps identified in literature

Through the systematic mapping review, I was able to identify five patterns in literature that links my interests in studying interprofessional conflicts to the specific research questions this thesis focuses on:

1. Most studies on interprofessional conflicts are from Nigeria where issues such as remuneration, lack of professional autonomy, fussy job descriptions and imbalanced professional power between doctors and other professionals have reportedly led to crisis in the health system. These findings explicate my personal experience on the topic and reinforced my interests in studying interprofessional conflicts in Nigeria health system.

2. The systematic mapping review reported a dearth of published papers on the understanding of system level dynamics on IPT in this setting hence indicating a need to shift research agenda to system or organisational level perspectives and dynamics of the topic.

3. There is a methodological gap in literature with more quantitative studies reported than other types of studies.

4. Despite few studies identifying a need to bring the perspective of patients and/or family of patients to research on IPT, little evidence is available about their contributions. Although this research area is not covered in this thesis, it presents opportunities for researchers in LMIC to explore.

5. The associations between interprofessional teamworking and patient safety are complex and multifactorial with several mediators. I categorised them into positive and negative associations for clearer perspectives. The pathways from IPT to patient safety, and their mediators, have potential research and policy implications.
From these interesting findings, my focus on the perceptions and contributions of IPGCs among policymakers in Nigeria health system using a qualitative approach is further justified.
3.1 Introduction

Apparently, the origin of conflict is an abstraction with different perspectives in literature, however, conflict can be traced to the description of biological, social, cultural, and environmental factors underpinning human behaviours (Queller and Strassmann, 2018, Michod and Herron, 2006). This implies that conflict has broad origin and cuts across several epistemic disciplines, hence, there is a need to understand the broad dimensions of conflict including the theoretical and empirical evidence of interprofessional conflicts from global perspective.

Literature suggests that history is not sufficient to understand alterations in social order such as experienced in French revolution and industrial revolution, hence, classical scientists proposed a more intentional and objective method of studying social phenomena (Turner and Maryanski, 1979). French and Industrial revolutions were believed to be major historical events that led to the discovery of sociology by Auguste Comte as a science that applies deliberate and planned methods to understand human organisation (Turner and Maryanski, 1979). This implies that conflict itself is at the foundation of sociology as it is a basic experience of human nature. Hence, conflicts are at the foundation of social theories that seek to proffer solutions to human reorganisation (Turner and Maryanski, 1979).

This chapter aims to achieve a flexible review of theories and evidence that are relevant to interprofessional group conflicts from global perspective. Also, this review enables me to identify a set of relevant frameworks that are used to organise and explicate my findings in the results and discussion chapters.

3.2 Method

I employed a traditional narrative review to identify theories and empirical evidence on interprofessional conflicts due to its ability to provide a flexible and broad exploration of
literature compared to other review methods such as systematic review or scoping review. Conflict cuts across different epistemological disciplines hence an unstructured (unsystematic) review is apposite for understanding the different narratives of interprofessional conflicts in literature and what theories are relevant to explicating interprofessional conflicts, as well as the existing evidence on interprofessional conflicts from global perspective.

The unstructured review includes searches of databases such as Medline (via ovid), Web of Knowledge, Emerald Insight and Scopus as well as Google Scholar. Forward and backward citation tracing method was employed to identify more relevant studies. Studies were selected purposefully based on their relevance to the topic but limited to those written in English language. Interprofessional teamwork, collaboration and relationships already covered in the systematic mapping review were excluded. Also, interprofessional training/simulation/education, work-family conflicts, patients-healthcare workers conflicts and violent conflicts in healthcare were excluded because they do not align with the purpose of this review.

3.3 Results: Relevant theories

The following theories are discussed in this section due to their relevance to understanding interprofessional group conflicts:

Table 5: Overview of Relevant Theories

<table>
<thead>
<tr>
<th>Theory</th>
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<th>Overview</th>
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<tr>
<td>Marslow’s theory of motivation and Fundamental theory of need</td>
<td>3.3.1</td>
<td>Needs are in hierarchies and violating the fundamental needs generates conflicts more spontaneously than violating other categories of need.</td>
</tr>
<tr>
<td>Functionalism Theory</td>
<td>3.3.2</td>
<td>Healthcare system consists of functioning interdependent groups which achieve stability due its organisational structures and norms.</td>
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<tr>
<td>Theory</td>
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<td>Marx theory of conflict and countervailing power theory</td>
<td>3.3.3</td>
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<tr>
<td>Conflicts are inevitable due to scarcity of resources and inequities generated by one social class (Bourgeoisie) exerting advantage over another (proletariats). Countervailing power theory explains the shifts in political, social, or economic power due to excessive power of one social group over disadvantaged group(s).</td>
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<tr>
<td>Theory of social constructionism</td>
<td>3.3.4</td>
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<tr>
<td>Professional groups attain status by appealing to stakeholders in the society for acceptance and recognition.</td>
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<td>Rational choice-exchange theory</td>
<td>3.3.5</td>
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<tr>
<td>A system reflects the aggregates of individual or group interests making decision on its behalf.</td>
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<td>Professionalism/professionalisation, Managerialism and Negotiated Order</td>
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<tr>
<td>Professional groups engage in activities to gain more status and advantage sometimes without considering the interests of other professional groups or the interests of the health system. Managerialism underscores the rise of management experts in charge of health system management. Negotiated order is necessary to ensure harmony due to professionalisation and...</td>
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3.3.1 Maslow’s theory of motivation and fundamental theory of needs

Maslow’s theory of motivation highlights 5 hierarchies of need that form the very nature of human motivation which are applicable to explaining the origin of conflicts (Maslow, 1943). The hierarchy of needs is a pyramid with the most important category of needs being physiological (such as food, clothing, and shelter). The need for self-actualisation, which is considered for individuals or groups that have achieved physiological, safety, the need for love and belonging, and the need for esteem, is placed at the peak of the pyramid. Maslow suggested that human nature is conditioned to become hostile against circumstances that threatens his/her basic needs. In Marslow’s words:
“It is easy to accept basic need frustration as one determinant of hostility; it is quite as easy to accept the opposite of frustration, that is basic need gratification as an a priori determinant of the opposite of hostility, that is friendliness.”

Fundamental theory or the theory of basic human needs from the field of psychology was also able to link conflict to Maslow’s hierarchies of need. This theory postulates that conflicts occur due to unfulfilled, suppressed or denial of basic human needs (Burton, 1990, Pittman and Zeigler, 2007, Doyal and Gough, 1984, Maslow, 2019). While human needs are insatiable, it is the basic physiological needs that generate the greatest emotional response such as fear, anger, and satisfaction in humans (Pittman and Zeigler, 2007).

3.3.2 Functionalism theory

One of the dominant theories of sociology is functionalism which was first postulated by Emile Durkheim. His work became the theoretical foundation for many other classical theories by Parson, Merton and Weber (Holmwood, 2005).

Functionalism is an ideology that believes society is a relatively stable system of functioning components such as norms, roles, and institutions; and that these components serve specific purposes which help to maintain the long-term survival and stability of the society (Holmwood, 2005).

Emile Durkheim posited that different parts of a society such as institutions, only exist because of the vital role they play in the society (Archibong and Antia, 2014). The society is viewed as a ‘living organism’ based on the functioning of its different parts working together as a whole. In his words, Durkheim stated:

“The totality of beliefs and sentiments common to the average members of a society forms a determinate system with a life of its own. It can be termed the collective or creative consciousness” – The Division of Labour (1893).

In the sociology of profession parlance, Durkheim’s work emphasises the position of professionals as agents of stability in the society and how occupational groups facilitate moral order. Durkehim argued that a form of organic solidarity is generated in organisations
not spontaneously but through the formation of professional associations which he emphatically believed is needed to destroy individualistic interests and ego as well as advance moral regulation in organisations (Collins, 1988, Durkheim, 2013).

Building up on the foundations laid by Durkheim, Merton however stated the need to differentiate between latent and manifest function so that functionalist views will not supplant scientific inquiry. He went further to argue that what is functional for a society may not be functional for a sub-group in that society thereby creating inequalities. As explained by Holmwood, Merton’s work introduce the dimension of power and conflicts to functionalism theory (Holmwood, 2005). This makes functionalism relevant to explicating relationship dynamics in modern healthcare institutions where status stratification exists among multiple professional groups acting as interdependent parts of the whole health system structure.

While there are scholars who believe in the empowerment of professions because their knowledge and altruism make them indispensable to modern societies (Wilenski, 1964, Evetts, 2002), other contemporary scholars adopt neo-Weberianism to argue that professional groups are organised with state support for profit and self-interest given the competitive environment of the modern society (Adams and Saks, 2018, Saks, 2020, Saks, 2010). Saks (2016) have however called for more empirical evidence to support such claims including the role of the state and the factors that shape state’s influence.

Functionalism has faced criticism for focusing on macro level of social structures rather than the micro level which applies to daily experiences, hence it is regarded unsuitable for explaining the micro level human interaction in the health systems. Nevertheless, Oluyemi and Adejoke applied parson’s structural functionalism view to explain the situation of interprofessional conflicts in Nigeria health system from micro level perspective (Oluyemi and Adejoke, 2020). They argued that health system can be viewed as an independent society on its own having different professions as components. Profession in this case can be defined as a dominant position in the division of labour which has control over the determination of the substance of its own work (Elliot, 1979). Either viewed from the micro or macro health system level, functionalism is suitable for making sense of the situation of IPGCs in Nigeria health system which is the focus of this thesis.
3.3.3 Marx theory of conflict and the countervailing power theory

One of the criticisms of functionalism theory is that it does not accommodate social changes in its social order narratives. Although, a few neo-functionalism scholars like Parson and Weber have made efforts at clarifying such concerns, the flaws of functionalism were believed to have disqualified it from the concept of a unified social theory it was intended to be (Holmwood, 2005). To explain the social changes taking place through history especially during the industrial revolution, Karl Marx theory of conflict finds significance.

Karl Marx postulates that social conflict is inevitable within the evolution and tenets of capitalism due to the inequality and dehumanisation it imposes on the labour-class or proletariats (GÜÇLÜ, 2014). In contrast to functionalism theory, Marxists believe society is dynamic with scarce resources and the element of scarcity engenders power imbalance as well as inequity in the distribution of resources which usually favour individuals or groups with higher social status (the bourgeois) to the disadvantage of those in lower status or class which provide the labour (the proletariat). In his book, the communist manifesto, Marx suggested the need for proletariats to unite and revolt against the oppressive capitalists’ class thereby eliciting political, economic, and social debate during the industrial revolution era (GÜÇLÜ, 2014).

Whereas the existence of class groups in contemporary health industry is aptly discussed by scholars such as Saks (2016). Max Weber theory of social closure was applied in the sociology of profession to explicate how medical profession acquire status through occupational closure. Saks described this as “a process by which a group seeks to increase its advantage through a monopoly of resources as well as by restricting recruitment and access to the group by outsiders in a society where there is competition for power and other goods.” (Saks, 2016)

There are other contemporary proponents of Marxism assessing status stratification in healthcare institution. For instance, Braverman 1998 placed medicine as highly classed professional group in the healthcare industry with power and status to “proletarianise” other professional groups including the nurses (Braverman, 1998). Ehrenreich and Erenreich on the other hand perceive profession-managerial class as capitalist agent that seeks to control resource distribution (Ehrenreich and Ehrenreich, 1979). Other neo-Marxist view of
profession consider medical profession as part of the capitalist class itself despite not having formal ownership of any means of production (Ehrenreich and Ehrenreich, 1979).

Conflict theory has been criticised for not able to explain the stability and continuous improvement in societies. For instance, revolution is no longer common in western societies and most changes are known to occur incrementally through innovation rather than through revolution. In the health sector, Marxist view is also criticised for its subjective view of the state as a long-term supporter of the “capitalist class”, in this case, the medical profession, without a framework to generate empirical evidence that support such claims (Saunders 2007, Sak, 1995).

Following a similar principle regarding power shifts, the theory of countervailing power was first postulated by Montesquieu in 1748 and popularised by Galbraith in 1952 (Galbraith, 1954). Theory of countervailing power essentially describes the phenomenal whereby the control of political, social, or economic power is weaned from the dominant force by the oppressed groups due to excessive control of the dominant force (Galbraith, 1954). This concept has been used to analyse power shifts in oligopolistic economic market (Sarfatti, 1977, Dobson and Waterson, 1997, Galbraith, 2017), but Johnson (1977), Larsson (1977) and Light (1991) focussed their arguments of countervailing power on the interaction of powerful social actors within an interdependent yet distinct professional groups such as in health system where professionalisation create dominance-countervailing dynamics among professional groups on one hand and profession-state bureaucracy power shifts on the other hand (Light, 1991, Sarfatti, 1977).

Health system is known to be highly dynamic due to constant reforms at the macro level where key decisions that shape national health systems occur (Nancarrow et al., 2013). In LMICs, resources for health system are usually constrained thereby creating inequality, differential power imbalance and the consequent agitations among the groups who feel oppressed. For instance, Nigeria health system is reported to experience constant struggle among the interprofessional groups either to gain more status or retain professional status with considerations that more resources are allocated to the group with higher power and status (Oluyemi and Adejoke, 2020). Furthermore, the perception that one profession dominates and control resources in the health system without fair distribution of resources or opportunities may eventually lead to resistance by other professions who feel oppressed.
Both Marxism and countervailing power theory suggest that the presence of injustice and oppression will inevitably create interprofessional conflicts among healthcare professional groups in the health system, hence the need to manage the relationship dynamics and resource distribution in ways that promote interprofessional harmony cannot be overemphasised.

3.3.4 Theory of social constructionism

The theory of social constructionism postulates that a society determines the value and status of resources or entity within it (Andrews, 2012, Burr, 2015). The value society places on an entity relative to another is based on preconceptions or assumptions which are either subjective or objective. Tangible and intangible attributes such as appearance, colour or positions form the bases on which assumptions are made and which determine the value society ascribe to an entity (Andrews, 2012). The theory of social constructionism is similar to the theory of symbolic interactionism except that while the latter is appliable at macro level, the former is applicable to micro level interactions.

In the health sector, assumptions are known to confound diagnosis in clinical practice. For instance, medicalisation at micro health system level is often associated with the practice of attributing behaviours to medical problems thereby creating a necessity for medical solution to problems that require a different solution (Van den Bogaert et al., 2017). Medicalisation at macro health system level is however linked to the narratives that drive policy formulation, hence, the expansion of medical dominance and the import of medical solutions for addressing social problems are related to medicalisation (Ballard and Elston, 2005).

Social constructionism also applies to the relationships and interactions among professional groups. Class and status differences between professional groups in the health system is a function of the value society place on professions and the assumptions that underline the construct of such values. This theory supports the narrative that professional groups gain their powers, status and prestige that determine their relevance or position in the health system through the value placed on their work by the society. Hence, part of professionalisation activity engaged by professions include lobbying the public for acceptance and recognition.
3.3.5 Rational choice-exchange theory

The rational choice-exchange theory (RC-ET) is multidimensional but essentially, the theory postulates that an individual is a rational being who takes decisions based on preferences in the light of his/her beliefs (Friedman and Hechter, 1988, Nye, 1980). This theory has macro level applications which can be applied in the health system for analysing distribution of resources such as approvals, appointments, remuneration or trainings. Hence such system reflects an aggregate of interests vested by individuals or groups taking decisions on its behalf.

As narrated in the previous subsection on functionalism view of professions, classical sociologists believe professions such as the medicine possess unique knowledge and altruism that earned medical doctors the power, status, and ability to self-regulate. However, such powers are constantly being challenged either by other professionalising occupational groups that seek to gain more societal recognition but also by the state power that seek to regulate the activities of professions (Adams and Saks, 2018). According to Adams and Saks, state’s deprofessionalisation agenda has become necessary in contemporary organisations due to misconducts and the proclivity of professional groups to place their own interests, sometimes the interests of powerful clients, above public interests (Adams and Saks, 2018). Apparently, competition based on political and economic benefits have pushed professions into pursuing complex agenda that combine their self-interests with their altruistic concerns for clients. Hence, powers of professionals to self-regulate is increasingly being curtailed by the state (Adams and Saks, 2018).

Although research into roles and interests of state agents is often omitted in sociology of profession literature, available evidence suggests that state actors possess dual interests in their agenda to regulate the activities of professional groups (Adams and Saks, 2018, Abbott, 2005, Adams, 2009). Hence, it is not often sufficed to examine the roles and interests of healthcare professionals but also the roles and interests of state actors. In the words of Adams and Saks:

“To understand social action more generally, and policy making in particular, scholars should therefore explore the influence of interests, values and principles”
In agreement with this assertion, fostering IPT in healthcare organisations entails the analysis of interests of key policymakers as well as their interactions. This is needed to illuminate areas of policy, advocacy, or research for improving interprofessional relationships and the performance of health system in general.

3.3.6 Professionalism/professionalisation, managerialism and negotiated order

3.3.6.1 Professionalism/professionalisation

Professionalism has been described as an abstraction that requires a unifying conceptual and methodological term for proper clarity and meaningful application especially due to numerous nuances and connotations associated with the term (Swick, 2000, Evans, 2008, Carr, 2014). The term profession itself has been argued to connote an idea of optimised occupational reputation with cognitive and normative features. Cognitive feature relates to unique theoretical and technical knowledge or skill expected in the profession which are acquired through extensive education and/or training (Carr, 2014, Swick, 2000). Normative features on the other hand refers to the service-oriented nature of the profession and the ethical virtues that embodies its ability to meet important societal needs. Such ethical or moral virtues justify the trust a society confers on professions to self-regulate in terms of recruitment and discipline (Carr, 2014, Larson and Larson, 1979).

Another view of professionalism is from Sarfatti (1977) who defined professionalism as the process by which producers of special services are organised to control the demand, supply, and delivery of their expertise for profits and social power (Dingwall, 2010). His definition is consistent with that of Hoyle (1975) who viewed professionalism from the prism of strategies and occupational campaigns employed by different professional groups to improve their remuneration, status, and work conditions. Carr (2014) argument however is that occupations that have attained the status of a profession are organised to safeguard such status with pride to the envy and sometimes admiration of other professions. Hence professionalism embodies a sense of community exhibited by professions with special power and prestige which establish their unique identities in the society. Such definitions are focused on how professions are organised for material wealth and status in contrary to
the view of professions as occupations that have earned their prestige based on moral and ethical virtues on which they are founded (Carr, 2014).

Some scholars argued that professionalism irrespective of how it is viewed, should be defined within the individual, organisational and cultural contexts that validates it (Larson and Larson, 1979, Morrow et al., 2011). Either viewed in terms of behaviour, attitude, or social power to control occupational narratives, professionalism cannot exist without the recognition and approval of the stakeholders in the state (Morrow et al., 2011, Carr, 2014, Noordegraaf, 2020). For instance, government has been regarded as playing crucial roles in the expansion of professionalism by granting practicing licence, setting standards, recognising, and patronising professional services, as well as funding educational trainings to advance professional knowledge and skills (Taylor and Kent, 2016, Cruess and Cruess, 2000).

Furthermore, professionalism is believed to stem from the fact that important skills are the building blocks upon which modern societies are built (Sarfatti, 1977, Larson and Larson, 1979, Evetts, 2013). Different occupational services develop and defend differentiated roles to remain relevant in modern societies. New professions are also striving to attain higher social status, autonomy, and recognition by standardising their practice and expanding their roles (Carr, 2014, Lynch et al., 2004). These descriptions of professionalism are relevant to this thesis as they suggest the foundations of professional regulatory councils, associations, and unions as well as the origin of context specific IPGCs in healthcare organisations.

Meanwhile, the term professionalism and professionalisation is often used rather confusingly in literature. Like professionalism, professionalisation is defined as a process involving certain attributes such as expansion of job descriptions, establishment of training schools, development of university curricula and the formation of professional associations (Levine, 2001, Larson and Larson, 1979, Noordegraaf, 2020). Similarly, (Hoyle, 2001) described professionalisation as “the process whereby occupations have become or seek to become publicly recognised as professions according to the degree to which they meet alleged criteria.” Other scholars like Larson and Larson (1979) could not also mark a distinction between the two terms. Instead, they described professionalisation in terms of marketability - an exchange of scarce knowledge and skills for social and economic reward. However, at individual professional level, Phillips and Dalgarno (2017) draw a contrast
between the two terms by describing professionalism as being ethical, compassionate, competent, and moral in practice while relating professionalisation to the process of gaining entry, formation of identity via socialisation, and internalising the ethos of a profession. Despite the dissonance between these two terms, they clarify that “professionalisation is an ongoing process by which professionalism is attained.” Irrespective of what term is used, Nancarrow and Borthwick (2005) posited that both professionalism and professionalisation underscore the intention of existing professions to expand their boundaries and gain more status in the health system.

Historically, health system is known to be dominated by medical profession which has monopoly of knowledge over most aspects of patient management (Freidson, 1985). Other professions have however evolved over time to carve unique occupational niches and identities for themselves which directly or indirectly challenge doctors’ dominance especially in areas of shared boundaries (Badejo et al., 2020, Nancarrow and Borthwick, 2005). The implication of these two concepts (i.e., professionalism and professionalisation) to the health system is that autonomous professional groups need to work interdependently within clearly defined job roles (including areas of shared roles) to avoid interprofessional conflicts (King et al., 2015, Nancarrow and Borthwick, 2005, Willis, 2020). Also, the hierarchical, bureaucratic, and managerial control which characterise industrial and commercial organisations are becoming less effective in healthcare organisation as each profession attain autonomy through professionalisation activities.

3.3.6.2 Managerialism

In their work, Anteby et al. (2016) discussed 3 lenses for understanding professionalism to include becoming, doing, and relating. The first two lenses are focused on the internal activities of a profession such as the process of recruitment, identity formation and standards of occupational practice. They however describe the ‘relating lens’ as focusing on understanding the interactions among interdependent professional groups. Noordegraaf (2020) believes the brokering component of the relating lens explains the rise of a third-party professional group that are essential to moderate and coordinate the complex web of relations around a profession.
Among other factors, managerialism gained relevance in this position especially in institutions as complex as the health system. Managerialism is thought of as an ideology organised by elites from business schools who believe that only seasoned managers possess the expertise, experience, and network necessary to manage public, private or charity organisations; and that no other profession or class in the society are better positioned to effectively manage organisations (Scott and Hart, 1991, Chauvière and Mick, 2013, Klikauer, 2013).

There are however other schools of thought who believe that managerialism is a mutation of neo-liberal capitalism into management capitalism with a view to mould a different perception of management from the 20th century experiences where ruthless bureaucratic practices are applied to control workers’ behaviours. These views are similar to that of other scholars who described managerialism as an expression of the management class that establish itself ruthlessly and systematically in all organisations (Locke, 2011, Locke and Spender, 2011). With the underlining concept that different types of organisations can be managed using a unique generic set of management instruments, managerialism was believed to have spread quickly to all sectors of western economies in the early 1980s (Klikauer, 2013, Klikauer, 2015).

A component of managerialism that is particular to public organisations is the New Public Management (NPM). During the UK post-war era, professional groups are known to participate actively in the development of public service as administrators until 1970s when the government of Margaret Thatcher introduced NPM. This step was taken on the perception that professionals-in-management are inefficient managers combined with their inability to regulate professions (Kirkpatrick et al., 2007, Lapsley, 2009). Since introduced to management practice, NPM has been adopted to transform health systems in other high-income countries such as USA, New Zealand, Switzerland, and Canada in waves of public administration reforms that characterised 1980s (Schedler and Proeller, 2011).

Like professionalism, NPM is also an abstraction with no universal model but whose main objective is to modernise the administration of public organisations. However, 6 generic elements of NPM identified includes:
1. Organisation restructuring which is characterised by reduction of hierarchy, political and managerial roles reorganisation.
2. Management instrument characterised by entrepreneurship style management which focuses on the output and efficiency.
3. Budgetary reform which is characterised by private sector expertise and styles to manage public sector organisation.
4. Participation which is characterised by the involvement of citizens
5. Quality management characterised by customer-focused reforms for achieving excellent service delivery e.g., through continuous quality improvement.
6. Privatisation which is characterised by reduction of public sector involvement in service delivery, promotion of efficiency by creating competitive environment and public-private-partnerships.

Despite the success of NPM leading to its adoption by Organisation for Economic Cooperation and Development (OECD) countries (Gruening, 2001, Oecd, 1995), one major constraint of NPM in healthcare organisation is the presence of strong professional associations that wields autonomous power and whose agenda often conflict with that of managers (Lapsley, 2009). Kirkpatrick et al. (2007) conducted a comparative analysis of management in UK and Denmark health systems. They found that doctors in the UK are disengaged from management while their colleagues in Denmark sought to take over hospital administration from within. This suggests that in health systems where there is insufficient supply of seasoned health managers to push the concept of managerialism, the dominant profession (usually the medical profession) may capture management for advancing their collective interests (Kirkpatrick et al., 2007, Ayala et al., 2015). The dominant power of medical profession positioned them as the de facto manager in such health system, including their ability to establish a mechanism for defending their legitimacy to lead (Belrhit, 2021, Lassa, 2016). However, professionalism and the desire of other professions to achieve more status could mean strong interprofessional group competition for management positions as it is currently experienced in Nigeria health system (Mayaki and Stewart, 2020, Omisore et al., 2017a, Badejo et al., 2020).

3.3.6.3 Negotiated order
Using the medical profession as a gold standard, few scholars have attempted to study the interactions between professions and management in the health system (Numerato et al., 2012, Kitchener, 2000, Harrison, 2009). Lassa in his thesis reviewed four doctor-management interaction spectra to include managerial hegemony, a situation where medical professionals imbibe management ideology hence carry themselves as managers in the health system (Lassa, 2016). The second being co-optation of management, where the forces of management interfere with medical profession. The third was described as hybrid identity in which the medical profession is merged with managerial responsibilities while the fourth is adaptation where professions accept management by considering management as an external force.

In the last scenario, management with formal authority over the administration of health system are now believed to have limited control over the behaviours and practices of different professional groups (Belrhiti et al., 2021). This is contrary to the agenda of managerialism that seek to promote the powers of seasoned managers in their organisations. Hence, the profession-management interactions, in combination with professionalisation activities of multiple professional groups, as well as their dominance-countervailing characteristics imply that functional health systems adopt a mechanism for negotiating order.

The term “negotiated order” was first used in literature by Anselm Strauss and colleagues (Strauss et al., 1963, Strauss, 1964) in their study of two US hospitals (Allen, 1997). This bidirectional appellation (i.e., negotiation and order) describe how negotiation facilitates social order and how social order enables the interaction processes of which negotiation is a part. According to Maines (1982), the purpose of negotiated order is to maintain a state of order during changes.

In line with the tradition of symbolic interactionism, Strauss and colleagues argued that all social order is negotiated, and people work together towards achieving a meaningful goal in the society through an ongoing process of negotiation (Strauss et al., 1963). According to Bryant and Stensaker (2011), “the key argument of negotiated order is determined through ongoing negotiations between individuals (or groups) rather than by imposition of formal rules, processes and job descriptions at macro levels of the organisation.” By using tactics such as trade-offs, deals and pacts, compromises as well as exchange and bargains (Maines,
1982, Bishop and Waring, 2016), scholars have demonstrated that ongoing negotiations rather than strict rules are essential to managing intra- and inter-professional relationships in healthcare organisations (Miller and Kontos, 2013, Colyer, 2004, Allen, 1997). For example, Miller and Kontos applied the theory of negotiated order to understand patient care at micro health system level between nursing and allied health professionals (Miller and Kontos, 2013). Few scholars have also studied how import of technological tools such as Computerised Prescription Order Entry (CPOE) can change micro-level interprofessional order leading to professional boundary renegotiations (Barley, 1986, Introna et al., 2019). Bryan and Stensakar consider how middle-managers at meso health system level employ negotiated order to manage role conflicts (Bryant and Stensaker, 2011). Despite the criticism that negotiated order fails to recognise the influence of structure, former rules, and historical practices (Fine, 1984, Allen, 1997), the theory has been combined with institutional logics to derive a macro-level conceptual framework for negotiating order between patients and hybrid organisation (Bishop and Waring, 2016). Furthermore, Bryant and Stensaker (2011) clarified that negotiated order factors in the macro contexts in which negotiations occur despite focusing on micro level interactions. Hence the theory is suitable and applicable in this thesis.

A very important theme in the negotiated order theory is that negotiation has contextual connotations. Bryant and Stensaker (2011) posited that changing structural contexts such as relationships, rules, and hierarchies exacerbate conflicts as well as create fragmented negotiation while a stable context fosters long lasting social order. Similarly, settings where policies around job roles are inexistent, not properly communicated or not properly negotiated among interprofessional groups are prone to competitive negotiations as against cooperative negotiations (Miller and Kontos, 2013). As posited by Adams (2004), interprofessional conflict itself is central to professionalisation, hence, a state of order that enables interprofessional teamworking must be constantly maintained either through negotiation or regulation (Hewett et al., 2009). With this understanding, policymakers can establish a well negotiated stable structure for relationships, remuneration, job descriptions or roles in health system for sustainable order among stakeholders. Indeed, the concept of negotiated order is sine qua non to understanding how individuals or groups interact with the health system by highlighting how social actors create changes and/or respond to
changes as well as how their interests play out as organisational representatives (Degeling and Maxwell, 2004).

3.3.7 Northrup’s intractable conflict theory

Intractable conflict theory which was proposed by Kriesberg et al. (1989) has been applied at different sociological strata from interpersonal to international conflicts including the development, transformation and management of conflicts between incompatible social identities in healthcare organisations (Jameson, 2003, Goldman and Coleman, 2000).

According to Goldman and Coleman (2000), conflicts become intractable when they are protracted (i.e. locked in long-standing cycle of conflicts), non-functional and defy resolution. Professional identity is a strong driver of conflict intractability because profession is one of the core bases of individual’s identity (Freedman, 2019, Jameson, 2003). Hence status and role boundaries are common causes of intractable interprofessional conflicts in complex and adaptive health system.

3.3.8 Social identity theory

This theory stipulates that healthcare workers identify with groups or categories within the health system to benefit cognitive representation or self-reference (Hogg and Abrams, 2007, Bochatay et al., 2020, Hennessy and West, 1999). Individuals within the same group will likely view members of their group favourably than out-group members, hence presenting a high propensity for intergroup conflicts (Bochatay et al., 2020, Mayaki and Stewart, 2020).

Social identity theory explains favouritism in the allocation of resources within an organisation and the process by which individuals develop esteem by imbibing the norms, values, and status of their group (Hennessy and West, 1999).

3.3.9 Complex and Adaptive Healthcare System (CAHS) theory

CAHS theory explores how healthcare workers organise and interact, as well as how they adapt and evolve through conflict. Complex adaptive healthcare system theory considers the healthcare system as a network of interacting microsystems such as professional groups and management, rather than a single macrosystem (Freedman, 2019). The interactions are
non-linear and constantly generate conflicts which drive adaption and learning when managed functionally.

3.3.10 Social dominance/Realistic conflict theory

Another theory relevant to explaining interprofessional conflict is the social dominance theory and realistic conflict theory which states that stability in functioning society is due to group-based hierarchies with one group having “legitimate” advantage over the other(s) (Vargas-Salfate et al., 2018). Realistic conflict theory propose that prejudice and discrimination occur due to struggle for scarce resources. Negative competition in the interdependent relationship generates zero-sum representation of intergroup interactions which is mediated by scarcity. Both theories suggests that individuals behave in ways that maximise their opportunities and minimise their costs through membership of a group.

3.4 HRH and interprofessional teamworking

The human resource is arguably the most essential component of the health system without which other components cannot have meaning or be coordinated to support health (Dussault and Dubois, 2003, George et al., 2018). HRH is not only central to all activities within the health system (Dussault and Dubois, 2003, George et al., 2018), it is described as the “heart and soul” of the health system. WHO (2006) defined “Human Resource for Health” (HRH) or “Health Human Resource” or “Health Workforce” as “all people engaged in actions whose primary intent is to enhance health”. It includes the clinical professionals (Physicians, nurses, pharmacists, dentists, physiotherapists, medical laboratory scientists etc.) and non-clinical staff who are not directly involved in health service delivery but are essential part of the health system (managers, receptionists, ambulance drivers, accountants etc).

Challenges with human resource for health have been highlighted in literature. First, the issue regarding shortage of HRH globally is widely published (WHO, 2006, Adeloye et al., 2017, Tsolekile et al., 2015, Liu et al., 2017). Particularly, Low and Middle-Income Countries (LMICs) are mostly affected by inadequate supply of adequate and appropriate mix of HRH (Tsolekile et al., 2015). Shortage of HRH in global south is further exacerbated by highly mobile health workforce who migrate to high income countries where conditions are more
favourable (Cometto et al., 2013, Dimaya et al., 2012, Dodani and LaPorte, 2005, WHO, 2006, Willis-Shattuck et al., 2008, Lofters et al., 2013). The issue of brain drain has sparked several debates and ethical issues on global health scene.

Shortage of HRH is sometimes a regional problem within a country (Salami et al., 2016, WHO, 2006) and has to do with poor planning and training of adequate number and skill mix of health workers. It can also be due to maldistribution practices in which some professional cadres are concentrated in one place but inadequate or completely absent in other places (Adeloye et al., 2017, WHO, 2016a). For instance, Nigeria has regional disparity in the distribution of HRH between the North and South of the country and between rural and urban setting (Salami et al., 2016). Solutions have been prescribed to overcome the global shortage of HRH and the underlining causes such as brain drain (WHO, 2016a). Some of these solutions include employing context-specific strategies for planning, training, recruiting and retaining HRH (Salami et al., 2016, WHO, 2016a). Another solution is the task-shifting and task-sharing strategy in which certain tasks are shared or completely ceded to other cadres of healthcare workers. This practice has been shown to improve maternal and childcare indices in some countries (Nabudere et al., 2011, World Health, 2007, Deller et al., 2015) but requires compromise among healthcare workers which may operate against professional boundaries and power.

Another critical issue with human resource for health is organising teamwork among interprofessional groups despite their differences such as professional expertise, knowledge, skills, and status (Manser, 2009). This is evident in the increasing efforts at understanding Interprofessional Teamworking (IPT) in research and practice. IPT can be defined as the relationship between two or more individuals from different professional groups, working together towards quality patient outcomes through shared decision making, mutual trust, respect, interdependency and recognition for one another (Nancarrow et al., 2013). Building on models introduced by Mickan and Rodger (2005) and Reeves et al. (2010), the Systematic Mapping Review (SMR) conducted in preparation for this thesis situated interprofessional conflicts as one of the themes in IPT. This is not only because conflict is not an anti-thesis to teamwork or collaboration, but also because the dynamics of relationships among healthcare professionals at every domain of IPT has the potential to generate conflict.
Proper management and leadership of the HRH can help to ensure adequate supply of and appropriate mix of healthcare professionals in a health system. Management also facilitates IPT which in turn limits wastages, prevent harm to patients and increase quality of care.

3.5 Conflicts in healthcare organisations from global perspectives

Healthcare organisations are unique due to some factors which are thought to be key sources of conflicts between management and employees as well as among employees. First, health organisations around the world are characterised by constant reforms and improvements which are necessitated by improving technologies, new methods, infrastructural expansion, and inadequate resources such as staff supply (Zakari et al., 2010). Enacting such reform can potentially generate conflict if not strategic, inclusive, or well negotiated among stakeholders who are directly or indirectly impacted.

Secondly, the health sector consists of several autonomous professional cadres such as doctors, nurses, medical laboratory scientists, technicians, physiotherapists, etc who are required to work interdependently within distinct and sometimes ambiguous job boundaries. Healthcare professionals are known to be faced with 3 types of conflicts in their job. These include task conflicts which are related to conflicting goals or interest on how a task is performed. Relationship conflicts which are related to incompatible personalities. Lastly, process conflicts which are related to incompatibility is roles, responsibilities, task schedules and deadlines (Liu et al., Jehn, 1997).

Professionalism expounds the quests of professional groups to expand their knowledge and skill as well as their behaviour and appearance which form their unique identity. Although the multiplicity of professional groups in the health system generates strong intraprofessional bond and members loyalty, professionalism is found to be associated with high level of intergroup conflicts due to fragmentation and status rivalry (Zakari et al., 2010).

Interprofessional conflicts may occur at the micro, meso or macro levels of the health system. In Nigeria health system, it is difficult to identify the boundaries of these conflicts due to interactions between the 3 levels of the health system hence conflicts at micro level are transferred to meso and macro health system levels and vice versa.
Conflicts in the health system can be interpersonal, intrapersonal, or interprofessional (also referred to as intergroup conflicts (Zakari et al 2010). Also, conflicts can be task-oriented, relationship-oriented or an overlap/mix of relationship and task-oriented conflicts (Jehn, 1995, Roth and Schwarzwald, 2016, Zakari et al., 2010). Some studies on conflicts also categorised conflicts in the health sector based on principle or expediency (Roth and Schwarzwald, 2016, Lankau et al., 2007). The followings are the categories of conflicts in literature:

1. **Interpersonal conflicts:** This type of conflict occur between two individuals due to inherent differences in personal attributes such as personalities, ethnicity, gender orientation, religion, value, opinion, or age. Interpersonal conflicts can occur within members of the same professional cadre such as between nurses or between members of different professional cadres such as between a doctor and a nurse. In this case, the conflict is not due to professional differences hence it cannot be termed interprofessional conflicts. Interpersonal conflicts can also be either relationship-oriented or task-oriented. Interpersonal conflicts are more frequent at the micro health system level where complex relationships, constant changes relating to tasks, complex system components, and interactions exist (Roth and Schwarzwald, 2016, Kim and Markman, 2013, Kim et al., 2017, Kim et al., 2016, Jehn, 1995).

2. **Intra-professional conflicts:** Occur between members of the same or similar professions such as between nurses or nurse midwives. It is possible for a nurse from one hospital to conflict with another nurse from another hospital due to differences in practices between the two settings or even nurses from the same hospital due to differing work ethics, levels of exposures or personal differences. Conflicts between nurses and midwives can be categorised as intra-professional due to the similarities and commonality between the two professional sub-groups. However, it can also be viewed from the perspective of interprofessional conflicts especially in settings where midwives and nurses have separate professional associations. Intra-professional conflict can also be task or relationship oriented and are more common at micro level of the health system.
3. **Interprofessional**: This type of conflict occurs between members of different professional cadres such as between doctors and pharmacists. It is usually due to differences or similarities in roles, knowledge, status, hierarchies, power, and positions from one profession relative to another. IPC occur across the 3 levels of health system and sometimes overlap in terms of their origin and boundaries.

4. **Interprofessional Group Conflicts (IPGCs)**: One key element of IPGCs is that it involves professional associations/councils/unions. It contains all the characteristics of interprofessional conflicts but involving the professional associations/councils/unions. While most IPGCs are industrial relations related in Nigeria, not all IPGCs can be regarded as industrial relation conflicts. However, Interprofessional conflicts, IPGCs and industrial relations conflicts are often used synonymously in Nigeria health system context (Oleribe et al., 2016, Oleribe et al., 2018, Oluyemi and Adejoke, 2020, Omisore et al., 2017a).

### 3.5.1 Sources of conflicts in healthcare organisations from global perspective

Studies reporting on sources of conflicts in healthcare organisations usually focus on micro health system level. One of the reasons could be the high frequency of interactions among interdependent professionals at this level. Hence the perspectives on conflicts at meso and macro level are not usually reported in literature.

A very common theme on sources of conflicts in healthcare organisations is differential power or status among professional groups (Comeau-Vallée and Langley, 2020, Bochatay et al., 2020). A study by Corneau-Vallee and Langley in Canada reported that status stratification between Psychiatrists, Psychologists and Social Workers generate interprofessional conflicts due to Social Workers been exempted from key decisions by both Psychiatrist and Psychologist. The Psychiatrists and Psychologists in this study were reported to be collaborative towards each other but non collaborative towards Social Workers (Comeau-Vallée and Langley, 2020). Bochatay and colleagues identified six domains of social power in health care organisation including positional, expert, coercive, informational, reward and referent power (Bochatay et al., 2020). Their analysis found that social bases of power including positional, expert, and coercive power are comparable across health
systems in 3 countries including USA, Switzerland, and Hungary. Power differential in health systems is often studied in literature using the theory of medical dominance which is founded on the believe that medical profession dominates every aspect of the division of labour including how resources are allocated within the social, political, and economic structures of the health system. The theory of medical dominance was first proposed by Friedson (1970) who posited that medicine is not subject to the control and evaluation by other professions in the health system (authority) but enjoys the control and evaluation of other profession (autonomy). In what is termed medical sovereignty, Evan Willis noted that medicine has been able to diffuse its dominance through every aspect of the health system and the wider society to the extent that in some settings, government’s patronage of other profession is based on the approval or acquiescence of the medical profession (Willis, 2020). Some authors perceive that medical dominance comes into existence in the health system because of the historical relevance of medicine to the development of health systems globally and the fact that its contributions to contemporary health system undeniably transcends the contributions of other professions. Hence, any system that rewards excellence and hard work must accommodate the status and prestige enjoyed by the medical profession in the health system and the society at large.

Another common cause of interprofessional conflicts in the health system is poor communication. In USA, Bosset et al. (2018) reported that breakdown in communication was a major cause of interprofessional conflicts among women surgeons. Differential status often influences the manner of approach to communication among professional groups. For instance, a study among nurses in Australia found that professional status is a factor in the nurse-doctor communication where nurses hold concerns about doctor’s perceptions and reactions to their advocacy role (Broom et al., 2015). Conflicts due to poor communication among professionals is often due to lack of adequate interprofessional education or training (Foronda et al., 2016).

Due to the complex and dynamic nature of micro health system level, it is expedient to equip healthcare professionals with adequate interprofessional training so they can communicate effectively irrespective of the pressures they face (Bochatay et al., 2020). This assertion is supported by a study in Turkey which found that nurses who are trained in problem-based learning has higher conflict resolution skills than those trained in the
conventional education method (Seren and Ustun, 2008). This study also evaluated sub-scales such as empathy, listening and anger management which are relevant attributes that mediate effective communication in stressful situations. However, many studies across the globe report inadequate training in these important skills. For instance, a study by Sexton and Orchard found that average healthcare professional do not believe they have an adequate education and training to resolve conflicts (Sexton and Orchard, 2016). Their study also reported that healthcare professionals have mid-level confidence in their interpersonal communication and competence to resolve conflicts. A similar study in Canada reported that more than half of healthcare providers feel undertrained in conflict management skills (Kfouri and Lee, 2013).

Conflicts due to role boundary are commonly reported in literature as one of the causes of IPGCs. In their review, King et al. (2015) highlighted 2 key drivers of interprofessional role conflicts. One of them is short supply of professional cadre that claim ownership of certain roles. The other is government modernisation agenda which compel role changes in the health system. They also argued that both scenarios may lead to emergence of a completely new profession or expansion of others.

Another dimension of interprofessional role conflicts reported in literature from both high-income countries and LMICs is the ownership-usurper competition that form part of professionalisation activities among professional groups (King et al., 2015, Badejo et al., 2020). While scholars like Aspesoa (2012) believes role transgression do not fundamentally lead to dysfunctional conflicts in hospitals, role blurring is increasing in the high-income countries due to changes in demographics and the consequent increase in chronic illnesses which drives policies in support of professional role flexibility (King et al., 2015; Apesoa-varano 2013). Masterson (2002) and King et al. (2015) believe that claims of role ownership are either being voluntarily relinquished or challenged by usurpers. The profession that claims ownership of certain roles are traditionally known to deliver such services and such claims are established through occupational closure or dual closure (Nancarrow et al., 2006, Witz, 2013, King et al., 2015). However, usurper professions have emerged to challenge exclusivity to roles in macro-level professional rhetoric (Norris, 2007, King et al., 2015). King et al suggest that professional associations are key players in lobbying policymakers and other stakeholders to either defend their legitimacy for continued ownership of a role or
encroachment into other roles. Diversification, specialisation, vertical and horizontal substitution are terms which describe role changes among interprofessional groups, each of which have potentials to generate IPGCs in health systems (Badejo et al., 2020).

It is interesting to note that most studies in high income countries focus on task and interpersonal level conflicts as against interprofessional and system level conflicts in LMICs. For instance, a study in Switzerland reported six sources of interprofessional conflicts relating to task, communication, structural processes, and team processes (Bochatay et al., 2017). They further report that disagreement over patient care was the major trigger of conflicts while communication escalates conflicts rather than trigger it.

Interprofessional conflicts can also be a mix and/or overlap of relationship and task conflicts. For instance, a study in the US found that majority of conflicts (53%) is a mix and overlap between task-oriented and relationship-oriented conflict (Kim et al., 2016). This study also reported that at individual level, factors contributing to conflict include focus on self over others, resource depletion and suboptimal competence/integrity. At interpersonal level, bias by prior relationship dynamics, dehumanisation of colleagues, failure to communicate and disempowerment to bridge power differential are major sources of conflicts. Also, threats to professional identity were reported as one of the causes of IPGCs (Adams, 2004, McNeil et al., 2013, Oliver, 2013).

At organisational level, difficulties with navigating and negotiating complex organisational structures regarding hierarchies, roles, tasks, workflows, and shortage of resources reportedly contribute to interprofessional conflicts (Kim et al., 2016).

3.5.2 Management of conflicts in healthcare organisations from global perspectives

Conflict management and conflict resolution have been used interchangeably in literature to mean the same thing. For this thesis, I differentiate between the two terms based on the argument that conflict resolution is a subset of conflict management from system level perspective. Conflict resolution is a term used when dealing with case specific conflicts between two individuals or groups using mediation and arbitration that are designed for the issues, context, and characteristic of conflicting party(ies) involved. Conflict management on
the other hand is broader and cotes continuous efforts for not only preventing, mediating, and functionalising conflicts but also developing strategies to sustain peace and harmony.

The occurrence, and management of conflicts in the health system can be conceptualised at micro, meso and macro levels of the health system (Brown et al., 2011). I hypothesise that most organisations focus on conflict resolution as a reactive way of handling conflicts, whereas conflict management is broad, more comprehensive, and a more sustainable approach to managing conflicts. When equipped with the necessary skills and trainings to handle such, conflict resolution can be implemented at micro and meso health system levels either by the conflicting parties involved or mid-level managers. Conflict management on the other hand would require strategic organisational planning, negotiations and change management to execute successfully (Skjørshammer, 2001).

One of the early debates on conflict management in literature is whether conflicts can be prevented at all. Some researchers argue that conflict management efforts should emphasise conflict prevention (Aggestam, 2003). Other scholars are of the opinion that experience of interprofessional conflicts is an indication of a missed window of opportunity to manage tensions at a certain sub-threshold level (Coleman, 2018). For instance, Tuckman’s theory of group dynamics suggest that small-groups experience different level of conflict as they transition in stages from forming, storming, norming and performing (Tuckman, 1965). However, it may be difficult to foresee conflicts in healthcare organisations due to the complexity and dynamic nature of the system, hence conflict erupts spontaneously without going through expected stages. Hence, Tuckman’s group dynamics do not always apply in healthcare organisations especially during emergencies where the team is required to go from forming to performing immediately (Tuckman, 1965). In such critical scenario, conflict prevention may not be as realistic as management which entails an established flexible approach to dealing with different kinds of conflicts.

At the meso level, middle managers coordinate conflict resolution. Official complaints are lodged and addressed based on available policies and guidelines. While organisations may have conflict resolution guidelines that mid-level managers can deploy to resolve conflicts, formal channels could be slow and inadequate. Efficient conflict resolution often depends on conflict handling skills of the health workers and the mediating skills of the mid-level
manager. Such interpersonal and conflict resolution skills can be enhanced through interprofessional education and training (Reeves et al., 2013, Belar, 2016) (Moore, 2014).

At system or organisational level, professional groups are better organised, and politics is usually more advanced due to professionalisation activities, profession-management dichotomy, scarce resources, and the activism of elected union leaders. To deliver on their mandates, union leaders tend to escalate existing tension through social justice processes (including demonstrations/protests, litigation, and industrial action). Such conflicts often require top-level management interventions that merge global best practices with contextual realities (Coleman, 2018, Cloke and Goldsmith, 2011). A key success factor at this level is timely conflict management that prevents dysfunctional or disruptive conflicts.

The dominant theoretical models used in literature are in fact consistent with the reality that conflict is mostly considered at micro health system level and from the perspectives of individuals within a team especially conflicts relating to interpersonal interactions among healthcare professionals. One theoretical model is the two orthogonal dimensions of conflict resolution by Rahim and Bonoma (1979) which posit that concern for self and concern for others inform four conflict resolution styles preferred by individuals within a team. These include cooperation/integrating (high concern for self and high concern for others), obliging (high concern for others and low concern for self), contending/dominating (low concern for others and high concern for self) and avoiding (low concern for others and low concern for self) (Boroş et al., 2010). This framework is fundamentally similar to the model of conflict resolution styles posited by Thomas Kilmann (Thomas, 1974, Kilmann and Thomas, 1977). They are based on assertiveness and cooperation including competing, collaborating, compromising, avoiding, and accommodating.

Another framework is the rights-based, power-based, and interest-based negotiation models (Ury et al., 1989). Rights-based approach is based on legal rules that are decided by an arbitrator (e.g., a court of law) while power-based approach is based on one party’s advantages over the other such as economic power or the power to “hire and fire.” Example of power-based approach is present in employee-employer relationships.

Right-based and power-based models are focused on satisfying one party, thereby creating a win-lose or lose-lose scenario. Interest-based approach on the other hand considers the
interests of all parties and seeks to address them. It leverages negotiations to create a win-
win relationship for the interested parties. Ury et al. (1989) note that most organisations
prefer the right-based and power-based approaches whereas the interest-based approach is
beneficial for sustainable conflict management.

Developing an appropriate conflict resolution strategy entail understanding the dynamism
of conflict resolution approaches. For instance, differential power status that predicate a
party’s adoption of avoidance approach may be compelled by power approach from the
other party. Although, avoidance limits opportunity for dialogue, it is helpful in dousing high
hostility and disruptions before entering or returning to negotiation tables.

Competing style is also believed to have dysfunctional outcomes if not properly handled but
necessary for innovation, improvements, and creativity in the health system. While there is
no one approach fits all conflict situations, collaborating usually yields better outcomes for
the conflicting parties and the patients. However, preferences for conflict resolution can be
affected by factors such as gender, position, shift time, changes in demographic variables or
even context (Labrague et al.).

With regards to management of conflicts, the use of Conflict Management System (CMS and
Conflict Management Framework (CMF) are common conflict methods described in
literature. Both terms refer to system level processes for strengthening organisational
conflict management capacities. According to Lee (2008), conflict management is a
systematic process aimed at identifying and implementing acceptable solutions to conflict
by all stakeholders and its purpose is to decrease non-functioning conflicts while engaging
conflicts constructively.

A study on conflict management utilise action research approach to study conflict
management in Norway hospitals and suggests that health systems either at hospital or
national level need comprehensive mechanisms for handling and negotiating disputes
(Skjøreshammer, 2001). Their approach involves two stages of CMS including the design
phase where assessment of existing practices and proposition of a new CMS are developed.
The second stage is the implementation phase where the proposed CMS is implemented
including training of health managers.
The effectiveness of CMS or CMF have been highlighted in literature. CMF was found to significantly decrease conflict incidence post intervention by facilitating early identification of conflicts and reduction in the reported mild to moderate conflicts as they were quickly managed (Forbat and Barclay, 2019). This study also highlight the importance of data-driven contingency approach to conflict management which helps in early identification and mitigation of dysfunctional conflicts.

3.5.3 Consequences of dysfunctional conflicts in healthcare organisations

Many scholars have shown through theoretical and empirical evidence that dysfunctional conflicts have negative impacts on the patients, healthcare professionals themselves, performance of the health system and the economy of a nation (Kim et al., 2016, McKenzie, 2015, Broukhim et al., 2019, De Wit et al., 2012). Most studies in literature report the psychological impact on staff (De Wit et al., 2012). However, researchers like Bochatay et al. (2017) stratified the consequence of conflicts in their study to individual, patient, interprofessional and organisational impacts. On individual staff, their study reported that conflict elicit negative emotional responses from staff in form of anger, fear, frustration, shame, and doubts. Staff that feel bullied and harassed after conflict experience were reported to develop health complications such as poor diet and insomnia which in turn cause absenteeism, sick leaves, and staff turnover (Bochatay et al., 2017, Kim et al., 2017). More than 50% voluntary resignations in healthcare have been attributed to poorly managed conflicts (Lyon, 2012, Broukhim et al., 2019). Conflict can also affect staff professionally making them to change their position or speciality (Kim et al., 2017).

Patient care are also negatively impacted by dysfunctional conflicts as they lead to delays in care or delivery of care that does not focus on the need of the patients (Kim et al., 2017). At organisational level, conflicts were reported to negatively affect work organisations such as task assignment within a team, and creating error prone environment (Baldwin Jr and Daugherty, 2008a). Conflicts is also caused by illegal or corrupt act such as falsification of medical records (Baldwin Jr and Daugherty, 2008b). With poor response to conflicts, an unending cycle of interprofessional conflicts that is relating to tasks and relationships among the healthcare professionals was reported (Bochatay et al., 2017).
3.5.4 Conflict and industrial relations

The health sector is arguably one of the most unionised sectors due to the presence of multiple heterogenous professional groups which quite often perform professional regulatory functions, employee representation and social functions (Parry and Parry, 1977, Sachs, 2012). Unionism enervates the collective bargaining power of professionals in health organisations hence giving a voice to employees and in return, the union secures the support and loyalty of their members.

The field of industrial relations is concerned with managing the complex relationships between employers and employees either directly or indirectly through the avenue of Employee Representative (ER), trade or professional unions, or professional associations (Salamon, 2000, Sachs, 2012). It has also been defined as the rules and processes that govern critical relationships in organisations (Cowman and Keating, 2013) and it is aimed at ensuring harmony among the different elements of the organisation.

The agreed ways of working (job descriptions, salaries, guidelines, procedure, rules, regulations, promotions, disciplinary procedures, etc) are usually achieved through collective bargaining involving all stakeholders in the organisation and sometimes supervised by external systems (including the industrial court and government) which have the responsibilities to regulate labour relations, avoid exploitations or mediate in conflict situations (Article 2, ILO Convention No, 154) (Gernigon et al., 2000a), especially in situations that concerns the state such as public service (Gernigon et al., 2000b).

To emphasize the importance of harmonious industrial relations in organisations, Salamon (2000) posited that an ability to manage the differences among individuals and groups within an organisation is one of the most critical relevance of industrial relations. Hence, industrial relations aim to balance the different interests among organisational actors to achieve harmony.

The workplace, especially the healthcare industry is complex and dynamic due to different factors such as changes in government policies, new technologies and increasing professionalism (Nancarrow et al., 2013, Richardson et al., 2010). Within these factors, the primary concern of leaders and managers is to maximise productivity through prudential
use of resources. Hence, disruptions to business activities, wastages, increased operational costs and sometimes violence are undesirable consequence of conflicts (Almost et al., 2010, Wolff, 2009, Almost, 2006).

Within the industrial relations parlance, conflicts can be due to disagreements over terms and conditions of work or wellbeing of the staff in which case, there are clashes relating to the dichotomy of priorities between management and healthcare professionals. For instance, management might be interested in measuring performance based on efficiency, finance optimisation and population health figures whereas a doctor is primarily concerned with individual patient health.

Some scholars have analysed the dynamics of power between management and professionals which characterises health systems (Saks, 2016). Available evidence suggests that management orientation often conflicts with physicians’ thereby creating loss of autonomy and the pressure to conform. In such situations, organised workers’ unions engage employers in dialogues to bargain terms. When dialogues fail, organised unions resort to strikes. Health organisations are known to be highly unionised with multiple trade unions and professional associations. They are protected by ILO convention 87 and 98 which guarantees workers’ rights to strike in demand for economic and social interests (Novitz, 2014).

While there is a marked decline in strike actions in the western Europe and North America partly due to adoption of innovative HRM strategies that limits conflicts in organisations, there appear to be an increase in the global south. In trying to understand this trend, the authoritarian rule of post-colonial military government in many sub-Saharan African countries is not inclined to dialogue with unions. However, as democracy expands, awareness of freedom of association and the power of collective bargaining increases employee representation. Professional unions gained more power to defend the rights of their members under the protection of national laws and international conventions.

The impact of conflicts in industrial relations can be evaluated by its impact on productivity, stability, and adaptability but occurrence of strike action underscores the need for strategic HRM and stakeholders’ management. Government through its agents have the responsibility to manage dysfunctional conflicts that result in industrial crisis especially in
the health sector where issues such as patient harm, absenteeism and brain drain make strike actions unacceptable.

Achieving self-managed teams is one of recommended practices of High-Performance Work System (HPWS) which is an Innovative HRM practices developed to increase employee commitments in organisations (Pfeffer, 2007, Ogbonnaya et al., 2018, Leggat et al., 2011). This underscores the fact that IPT is essential in any organisation where achievement of important goals and objectives require interdependent actors. Due to the complexity of relationships within an organisation and to guarantee harmonious working relationships, it is necessary to develop rules and regulations that govern work place environment with a clear understanding of the roles, expectations and consequences to all stakeholders (Salamon, 2000).

Conflicts in industrial relations have been linked to several factors including remuneration, downsizing, safety standards, staff trainings, working hours and the perceived antagonistic influence of trade/professional unions (Guest, 1987, White et al., 2003, Dastmalchian et al., 2014). Trade/professional unions give voice to the employees and often serve to balance management’s policies with employee’s wellbeing through demands for better wages, work conditions and organisational progress (Blanchflower, 1996, Deery et al., 1999, Dastmalchian et al., 2014).

Organisational climate and culture are shaped not only by the structures of the organisation but also through the social relationships part of which are created by Employee Representatives (ERs) and trade/professional unions (Bacon and Blyton, 2004, Deery et al., 1999). In agreement with this assertion, major reforms targeted at improving productivity in organisations were found to have negative effects on employees job satisfaction, retention, motivation and engagement when there is no consensus with trade/professional unions (Bacon and Blyton, 2004, Bacon and Blyton, 2000).

In many developed countries, there are indications that collective bargaining and union activities are gradually declining (Roche et al., 2014, Colvin, 2016). Bacon and Blyton (2000) suggest that factors such as managers’ failure to recognise the importance of trade unions and the adoption of innovative human resource practices have seen management striving to protect their powers and influence in the organisation while reducing the “restrictive
practices” - powers and influence - of the unions. However, trade unions/ ERs in LMICs, where innovative human resource management practices have not been widely adopted, remain strong.

Health system leadership and governance at organisational level can benefit from trust and collaborative relationships with ERs or trade/professional unions as they – trade/professional unions or ERs – have the capacity to facilitate teamwork among professional colleagues, improve dialogue and mitigate conflicts at different levels (Okon et al., 2012).

Nigeria has one of the highest cases of industrial crisis in the world. Occurrence of industrial crisis has been reported in almost every sector of the economy. However, the most affected sectors are the education and health (Omisore et al., 2017b, Uma et al., 2013a). This is unfortunate as the two sectors represent the economic bedrock of any country. Decades of industrial crisis have been linked to lackadaisical approach to industrial relations management and poor conflict resolution strategies (Obembe et al., 2018, Olajide et al., 2015b, Oleribe et al., 2016, Omisore et al., 2017b, Uma et al., 2013a). Also, available evidence suggest that management’s tendencies for top-down approach in managing industrial relations, flouting collectively bargained agreements, poor stakeholders’ engagement, and poor uptake of evidence for decision-making are contributors to incessant industrial crisis in Nigeria (Obembe et al., 2018, Olajide et al., 2015b, Omisore et al., 2017b).

3.6 Discussion

Traditional narrative review approach employed in this chapter allows identification of theoretical and empirical evidence on conflicts from diverse epistemological disciplines. While perspectives on conflicts have been described by different school of thoughts, the field of sociology is central to empirical, historical, and theoretical knowledge relating to conflict. Understanding conflicts in the field of public health mostly draws epistemological foundations from sociology as health itself has been described as inseparable from the social context within which an individual, family or community exists (WHO, 2008).

Most of the theories identified in this review indicate that differential power, scarcity of resources, poor communication, inequality, and group identity factors are major causes of
interprofessional group conflicts. Although Maslow’s theory directly or indirectly links human fundamental needs to conflicts, the nature, scale and sophistication of conflicts have evolved from struggles for basic physiological needs to resistance of perceived oppression, struggle for resource control, competition for economic benefits, and differing interests of occupational groups in the health systems.

While functionalism theory supports social order among interdependent groups working together, the stability proposed by this theory indicates that established social structures are designed to resist conflict. This narrative differs from the views of Marxism and countervailing power theories which support resistance to organisational arrangements that are perceived unjust or discriminatory.

In this review, negotiated order is discussed as necessary for achieving harmony in the health system given the activities of professionalising occupational groups and the rise of managerialism. Furthermore, this review shows that health system is highly unionised, hence, negotiated order is sine qua non to maintaining a functional health system amidst complex and multiple interests. This assertion is also supported by complex and adaptive health system theory which suggests the need for learning and adaptation to facilitate functional health system.

This review also found that beyond conflict resolution which can be achieved by middle managers, and macro-level conflict management are necessary in the health system due to multiple factors such as professionalisation, managerialism and union activities. The conflict management suggested by scholars entails a systematic process aimed at functionalising conflicts and minimising destructive conflicts.

One critical achievement of this review is that it enabled me to identify relevant theories and evidence on interprofessional conflicts in the health sector. Hence, the outcomes of this review contribute to contextualising and explicating the evidence presented in this thesis.
CHAPTER FOUR

STRUCTURED REVIEW OF EMPIRICAL EVIDENCE ON INTERPROFESSIONAL CONFLICTS FROM THE NIGERIAN CONTEXT

4.1 Introduction

While the narrative review in chapter three enabled me to identify theories and evidence on interprofessional conflicts from global perspective, there is a need to understand the specific issues within the Nigerian context based on existing evidence. This chapter is dedicated to exploring literature for evidence on interprofessional conflicts from Nigeria health system. This review also contributes to refining the objectives of this thesis based on identified gaps.

This chapter is a structured review which adopts some technical elements of a scoping review but explores the topic using a flexible approach (Peterson et al., 2017). This structured review is not guided by a set of specific objectives (as in systematic review) due to the complexity of terminology used to describe interprofessional conflicts in the Nigerian context. However, I adopt the steps in a scoping review to organise my data and characterise the literature. Unlike the systematic mapping review in chapter two, this structured review accommodates iterative and flexible approach to literature review using non-restrictive search terms like a full scoping review.

4.2 Review Methods

This structured review adopts the framework by Arksey and Omalley (2005). The steps include identifying the review question, study selection, charting the data, collating, summarising, and reporting the results (Arksey and O'Malley, 2005).

4.2.1 Review question

What are the causes, consequences, and management of interprofessional group conflicts in Nigeria health sector?

This review question guides the structured review and the combination of search terms applied during searches.
4.2.2 Search strategy

I conducted searches of published papers on electronic databases including Medline, Embase, Emerald Insight, Scopus, and Web of Science. I also conducted additional searches on Google Scholar as well reference list searches using forward and backward citation tracing. I limited searches to years between 2011 and 2021 to capture the most recent studies.

4.2.3 Study selection

This process is necessary to discard studies that are not relevant to this review. Inclusion and exclusion criteria were developed post hoc to give flexibility. References were managed using Endnote version X9 and Excel spread sheet. I first carried out title and abstract screening and if uncertain about the eligibility of the article, I conduct a full-text review. The screening process was flexible and quality assessment of the included studies could not be conducted due to exigency of time. Majority of the studies included for review were obtained on Google Scholar and screening were conducted concurrently with searching.

Studies were included if:

1. They are from Nigeria.
2. They are primary either quantitative, qualitative, mixed method, intervention or experiential studies as these methods give empirical evidence relevant to interprofessional conflict.
3. The study is about conflicts in the health sector irrespective of the level of care either macro, meso or micro health system level and either tertiary, secondary, primary health system level.

Studies were excluded if:

1. They focus on other types of conflicts except interprofessional conflicts in the health sector. For instance, studies between patients, patients and health workers or work-family conflict that is not related to interprofessional conflicts were excluded.
2. Studies on conflicts in interprofessional education were also excluded.
Table 6: PICOS Chart.

<table>
<thead>
<tr>
<th>Population</th>
<th>Healthcare workers as relating to their professions especially in their professional associations or groups.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Interprofessional conflict/Intergroup conflict/Interprofessional Group Conflict/Industrial Crisis/Strike Action/Lack of Interprofessional Teamwork</td>
</tr>
<tr>
<td>Context</td>
<td>Hospital, Health system administrative level, Ministries Department and Agencies (MDAs) in Nigeria.</td>
</tr>
<tr>
<td>Outcome</td>
<td>Disruptions to service delivery, mortality and morbidity, staff outcomes, health system performance, quality, or safety of care.</td>
</tr>
<tr>
<td>Study</td>
<td>Quantitative, Qualitative, Other primary studies.</td>
</tr>
</tbody>
</table>

4.2.4 Charting the data

This stage is about collecting data from articles using a narrative approach which is guided by the review question. The data charting is narrative to explore the breadth and depth of issues around interprofessional conflicts without a standardised data charting tool developed *ab initio*.

4.2.5 Collating, summarising, and reporting the results

For coherence and consistency, this stage was conducted first with the review question in focus and secondly, in alignment with the objectives of the main thesis. Hence, results were reported on causes, consequences, and management of interprofessional conflicts in Nigeria health system. While I did not attempt to determine the quality of included studies, I focused on relevance of the studies to the objective of this review.

4.3 Results of the structured search

Searches yielded a total of 32 studies from the databases including Medline (6 hits), Emerald Insight (19 hits), Scopus (6 hits), Web of science (7 hits) and Embase (4 hits). Search of other sources apart from the databases yielded 37 additional studies. There were more studies from Google scholars than the databases due to non-availability of studies from Nigerian context on the selected databases. Duplicates were automatically removed by Endnote while the rest were subjected to title and abstract screening.

A total of 33 studies were included for the structured review. Table 3 shows the studies included.
Figure 8: PRISMA Diagram

Identification
- Medline (6)
- Emerald Insight (19)
- Scopus (6)
- Web of Science (7)
- Embase (4)
- Google Scholar (37)

Total (79)

Screening
- Records screened (79)

Studies removed after screening (46)

Included
- Studies included for review (33)
<table>
<thead>
<tr>
<th>S/N</th>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Adeloye et al., 2017</td>
<td>Health workforce and governance: the crisis in Nigeria</td>
</tr>
<tr>
<td>2.</td>
<td>Adim et al., 2020</td>
<td>Conflict Management and Performance of Health Care Professionals in Teaching Hospitals in Rivers State</td>
</tr>
<tr>
<td>4.</td>
<td>Akin-Otiko et al., 2019</td>
<td>Nurses’ Perception of Causes of 2015 Strikes at Federal Medical Centre Owerri: Implication for Preventive Strategies</td>
</tr>
<tr>
<td>5.</td>
<td>Akpabio and Ogunbodede, 2020</td>
<td>Teamwork among healthcare professionals in a tertiary health facility in Port Harcourt, Nigeria</td>
</tr>
<tr>
<td>6.</td>
<td>Alubo and Hunduh, 2017</td>
<td>Medical Dominance and Resistance in Nigeria’s Health Care System</td>
</tr>
<tr>
<td>7.</td>
<td>Aturaka et al., 2018b</td>
<td>Effect of Health Workers Strikes on Quality of Care in Health Institution in Cross River State, Nigeria</td>
</tr>
<tr>
<td>8.</td>
<td>Balogun, 2021b</td>
<td>Leadership of Healthcare Teams, Organisations and Systems: Implications for Curriculum Revision in Medical Education</td>
</tr>
<tr>
<td>9.</td>
<td>Badejo et al., 2020</td>
<td>Confronting power in low places: historical analysis of medical dominance and role-boundary negotiation between health professions in Nigeria</td>
</tr>
<tr>
<td>10.</td>
<td>Erhabor et al., 2020</td>
<td>System safety assessment based on STPA and model checking</td>
</tr>
<tr>
<td>11.</td>
<td>Dakwat and Villani, 2018</td>
<td>Professional Autonomy in The Running of Medical Diagnostic Laboratories in Nigeria</td>
</tr>
<tr>
<td>14.</td>
<td>LanreKamoru et al., 2019</td>
<td>Negotiation As a Conflict Management Tool and Employees’ commitment Among Healthcare Professionals in Kogi State, Nigeria</td>
</tr>
<tr>
<td>15.</td>
<td>Akanbi, 2020</td>
<td>Impact of Conflict Management Dynamics on Staff Performance in Tertiary Healthcare Institutions in North-Central, Nigeria</td>
</tr>
<tr>
<td>16.</td>
<td>McFubara, 2015</td>
<td>Law and ethics of strikes in the Nigerian health system</td>
</tr>
<tr>
<td>17.</td>
<td>Mayaki and Stewart, 2020</td>
<td>Teamwork, Professional Identities, Conflict, and Industrial Action in Nigerian Healthcare</td>
</tr>
<tr>
<td>18.</td>
<td>Nwobodo et al., 2021</td>
<td>Interprofessional Conflict Among Healthcare Teams in Nigeria: Implications on Quality of Patient Care</td>
</tr>
<tr>
<td>No.</td>
<td>Authors and Year</td>
<td>Title</td>
</tr>
<tr>
<td>-----</td>
<td>------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>therapeutic approach in resolving the Nurse-Physician clashes in two</td>
</tr>
<tr>
<td></td>
<td></td>
<td>secondary hospitals in Oyo State, Nigeria</td>
</tr>
<tr>
<td>21.</td>
<td>Onwujekwe et al.,</td>
<td>Where do we start? Building consensus on drivers of health sector</td>
</tr>
<tr>
<td></td>
<td>2020</td>
<td>corruption in Nigeria and ways to address it</td>
</tr>
<tr>
<td>22.</td>
<td>Olaopa et al., 2020</td>
<td>Conflict and conflict resolutions experienced by early career doctors in the Nigerian health sector: A qualitative report</td>
</tr>
<tr>
<td>23.</td>
<td>Olaopa et al., 2020</td>
<td>Where do we start? Building consensus on drivers of health sector corruption in Nigeria and ways to address it</td>
</tr>
<tr>
<td>25.</td>
<td>Oleribe et al., 2018</td>
<td>Healthcare workers’ industrial action in Nigeria: a cross-sectional survey of Nigerian physicians</td>
</tr>
<tr>
<td>26.</td>
<td>Oluwemi and Adejoke, 2020</td>
<td>Rivalry among Health Professionals in Nigeria: A tale of two giants</td>
</tr>
<tr>
<td>30.</td>
<td>Ukonu and Emerole, 2016</td>
<td>Inter Professional Teamwork in Public Organizations, A Paradigm Shift to Crisis in Nigerian Hospitals</td>
</tr>
<tr>
<td>31.</td>
<td>Uchejeso et al., 2020</td>
<td>Inter Professional Teamwork in Public Organizations, A Paradigm Shift to Crisis in Nigerian Hospitals</td>
</tr>
<tr>
<td>32.</td>
<td>Uma et al., 2013b</td>
<td>The dialectics of industrial disputes and productivity in Nigeria's economic development</td>
</tr>
</tbody>
</table>
4.3.1 Interprofessional group conflicts in the context of Nigeria health system

Interprofessional Group Conflicts (IPGCs) in Nigeria health system is complex in the sense that almost all professional groups are affected for various reasons ranging from remuneration, job description, leadership positions and career progression (Osaro and Charles, 2014, Oleribe et al., 2016).

The focus of studies in literature is distributed between understanding the causes, resolution/management, and historical analysis of the conflicts (Badejo et al 2020; Oleribe et al 2015). Also, while majority of scholars focus their efforts on causes and management of IPGCs at micro health system level, only few scholars attempt to understand the meso and macro level dynamics of the conflicts (Essien 2018; Sani et al 2019; Oleribe et al, 2016; Dakwat 2018; Oluyemi and Adejoke 2020).

4.3.1.1 Causes of interprofessional group conflicts between NMA and JOHESU

Since early 1970s, several conflicts between NMA and JOHESU have resulted in industrial actions and the cycles of IPGCs between the two parties are synonymous to industrial actions (McFubara, 2015). Even though most health workers do not prefer industrial actions (Oleribe et al 2016), Nigeria records more strikes in the health sector than other countries in LMICs suggesting that conflict is one of the major contributors to the poor performance of the health system. Alubo and Hunduh (2017) reported that strikes are as frequent in the health system that at least one is happening at a particular time. Hence, most studies in literature reported the causes, consequences, and solutions to the industrial actions rather than IPGCs. Since strike actions are mostly caused by IPGCs, it is logical to merge the two concepts to gain both depth and breadth of disruptive issues in the health system.

i. Decline of Professional Ethics

McFubara (2015) attributed health sector strikes to decline in values of professional ethics because moral codes which place demands on healthcare professionals to prioritise patients above personal, or group interests are constantly being violated. Furthermore, health sector
strikes are not supported by relevant health system laws such as NHA 2014, yet management appears helpless in confronting the powers of striking professionals. As narrated earlier in chapter one, it is difficult to separate IPGCs based on health system levels. For instance, issues of remuneration have been reported at micro, meso and macro levels of the health system. However, this thesis concentrates on macro level discourse across the three levels where NMA and JOHESU are key players.

**ii. Poor Leadership**

Central to IPGCs is the government who has responsibility to ensure health system harmony among the different professional cadres and whose slightest approval of one group’s demands can be misinterpreted as discriminatory. Despite being in this delicate position, health system management is often blamed for not demonstrating adequate leadership towards limiting dysfunctional IPGCs to a reasonable degree (Oleribe et al., 2016, Olajide et al., 2015a). Apart from favouritism and poor organisational response, management is also blamed for failures to fulfil previous agreements which often cause escalated conflicts and strike actions (Obembe et al., 2018).

**iii. Influence of Professional Association**

The role of NMA is like that of other professional associations or unions in the health system, which are basically to defend the rights and wellbeing of their members, ensure that medical profession continues to gain relevance and status, sustain professional identity, and advise government on matters of health in the country. The NMA is known to be the parent body of all medical doctors in the country and has many sub-groups specific to different categories of doctors such as National Association of Resident Doctors (NARD). NMA is believed to be a powerful association with members in every stratum of the health system and the society including politics. Hence, despite representing just 5% of the health workforce, most executive bureaucratic positions such as minister of health, commissioners of health at state level, medical officer of health at local government level, directors in the ministry of health and administrative heads of government hospitals or parastatals are occupied by medical doctors.
JOHESU on the other hand is a consolidation of all professional association/union except doctors. Majorly, it consists of five unions of health professionals recognised by the government including Medical and Health Workers’ Union of Nigeria (MHWUN), National Association of Nigerian Nurses and Midwives (NANNM), Senior Staff Association of Universities, Teaching Hospitals, Research Institutes and Associated Institutions (SSAUTHRIA), Nigeria Union of Allied Health Professionals (NUAHP) and Non-Academic Staff Union of Educational and Associated Institutions (NASU) (Adeloye et al., 2017). They formed an alliance to gain more professional power capable of fighting the powers of doctors and to have an effective representation with the government. While doctors are believed to be the forerunners of strikes in the health system, Akin-Otiko et al. (2019) stated that industrial actions by non-doctors have become more formidable since the formation of JOHESU.

**iv. Professionalisation**

Despite their crucial roles in the health system, professional groups are believed to pursue professional interests which deepens the divisions among health workers in the system. Professional group interests and loyalty are found to be largely responsible for IPGCs in the health system (Akpabio and Ogunbodede, 2020, Omisore et al., 2017a). The development of autonomous professions such as medicine, nursing, pharmacy, medical laboratory science, and other professions create areas of overlap in job roles which are reported to create tensions among the interprofessional groups (Badejo et al., 2020). Nurses’ desire for more influence and the quest for more power by doctors were reported by Olajide et al. (2015a) as contributing to IPGCs in the health system.

Shortage of doctors was believed to have forced task-shifting in the 1990s with doctors enjoying the privilege to determine what tasks are delegated to other professions of lower status (Badejo, 2020). Badejo et al. (2020) gave an instance of insertion of Intra-uterine contraceptive Device (IUCD) which was exclusively the role of specialist doctors in 1966 but later delegated to nurses. They described it as part of occupational imperialism strategy used by the medical profession to control the content and practice of other professions. However, as
more doctors are recruited, attempt to claim back some of these roles which were already designated to other professions have led to IPGCs in the health system.

v. Poorly Defined Job Roles

As highlighted in Yahyale Ahmed report, National Association of Nigeria Nurses and Midwives complained of doctors (especially junior doctors) encroaching into some of their tasks such as deliveries and wound dressing. These examples do not only emphasise the contributions of poorly defined job roles as one of the leading causes of IPGCs between NMA and JOHESU but also the reality that increasing specialisation, advancement in technology and increasing numbers of medical professionals are negatively impacting the relationship dynamics among health care professionals in the health system (Nwobodo et al., 2021).

vi. Hybrid Management Structure

Nigeria adopts a hybrid management model where professionals are in management positions across the health system (Erhabor et al., 2020, Badejo et al., 2020, Omisore et al., 2017a). Some scholars reported this as a major cause of IPGCs in the health system. Erhabor et al. (2020) argue that healthcare professionals do not contribute economic value in managing health system especially when there is shortage of professionals at the frontlines where health services are delivered. Whereas doctor’s presence in management positions can be ascribed partly to insufficient or inactive health managers and some doctor’s acquisition of additional qualifications in management which in combination with their knowledge of clinical medicine strengthens their competitiveness. In response, other health professionals have started introducing management courses into their curricula as Badejo et al. (2020) argued that doctors use management roles as opportunity to perpetrate medical dominance. Hence, the leadership of departments, hospitals, and health MDAs continues to be a contentious issue in the health system.

vii. Career Advancement

Few empirical studies reported that JOHESU perceive NMA as unjustly obstructing their opportunities for career advancement. For instance, doctors are reported to opposed Doctor of
Pharmacy training for pharmacists and consultancy training for nursing on the bases that such roles create confusion or anarchy in the health system. Similarly, Olayemi and Adejoke (2020) reported that pathologists (who are medical doctors in the laboratories) and medical laboratory scientists have differing opinions on the headship of laboratory.

**viii. Professional Dominance**

Causes of IPGCs in the health system also include professional dominance (Olaopa et al., 2020). Doctors in the study by Olaopa et al. (2020) believe that historically, other professions are offspring of medicine and trained by medicine to provide support for medical practice, hence, doctors should naturally be the head of every department in the hospitals including the laboratory (Badejo et al., 2020). Whereas medical laboratory scientists argued their autonomy and rights to head the laboratories. Oluyemi and Adejoke (2020) noted that medical laboratory science profession has been able to reduce the dominance of doctors in the laboratories by securing industrial court judgment not only to head the laboratories but also control the sales and usage of modern diagnostic technologies and equipment.

**ix. Remuneration**

Another widely reported cause of conflicts between NMA and JOHESU is remuneration (Orenyi et al., 2018, Oleribe et al., 2018, Onyinyechi Ekwoaba, 2016, Akin-Otiko et al., 2019). Particularly, many scholars reported resistance of JOHESU to salary disparity with NMA (Sani et al., 2019, Adeloye et al., 2017, Alubo and Hunduh, 2017, Akanbi, 2020, Uchejeso et al., 2020). As a matter of logic, economic interest is at the root of most conflict issues including job roles, career advancement and quest for positional powers between the two parties (Oleribe et al., 2016, Badejo et al., 2020)). Hence poor and discriminatory remuneration scales are strongly disputed (Dakwat et al., 2018, Essien, 2018).

Scholars such as Essien et al. (2018) reported poor remuneration, denial of salary review and non-payment of accrued salary in a secondary health system. Citing poor and discriminatory remuneration as a leading cause of IPGCs in the health system, Akin-Otiko et al. (2019) posited that economic recession is making compromise difficult to achieve during negotiations between the two parties and with the government. However, using Conflict Process Theory as a
framework, Ifeyinwa et al. (2016) found that dialogue fails because government’s abuse of previous agreements as well as high demands by medical professionals.

Furthermore, few other studies also reported poor leadership and management as one of the top causes of IPGCs and industrial action in the health system (Obembe et al., 2018, Olajide et al., 2015a, Oleribe et al., 2016, Oleribe et al., 2018, Akin-Otiko et al., 2019). For instance, poor staff welfare and administrative lapses were reported as common causes of strike (Oleribe et al., 2018, Oleribe et al., 2016). Akin-Otiko et al. (2019) highlighted poor condition of service and management’s misinterpretation of contracts as fuelling IPGCs. Similarly, Poor leadership and management is reported as the leading cause of industrial actions in the health system (Olajide et al., 2015a, Alubo and Hunduh, 2017, Obembe et al., 2018) while Ukonu (2016) noted that government has the responsibility to make a lasting change.

**x. Historical Narratives**

The historical context in which conflicts occur does not only broaden the understanding of IPGCs in Nigerian health system but also the reality that the dysfunctional conflicts have become intractable. The work of Badejo et al. (2020) made a significant contribution to literature by using the theories of professional dominance and negotiated order to explicate conflict events through historical timelines of the Nigeria health system. Their work traced IPGCs to colonial and military era where doctors occupy the peak of hierarchical structure while other professions are considered as supporting the medical profession.

The transfer of colonial hierarchical structure which favours medical profession is believed to have continued despite that health systems in the United Kingdom (UK), America and Europe have undergone reforms that reduce hierarchical structures to a rational degree (Adams, 2009). For instance, Professionalisation activities of nursing in the UK reached its peak with an amendment Act which removed the term “assistance” from nursing as a declaration of autonomy against the dominance of medicine (Harrison, 2009). About the same time, Nigeria health system see an increase in medical dominance since the establishment of Nigeria Medical Association in 1960 and Nigeria Medical Council in 1963.
The report of Yayale Ahmed Presidential Committee on Interprofessional Harmony highlighted several areas of interprofessional conflicts in the health system. Some of these issues are provided in table 4 below.

Figure 8: Excerpts from Yahyale Ahmed Presidential Committee of Experts on Professional Relationships in Nigeria Public Health System

<table>
<thead>
<tr>
<th>Conflicting parties</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association of Medical Laboratory Scientists of Nigeria (AMLSN) vs Association of Pathologists of Nigeria (APN)</td>
<td>AMLSN accused ASSOPON of not changing old practices leading to anarchy in the laboratories. There is an unresolved tussle over which professional association is qualified to regulate clinical laboratory practice in Nigeria health system. Issues at the frontline filters through to the national association level. A case of HIV infected blood transfusion of a baby at Lagos hospital is cited in the national news. Historically, pathologist created and trained medical laboratory scientists to assist them in the laboratory. Medical laboratory science has since evolved over the years through professionalisation and now want better control of the laboratories. APN cited MDCN Act cap M25 LFN2004 as the bases for why pathologists should be the undisputed head of the laboratory team. There were publications in the newspapers by both professional associations in their campaigns to gain stakeholders’ favours to their claims.</td>
</tr>
<tr>
<td>Association of Radiographers of Nigeria vs Radiologists</td>
<td>Radiographers (non-medical health professionals) accused radiologists (medical doctors specialising in radiology) of delaying results and administering radiology department poorly. Also, issues relating to regulation of the two professions were reported in national dailies alleging radiologists’ attempts at passing a controversial bill at the</td>
</tr>
</tbody>
</table>
Radiographers believe the bill will reduce their autonomy if allowed hence they vehemently resist.

| JOHESU vs NMA | JOHESU members argued that NMA is not a labour union but a professional association acting like a labour union hence government should desist from negotiating with NMA. They claimed that JOHESU on the other hand is a conglomerate of 5 professional unions and have the capacity to negotiate with the government. While they agree that medical doctors may head clinical services in the hospitals, they demand that management of health care services is ceded to expert managers and not medical doctors. They also demand equity, fairness, and justice in the health system. NMA maintained that adherence to the principles of relativity in line with training, skills, level of responsibility etc should be observed according to the international best practices. |

| Medical and Dental Consultant Association of Nigeria (MDCAN) vs JOHESU | In response to JOHESU’s argument for consultancy role, MDCAN’s assert that all areas of health have medical consultants and creating a non-medical consultant will lead to anarchy in the health system. They also want the office of Surgeon General or Chief Medical of Health office to be reintroduced in the health system. |

<p>| Medical and Health Workers Union of Nigeria vs NMA | They argued that doctors have no exclusive right to head hospitals and suggest professional administrators are appointed to manage hospitals. Where this is not practicable, they suggest the role is open to everyone. They complained that doctors dominate the directorate of the ministry of health. They also want a single salary structure and a single-entry level for all professionals. |</p>
<table>
<thead>
<tr>
<th>National Association of Nigeria Nurses and Midwives vs NMA</th>
<th>As in medicine, they want internship programme for graduate nurses and argued that fellows of postgraduate nursing college are recognised as consultants. They complained of role conflicts with doctors such as birth deliveries which are usually conducted by midwives but now taken over by doctors.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist Society of Nigeria vs NMA</td>
<td>Pharmacists are agitating for Doctor of Pharmacy and clinical pharmacist roles. These two roles are resisted by NMA.</td>
</tr>
</tbody>
</table>

4.3.1.2 Consequences of dysfunctional IPGCs and Industrial crisis in Nigeria health system

Studies reported unbearable suffering of patients and their families in bouts of IPGCs between NMA and JOHESU especially when they lead to industrial action by any of the professional groups (Aturaka et al., 2018a). Disruptions to healthcare service delivery is one of the commonest consequences of dysfunctional conflicts reported in literature. By implications, patients that are critically ill or in need of treatments for chronic health condition are denied healthcare services leading to increase in mortality and morbidity (McFubara, 2015). For instance, Mayaki and Stewart (2020) reported that conflict in healthcare sector exacerbate variation in infant mortality and a 31% decrease in life expectancy between 2017 and 2018.

Industrial action reportedly compels healthcare professionals to discharge their patients in the middle of treatments (McFubara, 2015). This is against the sacred oath they sworn to uphold. Similarly, accessibility to healthcare during industrial action was reduced to 8% in a study by Aturaka et al. (2018a), hence, patients are faced with the option of either patronising the more expensive private healthcare or seek traditional treatments.

Few studies also report the impacts of IPGCs on staff welfare and productivity (Omisore et al., 2017a, Akpabio and Ogunbodede, 2020). IPGCs was found to aggravate emotional exhaustion of health workers which interestingly lead to selfish acts. Quackery, medical tourism and proliferation of private hospitals were also reported as consequences of IPGCs (Ifeyinwa et al., 2016)
IPGCs have also been reported to have direct and indirect negative impacts on the country’s economy. A study conducted by Jolayemi and Fatomilola (2020) derived that increase in economic growth is associated with increase in industrial actions while at the same time, increase in industrial actions lead to greater distortion of Nigeria’s economy. Strikes was also found to eradicate user choice and increase household expenditures due to increased out-of-pocket payments in private hospitals (Dakwat et al., 2018)

4.4 Conceptual framework

As stated in chapter one, conflict is not necessarily destructive. Depending on how it is managed, conflicts can be functional or dysfunctional. Functional conflict management entails proactive and adaptable system that ensures learning from events as they arise. The goal of conflict management is not necessarily to eliminate conflicts in its entirety but to functionalise conflict, eliminate dysfunctional conflicts that causes disruptions to health care service delivery and promote teamwork among the health care professionals.

I adopt a combination of functional conflict management, policymakers’ analysis, and ideation analysis to guide the development of this thesis. Achieving a functional conflict management in a multi-interest environment entails interest-based approach to negotiating order among the key players. Hence, policymakers’ analysis helps to map the roles, position and powers of health policymakers and how they contribute to functional IPGC management in the health system (Schmeer, 1999).

Lastly, Kingdon (1995) model of ideation analysis was used to generate ideas or policy blueprints for managing interprofessional conflicts. Nielson Norman Group described ideation as “the process of generating a broad set of ideas on a given topic with no attempt to judge or evaluate them.” According to Béland and Cox (2010) ideation helps to “understand the policy issues and problems, the assumptions that guide the development and selection of policy alternatives, and the framing processes that helps actors legitimise policy decisions”. Ideation theory is relevant to this thesis because it brings convergence of ideas from different
sources including the views of policymakers and evidence from analysis of documents (Gstrein, 2018). Such ideas, according to Day (2019) can either be accepted or rejected upon testing. It is noteworthy that ideation is an ongoing process that can continually be refined, hence it is appropriate for generating solutions to IPGCs which are also constantly unfolding in the health system. Ideation is often used in computer science and product development to generate new product ideas Faste et al. (2013). Its applications are rapidly extending to other sectors including the healthcare industry. There are different methods of ideation process such as brainstorming, chain-stormy and mind-mapping (Faste et al., 2013). I adopt mind-mapping technique in this thesis because it provides better conceptual frame for converging ideas from different sources as well as connecting relationships among the themes into a coherent whole.

Table 9: Applied Conceptual Framework

<table>
<thead>
<tr>
<th>Framework</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional conflict</td>
<td>Management ideas are usually focused on functionalising interprofessional conflicts.</td>
<td>(Patton, 2014, Katz and Flynn, 2013, Özkalp et al., 2009)</td>
</tr>
<tr>
<td>Stakeholders’ analysis</td>
<td>The analysis of powers, positions, influence, roles, and perceptions of key health system actors help to make sense of their contributions to interprofessional conflict management including a model of accountability for each policy actor.</td>
<td>(Schmeer, 1999, Gilson et al., 2012)</td>
</tr>
<tr>
<td>Ideation</td>
<td>Ideation process is relevant to health system leadership and governance as it helps to make sense of problems bedevilling the health system and specific actions needed to solve the identified problems.</td>
<td>(Kingdon, 1995, Béland and Cox, 2010)</td>
</tr>
</tbody>
</table>
4.5 Summary of the reviews

In chapter 2, I presented the systematic mapping review conducted in preparations for writing this thesis. In chapters 3 and 4, I used different review methods to explore literature for understanding theoretical and empirical evidence on causes, consequences, and management of conflicts from global perspective and the Nigerian context respectively.

The systematic mapping review characterised the broad area of interprofessional teamworking and their associations with patient safety in LMICs. I found that majority of studies on interprofessional teamworking from this setting focused on the micro health system level and there is scarce evidence on policymakers’ contributions to the dynamics of relationships among interdependent healthcare workers at macro level. The mapping review also revealed a dearth
of evidence on policymaker’s perceptions and contributions to Interprofessional conflicts in LMICs.

In chapter 3, I conducted a narrative review to explore the broad area of interprofessional conflicts in literature. I explored the theoretical and empirical reports on conflicts in healthcare organisations from around the world. I was able to report that origin of conflicts can be traced to the behaviours of humans when they are faced with certain differences, scarcity, or threats to their basic needs. I also reported Functionalism, Marxism, countervailing power theory, theory of social constructionism, rational choice-exchange theory, professionalism, managerialism, and the theory of negotiated order, Northrup’s intractable conflict theory, social identity theory and complex and adaptive healthcare system theory all of which provide theoretical bases for conflicts among interdependent professional groups who are required to work as a team toward quality patient care. Also, I reported empirical evidence on causes, consequences, and management of interprofessional conflicts in healthcare organisations from global perspective.

Lastly, I employed structured review method to funnel empirical evidence on interprofessional group conflicts to Nigeria health system context. This method allows me to understand trends and patterns in literature on interprofessional conflicts with contextual relevance to my study location. I reported here that IPGCs is almost synonymous to industrial actions and that the conflict is transmissible from one level of the health system to the other.

Studies consistently report accusations and counteraccusations between NMA and JOHESU on issues of remuneration, career progression and job roles. The IPGCs have become intractable due to its duration, disruptive nature, and the fact that efforts to resolve them have not been successful. The two sides are consistently reported to have differing opinions on key issues and that their interests are placed ahead of patients’ or the performance of the health system.
CHAPTER FIVE

METHODOLOGY

5.1 Introduction

In this thesis, I adopt a big Q qualitative approach (Braun and Clarke, 2020). As highlighted by Braun and Clarke (2013), big Q qualitative research involves the application of both qualitative techniques and paradigms, which is different from merely applying qualitative techniques without following the traditions, values, principles, and beliefs embedded in the qualitative culture (Braun and Clarke, 2020).

My decision to adopt a big Q qualitative method is based on its alignment with the core principles of HPSR which emphasise pragmatic approach to conducting research within the health policy and system framework. According to Tashakkori and Teddlie (1998), pragmatism is focused on fitness of approach that is best for research question hence driven by research objectives rather than the methods. Big Q qualitative approach gives a nuanced and robust perspectives of the policymakers’ views on IPGCs which is suitable for answering my research questions.

I use Reflexive thematic analysis because it allows me to freely develop themes from the data without strict adherence to theoretical frameworks. This enabled me to develop themes interpretatively within the frames of the data, my experience and perspectives from different reviews conducted. This thesis is rather a story of the causes and management of interprofessional group conflicts in Nigeria health system developed reflexively and guided by the research questions (Braun and Clarke, 2019).

Since qualitative studies are guided by the research questions, I review the research questions for methodical alignment and insights on how the selected approaches help to achieve the
research questions. Fig.10 shows the schematic flow of methods for answering the research questions.

5.1.1 Primary questions:

(Section 1.3.1) What are the perceptions of health policymakers on interprofessional group conflicts in Nigeria health system?

(Section 1.3.2) How do health policymakers contribute to managing interprofessional group conflicts in Nigeria health system?

5.1.2 Secondary research questions:

A. What do health policymakers perceive as the causes of interprofessional group conflicts especially between NMA and JOHESU?

B. How are health policymakers positioned in terms of power, roles, and influence in the management of interprofessional group conflicts in Nigeria health system?

C. What are the existing national strategies for managing interprofessional group conflicts and how effective are they?

D. How can interprofessional group conflicts be sustainably and effectively managed?
5.2 Background on Health Policy and Systems Research

HPSR is a growing field and its primary focus is understanding and improving health systems performance and outcomes (Peters, 2018). HPSR leverages multidisciplinary approaches to understand how stakeholders interact and harmonise their efforts towards achieving collective health goals (Gilson and WHO, 2012; Gilson et al., 2012). Stakeholders are known to influence policy and practice, as well as the interactions between health systems and policy decisions. These characteristics make HPSR relevant to this thesis.
Gilson and WHO (2012) narrated a fuzzy boundary between HPSR and management especially in framing research questions through networking with research output users. Generating ideas with policy actors entails that health policy and systems researchers critically assess this boundary and clarify if their focus is at specific programme level or system wide. To clarify this boundary, my participants in this thesis are policymakers at the national health system rather than hospital management level because national policymakers in the Nigerian health system have policy guidance, administrative oversight, leadership, and regulatory functions which inform decisions at all levels of the health system levels. This implies that policymakers have strong influence on how Interprofessional Group Conflicts (IPGCs) have been/can be managed in Nigeria health system.

5.3 Description of study context

Nigeria health system is pluralistic which means government recognises and regulates orthodox, alternative, and traditional medicine. As discussed in chapter 1, the Nigerian health system is a three-tier system consisting of primary, secondary, and tertiary levels of care. Administration of each level of care reflects the political arrangement of local, state, and federal/national governance in the country (Akande, 2004). As shown in Fig.11, Local Governments oversee the administration of primary healthcare centres which are either owned/managed by public, private or faith institutions. Secondary health centres are placed under the administrative jurisdiction of the state governments. There are secondary health facilities owned/managed by the state governments as well as private and faith organisations. They are however under the supervision of the State Governemnts. Likewise, tertiary healthcare services are provided by Federal Teaching Hospitals and Federal Medical Centres. Federal Teaching Hospitals have affiliations with the Federal Univeristy in their state and they are directly under the administration of the Federal Government through the FMOH. Tertiary hospitals are the highest referral centres and health services at this level are majorly provided by the Federal Government.

Design of the Nigeria health system is such that care continuum emphasises primary health care but the reality is that tertiary health care receives the major attention in terms of funding,
staffing and equipping. Asuzu (2004) warned that such inverted priorities may limit care accessibility to Nigerians especially the preventive services.

The tertiary public health institutions also serve as centres for training new healthcare professionals beyond the advanced/specialised care for which they are primarily established. Hence, there is high concentration of health workers in the tertiary hospitals compared to secondary and primary health cares. Most issues relating to IPGCs occur at the tertiary health institutions where complex interactions among different professional cadres and patients occur. Health worker union activities are also well organised in the public tertiary and secondary health institutions compared to primary health centres while the management of private and faith-based health institutions discourages interprofessional conflicts.

Although the Federal Ministry of Health is an institution of government in charge of health administration in the country, National Council on Health (NCH) is the highest decision-making organisation in Nigeria health system (Fig. 11). NCH leverages intersectoral collaboration to formulate and prioritise health agenda to be implemented by the FMOH. NCH is chaired by the honourable Minister of Health and consists of members from federal, state, private agents as well as international partners. Representatives of professional bodies including professional regulatory councils, associations and unions also participate in NCH.

According to recent statistics, about 70% of health financing in Nigeria is out-of-pocket in form of user fees which are paid at the point of service (World Bank, 2019). This means poor households experience catastrophic payment which further aggravate their poverty level. Government’s current health expenditure as percentage of Gross Domestic Product (GDP) is 3.2% (World Bank, 2019). Nigeria is thus far from achieving the Abuja declaration target of 15% government spending on health as percentage of national budget (Oladosu et al., 2022). The federal government is responsible for directly funding the Federal ministries, it's agencies and tertiary health institutions such as the federal teaching hospitals and federal medical centres. The state governments are in charge of funding state health institutions such as the General Hospitals while the local government is in charge of funding the primary health care.
IPGCs in Nigeria mostly occur at the macro health system level where all negotiations, engagements, communications, and relationships relating to the conflicts are organised. Hence, national health policymakers have more responsibility in providing lasting solutions to the challenges posed by IPGCs in the country.

![Figure 11. Structure of the Nigerian health system](image)

5.4 NMA and JOHESU

As stated in chapter one, interprofessional conflicts occur at the three levels of the health system without a clear boundary and direction. While most conflicts at micro and meso health system levels are relational and task-oriented, conflicts at the macro level are mostly industrial relations related. However, the focus of this study is to understand the macro level perspectives of the conflict issues irrespective of the level of care especially between the dominant
professional groups in the health system – the Nigeria Medical Association (NMA) and the Joint Health Workers Union (JOHESU).

NMA is the umbrella body for all medical and dental professionals in the country, having around 80,000 members including those practising outside the country. Statistics on NMA website shows that only 40,000 registered doctors are practicing in Nigeria. NMA was established in 1951 with 30 branches throughout the country consisting of members from medical and dental specialities such as medicine, surgery, public health, obstetrics and gynaecology, paediatrics, dentistry, and pathology.

On the other hand, Joint Health Workers’ Union (JOHESU) is an amalgamation of five registered health professionals unions including Medical and Health Workers’ Union of Nigeria (MHWUN), National Association of Nigeria Nurses and Midwives (NANNM), Senior Staff Association of Universities, Teaching Hospitals, Research Institutes and Associated Institutions (SSAUTHRIAII), Nigeria Union of Allied Health Professionals (NUAHP) and Non- Academic Staff Union of Educational and Associated Institutions (NASU) (Adeloye et al., 2017). Apparently, they have formed an alliance to counter the perceived authoritative powers of physicians in the health system and so they can have better welfare, autonomy, resources, representation, and participation (Olajide et al., 2015, Oleribe et al., 2016)

5.5 Study Area: Abuja, Nigeria

This study was carried out at the national health system level in Abuja, Nigeria. Abuja was purposively selected because it is the administrative headquarter of the Federal Government of Nigeria including the Federal Ministry of Health (FMOH). The Federal Ministry of Health has the stewardship/oversight function and provides policy and technical support to guide the operations of the entire country’s health system (FMOH, 2009). The FMOH also interacts with other national and international organisations on health matters, coordinates the national health management information system and administers the delivery of tertiary health services (FMOH, 2009).
Health policymakers in Abuja have good understanding of the macro level interprofessional group conflicts between NMA and JOHESU but also of the interprofessional conflicts among health workers at other levels of care. Hence, this study provides an elevated view of conflict issues from the policymaker’s perspective.

Abuja is geographically located at the heart of Nigeria, in the North Central geopolitical region. The now Act no 6 of 1976 confirmed the relocation of Nigeria capital from Lagos to Abuja. However, the city was officially confirmed as the capital of Nigeria on 12\textsuperscript{th} December 1991.

Figure 12 shows a detailed map of Nigeria including the 36 states and the federal capital territory while Figure 13 shows the map of FCT, Abuja where the Federal Ministry of Health and other government MDAs are located.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{nigeria_map.png}
\caption{Map of Nigeria}
\end{figure}
5.6 Study Design

5.6.1 Philosophical perspective

The philosophical assumptions underpinning this research have implications on how I framed the research questions, how I designed the data collection methods, the approaches to analysis and the interpretations (Cunliffe 2010). Rudnick (2012) emphasises the importance of understanding the philosophical positions that researchers are committed to and the options available to them.

Figure 13: Map of Federal Capital Territory
This study is exclusively qualitative, hence cannot ascribe to the notion that reality is studied objectively by neutrally collecting and analysing numerical data to make sense of IPGCs but rather that IPGCs, and how they can be effectively managed is studied within a socially constructed reality according to the experiences of the policymakers who are key decision makers in the health system (Simon and Cassell, 2012).

Also, this thesis is aligned with critical theory ontological perspective. Critical theory ontological perspective explores the interconnectedness between politics, values, and knowledge. Critical theory-based approach is widely used in organisational reform to gain understanding of institutional management practices, culture, or behaviours especially within the relations of power and domination, while emphasizing that policies or management practices in the systems are reformed or improved.

Understanding the interprofessional issues such as professional power, remuneration, job boundaries, politics, and leadership of the health system as well as possible policy and management improvements make critical theory ontological approach best suited for this research.

Critical theory is widely adopted in participatory management research to construct meanings around dominance and control in organisations as well as how such knowledge construct can birth egalitarian organisational culture (Symon and Cassell 2012). For instance, participatory management allows the inclusion of nurses on hospital management committee and the organisation of employee-management conference aimed at fostering harmonious relationship between management and nurses (Bopp and Rosenthal, 1979). Participatory research is focused on collaborative efforts of all stakeholders as they learn “what works and what doesn’t” in a bid to create change agenda toward improved health system (Abma et al., 2019).

5.7 Document Review/Content Analysis

This phase enabled me to identify, collect, and analyse documents that are relevant to IPGCs. According to Bowen (2009) document analysis can be used as a means of triangulating findings of other methods. Triangulation helps to achieve better validity by confluence of evidence to
corroborate or contradict findings across carefully planned methods, sources or theories (Farmer et al., 2006).

I adopt document review method because early discovery of certain documents informed the development of the participants’ list. Also, document review enabled me to identify additional questions to explore during key informant interviews. The document review informed the participants’ list while the participants sign posted me to other documents, hence informing the collection of more documents.

Lastly, findings from document reviews are integrated or triangulated with findings from other analysis to improve credibility of this research (Bowen, 2009). My primary source of data for this document review is Federal Ministry of Health mostly available online (O’Leary et al., 2017, Bowen, 2009)

5.7.1 Data Collection (Document Review)

Data collection from selected documents is by data extraction form developed ab initio. The data extraction form contains items such as title of publication, date of publication, publishing organisation and relevant page numbers. To source for relevant documents, I visited the library at the Federal Ministry of Health and searched the internet. Also, during the key informant interviews, I asked policymakers for any relevant documents and where to collect them.

Through pre field trip searches on internet, I identified three documents including the National Health Act 2014, National Health Policy, 2017 and National Strategic Health Development Plan (NSHDP I 2010-2015). Additional documents were collected during field trip, making a total of 18 documents. Document sampling was purposive and reflexive as documents were included flexibly if they are official and relevant to the research questions. The documents were assessed for authenticity, credibility, representative and meaning (Koduah et al., 2015).
<table>
<thead>
<tr>
<th>S/No</th>
<th>Title of Document</th>
<th>Date (Year) of Publication</th>
<th>Publishing Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trade Union Act</td>
<td>2005</td>
<td>The Judiciary</td>
</tr>
<tr>
<td>2</td>
<td>Suit No NICN/ABJ/238/2012</td>
<td>2012</td>
<td>Industrial Court of Nigeria</td>
</tr>
<tr>
<td>3</td>
<td>The Trade Dispute Act</td>
<td>2005</td>
<td>The Judiciary</td>
</tr>
<tr>
<td>4</td>
<td>National Health Act</td>
<td>2014</td>
<td>The Judiciary</td>
</tr>
<tr>
<td>5</td>
<td>National Health Policy</td>
<td>2016</td>
<td>Federal Ministry of Health (FMOH)</td>
</tr>
<tr>
<td>6</td>
<td>National Health Accounts</td>
<td>2017</td>
<td>FMOH</td>
</tr>
<tr>
<td>7</td>
<td>National Strategic Health Development Plan I (2010-2015)</td>
<td>2010</td>
<td>FMOH</td>
</tr>
<tr>
<td>8</td>
<td>National Strategic Health Development Plan II (2018-2022)</td>
<td>2016</td>
<td>FMOH</td>
</tr>
<tr>
<td>10</td>
<td>White Coat Drain</td>
<td>2019</td>
<td>National Association of Resident Doctors</td>
</tr>
<tr>
<td>11</td>
<td>Interprofessional Harmony Committee Report</td>
<td>2020</td>
<td>NMA/PSN</td>
</tr>
<tr>
<td>12</td>
<td>Yahyale Ahmed Presidential Committee of Experts on Professional Relationships in Public Health Sector</td>
<td>2014</td>
<td>YAPCEPRPH</td>
</tr>
<tr>
<td>13</td>
<td>Scheme of Service Volume I and II</td>
<td>2000 and 2002</td>
<td>Federal Civil Service Commission (FCSC)/Head of Service</td>
</tr>
<tr>
<td>14</td>
<td>FCSC Handbook and Public Service Rules</td>
<td></td>
<td>FCSC</td>
</tr>
<tr>
<td>16</td>
<td>Medical and Dental Practitioners Act Cap M8</td>
<td>2004</td>
<td>The Judiciary</td>
</tr>
<tr>
<td>18</td>
<td>National Salaries Income and Wages Commission Act Cap N72</td>
<td>1999</td>
<td>The Judiciary</td>
</tr>
</tbody>
</table>
The Content analysis and document analysis in this thesis are conducted flexibly. The document analysis involves the simple but systematic process of studying the materials and taking notes of relevant textual information being guided by the research questions. Excerpts from the documents were pulled as evidence in the results chapters. I also developed the coding schemes for content analysis during the document analysis as well as drawing patterns to assist the development of policymakers’ analysis.

Table 11 below shows the process of content analysis employed using NVivo Pro 2020. I used a combination of manual and Computer Aided Text Analysis (CATA) system (NVivo) because it increases speed and reliability of the content analysis.

<table>
<thead>
<tr>
<th>Steps</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Establish coding units such as words, phrase, sentence or paragraph</td>
</tr>
<tr>
<td>2</td>
<td>Determine initial coding scheme. This helps to generate confidence in the analysis</td>
</tr>
<tr>
<td>3</td>
<td>Assess the accuracy and reliability of initial coding of sampled text</td>
</tr>
<tr>
<td>4</td>
<td>Revise recording units and coding scheme</td>
</tr>
<tr>
<td>5</td>
<td>Repeat coding on sampled text as 3 above</td>
</tr>
<tr>
<td>6</td>
<td>Achieve sufficient reliability</td>
</tr>
<tr>
<td>7</td>
<td>Coding of all text</td>
</tr>
</tbody>
</table>

Content/document analysis was applied to identify themes or concepts within textual data in the documents. The presence, meaning and relationships of such themes were analysed first by document analysis which is a systematic process of reading, identification, and interpretation of patterns around IPGCs in the documents. Then content analysis was used as a qualitative approach to organise the themes based on terminologies obtained from the reviews. I applied the content/document analysis to develop additional themes on causes of IPGCs, effectiveness of existing strategy for managing IPGC, resources available for managing IPGCs and policymakers’ analysis which is another type of analysis conducted in this thesis.

5.8 Qualitative Key Informant Interview (KII)

In the second phase of data collection, I conducted qualitative Key Informant Interview (KII) to elicit in-depth information from policymakers who provide insights into the causes and
management of IPGCs (McRobie et al., 2017). KII is suitable for data collection in this research because it enabled data collection from limited number of interconnected group of experts who possess in-depth knowledge of the conflict issues and adequate experience to suggest practical solutions for effective management. Also, KII allows for information gathering across different backgrounds on a very sensitive topic such as interprofessional conflict which may not be possible with Focus Group Discussions (FDG) especially given the intensity of interprofessional rivalry and disharmony in the Nigerian health system.

5.8.1 Study population

The study population consists of policymakers who have or are in the position to contribute to policy decisions in the health system. They include high-ranking government and non-government officials who are involved in policy activities and/or have been affected/contributed to IPGCs in one way or the other. I include policymakers such as officials of FMOH, Federal Ministry of Labour and Employment, executives of private hospitals, representatives of development partners and top executives of professional unions. State government officials were not included in the sampling frame because negotiations and communications relating to IPGCs, especially between NMA and JOHESU are enacted at the federal/national level. Particularly, the pre-field trip review identified key informants from the Presidency, Federal Ministry of Health, Federal Ministry of Labour and Productivity, Nigeria Industrial Court, some private players, regulatory councils, and Professional associations/ unions. During the interviews, suggestions about new key informants were made by the participants either after asking or unprompted within statements.

5.8.2 Policymakers’ recruitment

The policymakers are usually busy and gaining access to them were sometimes challenging. I employed few strategies for access and recruitment.

1. My insider knowledge of administrative structures and operations of the Federal Ministry of Health and the Federal Civil Service was leveraged to engage and recruit policymakers. While using this advantage, I took care not to violate the ethics of carrying
out this study. My initial expectation was that policymakers would feel inclined to give audience when I introduced myself as a staff of the FMOH on a study leave abroad. This was not always the case. FMOH and other agencies were busy at the time of data collection, and it was hard to secure appointments. I had to conduct one of the interviews in a car with the policymaker on his way to the Airport because that was the only time available.

2. The use of a resource person or gatekeeper to access busy policymakers proved effective in securing appointments. My initial plan was to avoid conducting interviews out-of-office hours, I have had to accept few interviews out-of-office hours during the data collection after assessing the risks with my resource person.

3. I tried as much as possible to avoid terms that are likely to discourage key informants from participating in this study. For instance, I employed terms such as “studies” instead of “investigations” (Shedlin et al., 2011).

4. Although I followed the guidelines as highlighted in the risk assessment completed before the field trip, being flexible in my approach (such as collecting data in transit to Airport, meeting at an acceptable out-of-office locations/hours or accepting to meet a designated lower ranked officer instead of waiting endlessly for executive official) enabled me to achieve progress with the data collection.

5. To enhance rigour, I also followed the guidelines for conducting KII by centre for Health Policy research to elicit candid and honest answers from the key informants (UCLA, 2020).

The policymakers are actively involved in health system policy making in their organisations within the past 6 months and they have roles, interests, influence and/or knowledge on managing interprofessional conflicts at the national health system level.

Securing appointments were sometimes challenging. For instance, two appointments were cancelled by a senior official. I later accepted to interview one of the subordinates who was briefed to attend the interview.
5.8.3 Data collection

5.8.3.1 Interview Process

Before the field trip, I developed an interview guide consisting of introduction, primary questions, probing (follow-up) questions, closing questions and comments (See Appendix 3). The interview guide was developed to ensure that the semi-structured interview questions elicit open-ended responses to the research questions. The questions covered areas such as causes of IPGCs, current management strategies, effectiveness of the current strategies and ideas for sustainable management of IPGCs in the health system. Due to the diversity of policymakers interviewed, the interview guide was reflexively applied as a tool to navigate the conduct of the interviews. Questions were framed differently for each participant, as per good practice guidelines. Also, I iterated/refined the interview guide as new ideas emerged during the interviews. Each interview was conducted in a very flexible manner such that probing questions were applied to gain deeper understanding of important terms or meanings (See table 12).

Table 12: Reflexive interview Guide

<table>
<thead>
<tr>
<th>Participant (P.)</th>
<th>Designation</th>
<th>Question</th>
<th>Iteration</th>
<th>Follow up</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.1</td>
<td>Health Administrator</td>
<td>What factors do you perceive as responsible for conflicts between NMA and JOHESU?</td>
<td>How would you describe the causes of conflicts between NMA and JOHESU?</td>
<td>How would you describe the contributions of corruption to Interprofessional Group Conflicts (IPGCs) in Nigeria health system?</td>
</tr>
<tr>
<td>P.2</td>
<td>Conciliation Officer</td>
<td>What previous efforts or strategies have been used to manage IPGCs</td>
<td>What previous efforts or strategies have been used to manage conflicts between NMA, JOHESU and government?</td>
<td></td>
</tr>
<tr>
<td>P.3</td>
<td>NMA Executive</td>
<td>How would you describe the roles of NMA in the conflicts between NMA and JOHESU?</td>
<td>How would you describe the roles of JOHESU in the conflicts between NMA and JOHESU?</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>P.4</td>
<td>JOHESU Executive</td>
<td>How would you describe the roles of NMA and JOHESU in the conflicts between them?</td>
<td>How would you describe the roles of the Federal Ministry of Health in the conflicts between NMA and JOHESU?</td>
<td></td>
</tr>
</tbody>
</table>

Most of the policymakers had a good understanding of qualitative interview and have probably participated in one before. Participants read the Information Sheet before signing consent forms and granted permission for recording the interviews. They were adequately briefed including on their right to stop the interview at any time. Few policymakers were given the PIS and Consent form ahead as requested. I also stated my availability to answer any questions relating to the research and gave my phone numbers.

I started each interview with an ice breaker question to set a relaxing tone and build rapport with the policymakers. The interviews were anonymised and lasted between 30 minutes to 60 minutes. On the average, each interview lasted for about 40 minutes.

5.8.3.2 Transcription process

All transcriptions were carried out manually by me. I listened to the recorded audio files using headset and complete the transcription on another computer device (Sometimes writing on paper and later typed on computer). Initially, I tried to repeat participants’ statements on a speech-to-text applications, but the idea was later abandoned as the transcription speed was considerably slowed.

Transcription began simultaneously with data collection and even analysis. I sent a sample of the transcript to my supervisors to validate both the data collection process and the
transcription process while still on the field. Feedbacks were implemented to improve the processes.

Transcription was conducted verbatim which means they were transcribed as stated by the participants. However, they were cleaned by removing words or phrases that are irrelevant, unnecessarily extreme/offensive. These were replaced with ethical synonyms. Although excerpts were edited to enhance readability, the extent of editing was such that meanings of policymakers’ responses are preserved. Also, on few occasions, names were mentioned which compromised confidentiality and can potentially cause unintended harm to individuals or organisations. To maintain confidentiality, these were removed to mask the real identities of those involved.

Six interviews were excluded from the transcription process due to poor quality of recording and withdrawal of participants. Particularly, four interviews were part of those conducted virtually and the recordings were faulty. The other two were due to withdrawal of participants from the research. Their withdrawals are mainly due to having to attend unplanned primary official engagements.

5.8.4 Data analysis

I adopt Reflexive Thematic Analysis (RTA) method to analyse the data generated from KII because it is considered most appropriate in this circumstance, giving not only the ability to identify thematic patterns in a way that is flexible of theoretical frames but also that it provides a sound interpretation of meaning (Braun and Clarke, 2014).

There is more than one approach to thematic analysis in literature, but the 6-step framework developed by (Braun and Clarke, 2006) is adopted being relevant and adaptable to this study (Maguire and Delahunt, 2017). The steps to conducting thematic analysis is outline in Fig.14 below.
The first step is most critical to the analysis process, and it took me a significant amount of time. The process of data familiarisation began during data collection. Applying active listening skill during the KIIs enabled me to follow up interesting and important responses with relevant questions. I also began to mentally sense the general idea, patterns, potential themes, and some specific terms from participant’s responses. Another way by which I familiarise myself with the data is by listening to the recorded interviews. Data familiarisation continued through manual transcription and post-transcription where transcripts were read and re-read to highlight key areas.

Initial coding was done both manually and using NVivo Pro 2020 software. I started with using NVivo but switched to manual coding due to experiencing headaches from extended exposure to computers screen. This study adopts a combination of deductive and Inductive/Interpretative approach to coding. Inductive/interpretive approach meant the analysis was primarily grounded in the data rather than using an existential theoretical framework or concept as a guide for coding. Hence, codes were developed organically from the data and interpretations were based on deeper meanings; converging ideas from the data and
my subjective interpretations as the instrument of analysis (Braun and Clarke, 2019) (Smith, 2015 pg. 225 & 226). However, my exposure to key concepts, theories and terms during the reviews enabled me to categorise the themes deductively.

Excerpts from the transcripts are culled as evidence to support themes/sub-themes based on interpretive alignment according to my experience as the instrument of analysis. Descriptions of policymakers’ roles, backgrounds and their subjective bias are added to give perspectives to readers. These subjectivities are described as “Likely to support NMA”, “Likely to support JOHESU” and “Likely to be neutral” according to the policymaker’s backgrounds or roles.

5.9 Policymakers’ Analysis

Stakeholders Analysis (SHA) has been described as an approach or analytical tool for collecting data on key health systems actors including their position, behaviour, intentions, inter-relations, resources at their disposal and power to influence decision-making or implementation process (Varvasorszky and Brugha, 2000: p. 338 cited in Gilson et al, 2012). SHA is termed Policymakers’ analysis in this thesis because the analysis only targeted policymakers.

I used a combination of retroactive and prospective SHA (Gilson, 2003). Retrospective SHA seeks to collect information on current knowledge about policy or policy process particularly on the relative power of health policy or system actors, to influence the process of policy change (Gilson et al., 2012). Prospective SHA on the other hand provides knowledge which directly informs changes in policy or system designs such as through generation of ideas on how a proposed policy will impact key actors and how conflicting areas can be appropriately managed by negotiating differences (Gilson et al., 2012).

As highlighted earlier, data from the document review and KII s enabled me to develop the policymakers’ analysis (Schmeer,1999). This is done by extracting data on their roles, interests and power followed by grading their influence into high, low, or medium based on the data. This helps to know how to prioritise the stakeholders and where to hold them accountable.

Carrying out a policymakers’ analysis is necessary to identify how the roles, interests, power, and influence of different policymakers’ impact IPGCS in the Nigerian health system.
5.10 Data Integration

Although, this study is not a mixed method research in the sense that qualitative and quantitative methods, as well as their philosophical perspectives are combined. However, the methods of combining both content/document analysis, thematic analysis, and policymakers’ analysis to generate meaningful interpretations of the results require careful considerations (Creswell and Plano Clark 2013). The results from different qualitative approaches are presented sequentially in the results chapters and integrated/triangulated in the discussion chapter.

5.11 Ethical Considerations

For expert review, I submitted proposal for this research to confirmation review panel at the School of Health and Related Research (ScHARR). Afterwards, I obtained ethical approval from the University of Sheffield Research Ethics Committee before the commencement of data collection. I also obtained ethical approval from the Federal Ministry of Health Research Ethics Committee in Nigeria (See appendix 4 and 5 respectively).

I started the interviews by providing the Participant Information Sheet (PIS) and consent form to the policymakers. The PIS contained information on the aims, objectives, benefits, potential risks of participating in the research, the use of data and how the information will be disseminated. This affords the policymakers an opportunity to make informed decision whether to participate (or not) or to withdraw (or not) at any time during the research. Written informed consent were obtained before every interviews. This is followed up with verbal recorded consent for double checking.

The interviews were anonymised, and no personal identifiers were used during the collection, analysis, and dissemination of results. Instead, I used codes such as “Policymaker 1, 2, 3...” to designate each respondent. This is to preserve confidentiality of the participants.

I did not pay any monetary incentive to policymakers for participating in this study. However, on one occasion, a non-alcoholic malt drink was purchased for one participant who became obviously thirsty after the interview.
CHAPTER SIX

RESULTS: AWARENESS, IMPACTS AND CAUSES OF INTERPROFESSIONAL GROUP CONFLICTS

6.1 Introduction

In this chapter, I present the results of thematic and content/document analyses on the causes and contributing factors to Interprofessional Group Conflicts (IPGCs). First, I present the characteristics of policymakers followed by awareness and impacts of IPGCs.

6.2 Demographic results and characteristics of policymakers

Table 13 shows the characteristics and distribution of the policymakers recruited for this study. Extensive details could not be provided due to confidentiality considerations. A total of 20 key informant interviews were analysed. Out of the 20 interviews collected, four policymakers were females while the remaining 16 were males. 8 of the interviews were conducted virtually while 12 were conducted face-to-face. The participants are policymakers with years of experience ranging between 5 and 33 years. Majority of the participants are policymakers who have backgrounds in disciplines such as medicine, nursing, administration, management, medical laboratory science, pharmacy, physiotherapy, Non-Governmental Organisation (NGO) and private practitioners. Some practice as health professional in the hospital but play important role in their professional union/association.

Table 13: Characteristics of the Key Informants

<table>
<thead>
<tr>
<th>S/N</th>
<th>Organisation</th>
<th>Position of Key Informant</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Federal Ministry of Health</td>
<td>Senior Policymaker</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Junior Policymaker</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Federal Ministry of Labour and Employment</td>
<td>Senior Policymaker</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 14: Overview of themes on awareness and impacts of interprofessional group conflicts

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of IPGCs</td>
<td>6.3</td>
<td>There is a good awareness of IPGCs among the policymakers. There are indications that IPGCs has become intractable being present for more than 15 years. New graduates are introduced to long standing conflicts among professional associations/unions.</td>
</tr>
<tr>
<td>Negative impacts of IPGCs on job roles</td>
<td>6.4</td>
<td>Policymakers narrated disruption of workflow, delays in accessing important data, delays in processing important official documents and break down of bureaucratic protocols as negative impacts of IPGCs. The interdependent nature of healthcare activities means withdrawal of service by one group negatively impacts other groups.</td>
</tr>
<tr>
<td>Positive impacts of IPGCs on job roles</td>
<td>6.4</td>
<td>Positive impacts of IPGCs include feeling of satisfaction when demands are met, improved health services and improved interprofessional relationships.</td>
</tr>
</tbody>
</table>

6.3 Awareness of interprofessional group conflicts

Responses to this theme were obtained by asking the policymakers “to what extent are you aware of interprofessional group conflicts between NMA and JOHESU? There is a pervasive awareness of the IPGCs among the different categories of policymakers interviewed which they agreed has been in existence for a long time.
While there is a significant level of awareness of the IPGCs among policymakers, important official documents such as the National Health Act, Human Resource for Health Policies and Strategic Plans, and National Health Policy documents barely acknowledge the existence of IPGCs. However, non-conventional official documents such as the report of Yayale Ahmed Presidential Committee on interprofessional harmony and report of the joint research on interprofessional harmony by NMA and PSN clearly highlighted the scale and issues of the conflicts. Furthermore, there are plethora of articles, commentaries, and news reports of the conflicts in the national dailies and social media.

This study reports a good awareness of IPGCs among policymakers in Nigeria health system. Policymakers’ responses cover both the number of years the conflicts have been in existence, the scope of the conflict, and some specific issues they are aware of.

“I can say I hear about this (interprofessional conflicts) for more than 15 years. Since I was a student, I've always known about the rivalry. That's always been there, and I want to believe that it has started before the 15 years” – P.7 (Senior Policymaker/Pharmacist/International Partner/Likely to be neutral)

This participant is aware of the IPGCs for more than 15 years since his degree programmes. The scope of IPGCs among different healthcare groups transcends the conflict between NMA and JOHESU. Graduate healthcare professionals are inducted to their practice and simultaneously introduced to a long standing IPGCs between their professions and other healthcare professional groups. Healthcare professionals are known to loyally imbibe the values of their profession which they join automatically as they transition from study to practice (Omisore et al., 2017a).

One participant commented that doctors have uncooperative demeanour being constantly isolating themselves from other healthcare professionals. There is an awareness of “we against them” attitude which threatens interprofessional teamwork including socialisation, communication, and delivery of health services to the public.
“One very good example of this is when JOHESU was fighting for improved services in the health sector, they (NMA) segregated themselves from the remaining part of the health service providers...” - P.8 (Senior policymaker/private practitioner/pharmacist/Likely to support JOHESU).

This statement underscores the presence of division between doctors and other health workers belonging to JOHESU. This division relates to how health workers negotiate with management/government agents on industrial relations matters. It also buttresses the perceptions that doctors are egoistic, not wanting to associate and classing themselves as different from other healthcare professionals.

6.4 Impacts of interprofessional group conflicts on job role

When asked whether IPGCs impact upon their current job roles, policymakers’ responses were affirmative both directly and indirectly. They narrated how IPGCs disrupt their ability to perform official duties effectively and how their efforts are being frustrated. By asking “Do you think that interprofessional group conflicts impact upon your current job role?” I was able to elicit personal experiences of the participants in reflection of how IPGCs has impacted their job role. One participant narrated how IPGCs delayed access to important data required for policy making within the African region.

“Definitely. Sometimes when you go for meetings such as the African Union meeting that you are expected to give certain data, if doctors and other professional bodies are on strike, you cannot get data that would be needed to engage in adequate debate at such fora.” - P.12 (Senior Policymaker/Doctor/International Schedule Officer/Likely to support NMA)

Policymakers who engage their counterparts at international health fora are not able to contribute effectively because IPGCs either block or delay access to important data. It also means that direct negative impacts of IPGCs transcends disruptions to national policymaking and creating a negative impression of the health system/policymakers among committee of international health policymakers. Although Nigeria is known to lead regional health
policymaking within the west African region and entire African continent, IPGCs however limits policymakers’ ability to contribute effectively in regional health policymaking. This could increase or worsen the threats of global and regional pandemic such as Ebola and Covid-19 pandemic which depends on active data surveillance for early detection.

Similarly, another policymaker cited an experience of delays in processing important official documents due to IPGCs.

“I have seen a situation where results are delayed because a clerk delayed a file that was supposed to have gone out earlier and such file was not processed on time.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

As described by this policymaker, junior cadres such as administrative clerks in the health ministry also exercise their powers by delaying important official documents when there is IPGCs in the health system. A breakdown of bureaucratic protocols frustrates progress at the macro health system level where key decisions that impact the health of all citizens are taken. This reveals the depth of interdependency in the health system where junior cadres possess a degree of influence that can be used to negotiate demands. Such power is due to bureaucratic procedures of the ministry but also due to poor adoption of Information and Communications Technology (ICT) in the health system.

Another Policymaker also noted that impacts of IPGCs on their job role are rather indirect and are due to the interdependent nature of professional roles.

“It does although not directly because we are all usually affected. When you have interprofessional rivalry, it’s a little more difficult because the professionals who were involved withdraw their service. I may not be affected but we are all connected.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)
“...our work overlaps with each other. Whenever there is a conflict, we don’t tend to achieve the aims and objectives of the organisation.” - - P.4 (Senior Policymaker/Doctor/Health Administrator/Likely to support NMA)

The multidisciplinary nature of healthcare service delivery or health policy making means that withdrawal of service by a group can disrupt activities within the system. This in turn deter the achievement of organisational goals and objectives. This also implies that IPGCs is a strong contributor to poor performance of the health system. Hence, neglecting IPGCs to focus on other challenges can undermine efforts at improving the health system.

Another participant narrated the difficulty faced in getting different categories of healthcare professionals to agree during their supervisory role as a policymaker. IPGCs create disagreement among different professional cadres during clinical reviews which has an indirect negative impact on the policymaker’s role.

“...not directly. I will say indirectly. It doesn’t impact on the work I do in the office but when we go outside to have meetings in the hospitals, and when you want to do something, you see a group of people saying yes while the others saying no.” - P.17 (Junior Policymaker/Physiotherapist/Likely to support JOHESU)

These responses also suggest that policymakers who work directly with government at the ministries are more likely to experience indirect impact of the IPGCs while those working in the hospitals are more likely to experience direct impact of the conflicts. It is worthy to note that some policymakers have worked in hospitals before taking policymaking role which make them experience IPGCs both directly and indirectly.

Some participants in this study reported the existence of sabotage as one of the negative impacts of IPGCs in the health system.

“...when they have a management meeting with CMD and information is supposed to be passed down from these heads of units, they frustrate the efforts of the CMD just to proof a point that doctors don’t know how to
This participant suggests that IPGCs sabotage management’s efforts to discredit doctors. Disrupting communication and workflow with consequent negative impacts on the patients and performance of the health system are regarded as efforts at incriminating doctors. In Nigeria, doctors occupy most administrative positions in the hybrid management structure which often create frictions with other health workers.

One participant noted that health workers benefit more from IPGCs at the expense of the patient and the health system.

“Labour, professionals are usually the ones who benefit after a long or protracted strike that crippled the system.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

While patients bear the bulk of negative impacts of IPGCs due to crippled health system, this participant believes that IPGCs ultimately benefit the conflicting healthcare professionals. Patients and their families bear a huge burden for what appears to be positive outcome of IPGCs for health workers whose demands are met. This implies that health workers engage IPGCs and industrial actions for their own benefits despite the negative impacts on patients and performance of the health system. However, another policymaker acknowledges that IPGCs also positively impact patients when they are resolved.

“...but then, in a few months when conflicts are resolved, things will be more fine in the country. People’s health will improve. People will be attended to. People will not die unnecessarily on a preventable sickness.” – P.5 (Senior policymaker/Monitoring and Evaluation Officer/Medical Laboratory Scientist/Likely to support JOHESU)

This policymaker suggests that IPGCs can lead to a stronger interprofessional relationships, improved health status, low mortality rate and a better performing health system than before the conflicts.
6.5 Causes and contributing factors of interprofessional group conflicts

There are 7 themes identified as causes or contributing factors of IPGC. These include unregulated professionalisation, organisational factors, economic factors, historical factors, political factors, and human factors (Table 15). Each of the themes has sub-themes which are discussed below.

Table 15: Theme overview for Causes of interprofessional group conflicts

<table>
<thead>
<tr>
<th>Theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unregulated professionalisation</td>
<td>6.5.1.1</td>
<td>IPGCs are caused by factors relating to unregulated professionalisation activities.</td>
</tr>
<tr>
<td>Organisational factors</td>
<td>6.5.1.2</td>
<td>IPGCs are caused by factors relating to poor organisation of the health system.</td>
</tr>
<tr>
<td>Economic factors</td>
<td>6.5.1.3</td>
<td>IPGCS are caused by factors relating to economic benefits.</td>
</tr>
<tr>
<td>Historical factors</td>
<td>6.5.1.4</td>
<td>IPGCS are caused by factors relating to history of interprofessional relationship.</td>
</tr>
<tr>
<td>Political factors</td>
<td>6.5.1.5</td>
<td>IPGCS are caused by factors relating to politics in the health system.</td>
</tr>
<tr>
<td>Human factors</td>
<td>6.5.1.6</td>
<td>IPGCS are caused by factors relating to psychological complexes.</td>
</tr>
</tbody>
</table>
6.5.1 Unregulated professionalisation

This theme describes the processes by which various professions in the health system expand or maintain their autonomy, status, and influence. The concepts of professionalism and professionalisation were discussed in chapter three (Section 3.3.6), including activities such as occupational closure, control of work content, formation of professional associations etc. There are four themes in this category which describe how each professional group conduct their professional interests in conflicts with the professional interests of other professional groups and/or health system goals.

Table 16: Sub-theme overview for unregulated professionalisation

<table>
<thead>
<tr>
<th>Theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proliferation of professional bodies</td>
<td>6.5.1.1</td>
<td>Government’s inability to regulate the self-regulatory abilities of professions creates conflict of interests and focus on individual profession’s objectives.</td>
</tr>
<tr>
<td>Professional power and dominance</td>
<td>6.5.1.2</td>
<td>Doctors continue to exercise their powers over control of key decisions in the health system while other health workers of JOHESU extraction engage in countervailing strategies to wean doctors’ powers and gain more autonomy.</td>
</tr>
<tr>
<td>Professional identity</td>
<td>6.5.1.3</td>
<td>Professional identities create faultlines due to differences in the understanding of professional behaviours or views between doctors and other health workers.</td>
</tr>
</tbody>
</table>
Professional loyalty | 6.5.1.4 | Strong loyalty to a profession’s agenda create favoritism in allocation of resources or positions which in turn exacerbate IPGCs.

6.5.1.1 Proliferation of professional bodies

There are indications for proliferation of professional regulatory councils, associations, and unions in the health system. For instance, Nigeria has 14 professional regulatory councils emerging at different stages of professionalisation. The ability of professions to self-regulate is a global practice with underlining theoretical explanations in classical sociology (Evetts, 2002, Saks, 2016). This self-regulatory powers are due to trust accorded professions in the society based on their functional roles (Wilenski, 1964, Evetts, 2002) (Sections 3.3.2 and 3.3.4). However, as professions putatively pursue complex economic and political agenda which compromise their ethical values, governments in advanced health systems resort to regulate professions (Adams and Saks, 2018).

As narrated by policymakers in this study, the inability of government to supervise professional bodies create fragmentation and disharmony as each professional groups pursues individual agenda without consideration for others or health system objectives.

One policymaker noted that interprofessional rivalry is due to activities of professional regulatory bodies in their efforts to gain autonomy, expand their boundaries and legitimise their roles in the health system. One of such activities include the fragmented creation of postgraduate colleges in ways that accentuate interprofessional competition between them.

*When you have a splinter of regulatory bodies, you will see that there will be (dysfunctional) competition. For instance, only a few years, we don’t have Postgraduate College of Nursing. It was only Postgraduate Medical College.*
Now we have Postgraduate College of Pharmacy. We have Postgraduate College of Medical Laboratory Science, etc. Now there is competition (among the professional regulatory bodies) ... Why don't we have a common Postgraduate College? - P.14 (Senior Policymaker/Pharmacist/ Likely to support JOHESU)

Another policymaker went further, to suggest other forms of competitions apart from the establishment of multiple professional regulatory councils and postgraduate colleges.

“...One (professional group) is saying you're doing this; another says we will also do it.” – P.5 (Senior policymaker/Monitoring and Evaluation Officer/Medical Laboratory Scientist/Likely to support JOHESU

This participant noted that presence of multiple professional regulatory bodies is breeding dysfunctional IPGCs as each profession strives to attain better status by creating advanced/specialist training in their fields.

While doctors enjoy autonomy and dominance of their job, other health workers are negotiating boundaries to increase their responsibilities (Badejo et al., 2020). For instance, nurses have been pushing for consultancy training but met with resistance from doctors. Also, pharmacists want to establish Doctor of Pharmacy training which would earn them better status and remuneration comparative to doctors. This effort has equally been met with resistance from doctors who view plans by other health workers as challenging their autonomy (Olajide et al., 2015a).

As suggested, the essence of negotiating roles is not to increase responsibilities but to improve remuneration and status. Hence, unregulated professionalisation focuses health worker’s attention on professional group interests leading to dysfunctional competition.
Doctors have significant power in the health system which are acquired through possession of knowledge of clinical practice and political acuity (Emmerich, 2011). Some policymakers affiliated with JOHESU believe that medical profession through the NMA is pushing medical dominance agenda at all levels of the health system.

“Another point is the desire to continuously be in power. Even when they say there is supposed to be hospital administrators for the effective management so that each profession will mind their area of labour and expertise, that is professionalism in service delivery” - P.14 (Senior Policymaker/Pharmacist/Likely to support JOHESU)

“…In any team, doctors are always the head, and they didn’t care whatever you know even doctors that just graduated today must be the head in any team.” - P17 (Junior policymaker/physiotherapist)

These policymakers perceive that doctors attempt to enforce themselves into management positions at team level, hospital level and national health system level. Some positions are supposedly designated for non-clinical health managers. Apart from the clinical team where doctors are substantially the lead profession (Witman et al., 2011), doctors in Nigeria health system also head key administrative and management positions (Ojo and Akinwumi, 2015). The policymaker’s statements in this context refer to doctors’ tendencies to take control of available key position in the health system. In the case of Nigeria health system, doctors are also managers. Such hybrid practice introduces a new perspective to autonomy versus control narrative between professions and management (Noordegraaf, 2015). It means that doctors with autonomy and authority are also in control of management/administration thereby having a nearly absolute power.

Another policymaker described extension of medical dominance to medical education where doctors with training responsibilities attempt to control qualifications for academic research. According to (Willis, 2020), medical dominance at this level is termed medical sovereignty and it
denotes an idea that the medical profession automatically becomes the dominant profession in any field they choose to operate or influence.

“There was a time NUC said doctors who are willing to practice in academia should have a PhD. The essence of this is to promote research but doctors resisted and threatened to go on strike. Why is it that they don’t want to embrace research?” – P.20 (Senior Policymaker/Scientific Officer/Likely to support JOHESU)

“If you want to be an academia, be. Pursue your PhD and become a researcher. But if you don’t have the capacity for research, then do your residence and become a professional clinician.” - P.20 (Senior Policymaker/Scientific Officer/Likely to support JOHESU)

Society is believed to have high expectations of doctors which makes medical education extensive and rigorous. Doctors have residency or postgraduate programmes in different disciplines where they conduct advanced research similar to academicians with masters or PhD qualifications (Akbulut et al., 2010, Ojo and Akinwumi, 2015). This implies that a pathway in academic research is created for doctors which is different from those known by conventional academic scholars. Hence, lack of clearly defined structure and widespread awareness of how doctors can transition to academics contributes to IPGCs.

It is apposite to suggest that slow pace of development of other academic disciplines promotes the intrusion of medical dominance in their domains. For instance, doctors have residency programmes in medical microbiology because microbiology is not adequately equipped or recognised as a full profession. Most graduates of microbiology in Nigeria eventually become teacher/lecturers as they are being proletarianized by doctors.

On the other hand, claims of medical dominance were dispelled by doctors who argue that their job is highly technical, unique, and sensitive. Such high level of responsibility comes with high expectations and rewards. This raises a question whether doctors’ technical and clinical skills; and their investment in sustaining the health system should be considered medical dominance. Since doctors are more likely to face litigation than other health workers (Vaismoradi et al.,
2013), they tend to take more responsibility for how things are done. It is beyond the scope of this study to provide explanations for why medical dominance exist but within the context of leadership role, such tendencies might have influenced their behavioural concept of leadership which is perceived by other health workers as dominance.

“I believe what doctors are being paid and what level they get is fair ... based on the fact that their job is a very significant role and if not well handled, a life can be lost.” - P. 2 (Senior Policymaker/Medical Doctor)

6.5.1.3 Professional identity

Professional culture as part of professionalisation activities was also found to contribute to IPGCs in the health system. This include the behaviours or dispositions unique to a profession that are cultivated through socialisation, identity formation, or role modelling of new graduates (Skyvell Nilsson et al., 2018). Such disposition may be a norm of a profession but maybe perceived otherwise by other professions (McNeil et al., 2013). Doctors are often projected and perceived by the public as knowledgeable and competent. To meet such expectations, medical practitioners carry themselves confidently. Demonstrating confidence as a virtue of professionalism required by doctors may be perceived as pride by other health workers whereas it is an identity that differentiate the medical profession or make people have confidence in doctors who would conduct invasive surgery on their body (McNeil et al., 2013). Such distinctive viewpoints can be referred to as faultlines which are imaginary line that split professional groups based on their identity (Best and Williams, 2019, Chrobot-Mason et al., 2009, Lau and Murnighan, 1998).

Professional identity is strong and sometimes superimposes personal identity based on age, gender, race or nationality (Mitchell et al., 2011). At the macro level, different professions through their professional associations are always keen on promoting the positive narratives of their profession as well as the unjust treatments in relations to rival professions or the government (McNeil et al., 2013). Despite the successes of implementing interprofessional practice, IPGCs based on clashes of professional identity have been found to impede
performance in interprofessional teams (McNeil et al., 2013). Policymakers reported that
doctors carry themselves as knowing everything about every aspect of treatment, hence
instigating the belief that they have unnecessary ego or pride.

“Absolutely because the training of doctors gave impression that a doctor
knows everything. You will see most doctors offering advice on what another
professional knows more than him/her, whereas the ideal thing to do is say I
don’t know this but there is a pharmacist who can advise you better” - P.3
(Senior Policymaker/ Doctor/NGO partner/Likely to be neutral)

This participant suggests that doctors have broad training which creates the perception that
they know everything. However, their basic knowledge in other fields may not suffice to meet
patients’ needs, hence, it is better to consult other professionals out of their core competence
areas. Such know-it-all attitude by doctors can be due to perceptions that other health workers
are not competent (Nakhaee and Nasiri, 2017) or low expectations based on poor knowledge of
other health workers capabilities (Busari, 2019, Vaismoradi et al., 2013). It can also affect how
doctors communicate with other health workers which when short of mutual respect can lead
to IPGCs (Aghamohammadi et al., 2019, Oweis and Diabat, 2005).
The policymaker observed:

“…your senior that went before you, that was their own disposition. Before
you know it, you will come out from medical school with this chip on your
shoulder that you are better than other people” - P.3 (Senior Policymaker/
Doctor/NGO partner/Likely to be neutral)

The statement above was made by a policymaker with background in medicine which
accentuate the construct of social identity in medical education. Medicine is a noble profession
which gives a proud feeling of achievement especially within the Nigeria social context
(Oluwole, 2012). There are suggestions that some distinct attitudes relating to this feeling are
role modelled into new doctors in the medical school which affect how they interact with other health workers. Such attitude or dispositions can be suppressed by additional training in interpersonal and communication skills which are not present in current medical curriculum (Olasoji, 2014, Osoba et al., 2021).

6.5.1.4 Professional loyalty

Similarly, loyalty to professional association/union is believed to breed favouritism as individuals within a profession are perceived to take decisions that favour members of their professional association/union than their interprofessional teams or patients.

“We feel our voices can never be heard because the top managers are from one professional group, and they always protect their own.” - P.17 (Junior policymaker/physiotherapist/Likely to support JOHESU)

“When a person belonging to a particular professional group is in leadership. For instance, if they are in charge of staff mobilisation, they tend to push other members of their professional group to juicy places, and this is common to medical practitioners.” - P.13 (Senior Policymaker/Scientific Officer/Likely to support JOHESU)

Apart from having a common education and social identity, members of the same profession share similar interests, affected by similar issues, have similar world views and are likely going to behave in similar ways within a multidisciplinary environment. These factors tend to strengthen the bond between them, consequent on which they favour members of their profession than individuals from other professions. Professional association thrive on the loyalty and commitment of their members while members also enjoy the protection and support provided by their professional associations. Such differential treatment causes IPGCs in the health system as reported by the policymakers in this study.
6.5.2 Organisational factors

This theme covers organisational factors that cause or contribute to IPGCs in Nigeria health system. There are 9 sub-themes under this theme.

Table 17: Sub-theme overview for organisational factors

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of organisational support for interprofessional training</td>
<td>6.5.2.1</td>
<td>Fragmented education and training of healthcare workers prevent positive interprofessional teamworking. Lack of interprofessional education was also found to limit interprofessional Continuous Professional Development (CPD).</td>
</tr>
<tr>
<td>Perceptions of inequity in opportunities for leadership and management positions</td>
<td>6.5.2.2</td>
<td>Nigeria health system operate a hybrid management structure where professionals lead and manage the health system. Most leadership and management opportunities are occupied by medical doctors leading to a perception of inequity among other health workers. There is a dispute in the opinions of policymakers on this sub-theme.</td>
</tr>
<tr>
<td>Perceptions of inequity in promotion and career advancement.</td>
<td>6.5.2.3</td>
<td>Opportunities for promotion and career advancement were perceived to favour doctors thus generating IPGCs between NMA and JOHESU as well as their professional associates.</td>
</tr>
<tr>
<td>Poorly defined job roles</td>
<td>6.5.2.4</td>
<td>There are dissents regarding what roles are carried out by what profession which affects interprofessional relationships and patient safety.</td>
</tr>
<tr>
<td>Lack of organisational support for accountability in patient management</td>
<td>6.5.2.5</td>
<td>Lack of clinical audit and accountability in patient management lead to unaddressed misconducts and interprofessional group conflicts.</td>
</tr>
<tr>
<td>Lack of organisational support for interprofessional communication</td>
<td>6.5.2.6</td>
<td>Absence of essential interprofessional communication support such as computerised prescription order entry and clinical decision support impair effective communication among different professional groups.</td>
</tr>
<tr>
<td>Leadership and management lapses</td>
<td>6.5.2.7</td>
<td>Absence of effective leadership and management controls that balance multiple interests, roles and</td>
</tr>
</tbody>
</table>
6.5.2.1 Lack of organisational support for interprofessional training

Healthcare professionals in Nigeria are usually trained independent of other professions during their degree programmes. There are no organisational arrangement and support for interprofessional training which allows different cadres of healthcare professionals to train together, hence, the existence of gaps in communication and understanding during their practice. Some participants regard this fragmented training as a major cause of IPGCs. Whereas the importance of interprofessional education and training has become a topical issue in recent time as more scholars continue to report on its positive impacts on interprofessional practice, staff wellbeing, patient outcomes and health system effectiveness (Reeves et al., 2013, World Health, 2010, Reeves et al., 2016). Lack of organisational support for interprofessional training was also reported in LMICs by other scholars (Jayasuriya-Illesinghe et al., 2016, Okonta and Okonta, 2018) and it calls for integration of policies and management strategies that accommodate the practice.

“...we have such rivalries because in trainings, a lot of professionals were never in contact. So, if you go to medical school, only medical students will be relating. If you go to school of pharmacy, they will be on their own. School of nursing, they will be on their own...” – P.5 (Senior policymaker/Monitoring and Evaluation Officer/Medical Laboratory Scientist/Likely to support JOHESU

This policymaker noted that fragmented training does not allow contacts that promote socialisation, mutual understanding and knowledge sharing among students who would later practice together in a team. Rather, the health system is operationalised by healthcare professionals from different disciplinary backgrounds who have not trained together and are expected to leverage in-service training or Continuous Professional Development (CPD) for updating their skills. Whereas, CPD is currently fragmented being organised by individual professional regulatory councils (Ingwu et al., 2019, Daniel-Ebune and Joda, 2017) hence there
is a need for interdisciplinary approach which can be facilitated by a macro-level policy for consistency. Also, instead of an absolute focus on updating technical skills, CPDs should be made to include non-technical skills such as leadership, interpersonal and communications skills. Interprofessional training, conferences, workshops, and seminars can be organised on a yearly basis to improve interactions and socialisation among interdependent health workers in the health system. However, interdisciplinary CPD is not always easy to achieve due to funding opportunities (Ingwu et al., 2019)

“You know the in-service training? people are just doing their own so how do you expect them to come out and now all of a sudden start learning together especially with what has transpired before them?” - P.7 (Senior Policymaker/Pharmacist/International Partner/Likely to be neutral)

This policymaker suggests that not only did lack of interprofessional education cause IPGCs but also that IPGCs limit successful implementation of interprofessional CPDs. Several studies have also recommended interprofessional education and training to improve interprofessional practice and limit IPGCs in Nigeria health system. It is expedient for government through the ministry of health to support interprofessional education and interprofessional CPD as a strategy to reduce IPGCs and patient harm.

6.5.2.2 Perception of Inequity in opportunities for leadership and management positions

Policymakers also reported inequity in opportunities for leadership and management positions at different levels of the health system. Currently, most management positions at meso and macro levels are occupied by medical doctors which create a feeling of frustration among other health care professionals. At organisational level, other healthcare professionals feel dissatisfied that doctors occupy strategic leadership positions and that their leadership has structured the health system in favour of doctors to the disadvantage of other healthcare professionals, hence there is no sense of justice or fairness. Currently, Nigeria uses a hybrid management structure in which healthcare professionals occupy key management positions instead of seasoned health managers or health administrators as in New Public Management
(NPM) (Section 3.3.6.2). As highlighted in chapter three, NPM becomes necessary due to mistrusts in professions’ self-regulatory abilities and their tendencies to place individual or group interests above the interests of patients and the health system (Saks, 2016). NPM has not been formally adopted in Nigeria health system and opportunities for management positions have disproportionately favoured medical doctors.

“Doctors entered the civil service at a more advantaged position relative to other health workers hence they rise faster to a director cadre which now gives them opportunity to mobilise other staff. What you see is that a medical doctor, by privilege of office is now pushing other doctors to important programmes and positions.” - P.20 (Policymaker/Scientific Officer/Likely to support JOHESU)

“No healthcare professional should be appointed a minister of health. One of the best ministers of health was Professor Eyitayo Lambo. He is a Health Economist...so, he has the health system primarily in focus as against any professional group interests.” - P.20 (Policymaker/Scientific Officer/Likely to support JOHESU)

Policymakers suggest that appointing minister of health from either NMA or JOHESU group may introduce decision bias whereas a neutral person would likely think the health system in their decision making. Although countries like UK, Canada, USA, and Australia with high performing health system rarely appoint doctors as ministers, medical doctors in Nigeria are known to participate actively in politics which positioned them for such appointments.

Another participant believes the practice of reserving hospital management role exclusively to medical doctors is demoralising to other healthcare workers who have more years of working experience.

“...I have been a pharmacist for 20 or 25 years. Does it show any equity that my son becomes my boss just because he’s a medical officer? Hospital management should be by competence and not reserved for any professional
Currently, medical doctors as the head of clinical team also manage the hospitals irrespective of their years of experience. Other members of the clinical team feel dissatisfied with this arrangement leading to IPGCs in the health system. Fragmentation has emerged as one of the disadvantages of NPM model in health sectors and few scholars have tried to study the impacts of management control on medical professionalism (Byrkjeflot and Kragh Jespersen, 2014), in a post-NPM adjustments, there are calls for hybrid structures in western countries while some health systems such as NHS adopt a combination of NPM and hybrid management ideologies (Byrkjeflot and Kragh Jespersen, 2014, McGivern et al., 2015).

The above policymaker’s views align with hybrid management structure but emphasise that competence and experience should count in appointing hospital managers rather than profession. This implies a charismatic approach to hybrid management where all professions in the health system are given a level playing ground to compete for management positions and individuals are appointed based on merit (Levay, 2010). Nigeria health system is bedevilled with insufficient staff, inadequate supply of consumables, equipment and infrastructure combined with increasing threats of regional and global pandemic which make a hybrid management structure logically attractive, however, propositions by rational choice-exchange theory (Section 3.3.5) especially with concerns of corruption, lack of charismatic leadership and conflict resolution skills are confounding factors that must first be addressed.

As noted by one of the policymakers, selection of medical doctors as minister of health may be acceptable if such leader is able to differentiate their role as minister of health from their role as member of a profession.

“The other issue is the tradition of making medical doctors ministers of health and commissioners of health. Many of them don’t separate their roles as medical doctors from managers and their tendencies was to protect their own subgroups in the professional teams” – P.5 (Senior
Although the minister of health role is a political appointment, doctors have largely been appointed. The minister of health is an individual with vested authority over the entire national health system who would need to clearly demonstrate fairness to prove his neutrality in a complex environment where professional groups engage in dysfunctional competition.

On a contrary view, one policymaker believes that perception of inequity especially relating to how minister of health who are medical doctors treat other professional groups may be sentimental than reality.

“...because you have access to information more than somebody who is commenting from afar. The ministry as far as I’m concerned has been neutral. The minister usually takes a neutral position, a father of all who brings all professionals together to ensure harmony”. – P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

This assertion suggests that perceptions of inequity among JOHESU members may be a misconception. This misconception may be due to poor communication leading to an perception that health ministers perpetrate their position in favour of NMA. Lack of common understanding due to poor communication between management and employee is known to fuel IPGCs. Whereas proximity to previous ministers showed that they have been neutral as posited by this participant. Effective internal communication is reported to promote organisational effectiveness but sometimes communication processes are centred on management’s needs rather than the needs of employees (Ruck and Welch, 2012). More so, minister of health in Nigeria usually has multiple official and political engagements within and outside the health system which make him/her inaccessible to most employees. An appropriate communication model that considers all the salient barriers to communication may be helpful in eliminating misconceptions between management and different categories of employees.
Perceptions of inequality in opportunity for leadership and management roles was defended by one policymaker who believes that doctors’ leadership role stems from being the leader of clinical teams as against the sentiments of JOHESU members.

“...What we are thought and what we find in some other places is that the doctor is the head of healthcare team. To treat a patient, he asks for lab. test, physiotherapy input, dietician input and doctors are positioned to lead the team” - P.4 (Senior Policymaker/Doctor/Health Administrator/Likely to support NMA)

This participant’s statement revealed that doctors are trained to take charge as the head of healthcare team while the role of other professions is essentially to support healthcare objectives set by doctors. He also asserts that this position is a global best practice.

Also, another participant believes there is nothing wrong with doctors leading the health system because they have basic knowledge in virtually all healthcare disciplines.

“I don't see anything wrong with doctors leading the health system because while in medical school, I was thought different things, so, we have basic knowledge in almost all the areas. When you are now leading in health management role, it gives you better understanding.” - P.2 (Senior Policymaker/Doctor/Programme Officer/Likely to support NMA)

Medical training is rigorous and broad including courses in microbiology, physiology, anatomy, and community health apart from the core medical courses. Such broad knowledge gives the medical profession an advantage over other healthcare professionals as the head of clinical team hence, doctors have extended this advantage to management roles as suggested by the policymaker (McGivern et al., 2015). Future research may be interested in seeing the relative advantages of having technical skill in management positions rather than a core management skill or the advantage of both skills in a hybrid management model.
6.5.2.3 Perception of inequity in promotion and career advancement

This theme describes how inequity in promotion and career advancement generate IPGC in the health system. Opportunity for promotion was perceived to favour doctors and the existence of 9 years gap between doctors and other professional cadres at entry level is considered favouritism.

“...as a medical doctor, you come in on grade level 12 and all other professionals come in on grade level 8. You need 9 years to get to level 12 so (he/she) is ahead of you already with 9 years!” – P.1 (Senior Policymaker/ Administrative Officer/Likely to neutral)

“Another factor is how Federal Government draw the salary scale. Doctors are placed on level 12 at entry while others are placed on level 10. That makes those who are placed on level 12 to see themselves as higher and more important than others.” – P.16 (Senior Policymaker/ Population Programme Officer/Likely to neutral)

This participant believes the feeling of superiority among doctors is based on disproportionate entry level and promotion scale. 9 years gap at entry level between medical doctors and other healthcare professionals is perceived as inequity. While doctors undergo a total of 7 years training before joining practice, other professions such as pharmacy, medical laboratory science and nursing undergo a total of 6 years in training. Other professionals believe 1 year gap in training is disproportionate to 9 years gap in practice. For a long time, NMA resisted the specialist/consultancy status of nurses leading to industrial litigation that was decided in favour of nurses (Badejo et al., 2020). Although initially resisted by the NMA, Pharmacists have also begun a 6-year Doctor of Pharmacy programme that would place them in equivalent number of years in training with medical doctors (Ogaji and Ojabo, 2014, Ekpenyong et al., 2018). That would also mean equivalence in promotion and career progression that rivals doctors’ status in the health system. Badejo et al. (2020) also noted that management courses are being
introduced in other health workers’ training so they can compete with doctors for managerial roles.

There are reports of industrial conflict between JOHESU members and government where JOHESU members instituted a case to skip a Grade Level (GL) between GL10 and GL12. This would reduce the relativity in GL between NMA and JOHESU. However, NMA also demanded the same treatment for restoration of relativity. This further favoured doctors as industrial court ruled in favour of all health workers irrespective of their group affiliation (Alubo and Hunduh, 2017).

A closer look at promotion and career advancement at the FMOH shows that the 9 years gap between NMA and JOHESU indicate doctors would get to director cadre within 20 years of service while other healthcare professionals would retire below the director cadre despite spending 35 years in service. This arrangement, in combination with medical doctors as ministers may create unbalanced multidisciplinary representation at health system governance level and a potential medicalisation of the national health system policymaking. National health system policymaking would benefit from a multidisciplinary perspective into policy issues. The tripartite conflict between the government, JOHESU and NMA on promotions and career advancement is typical of other IPGC issues including remuneration, job roles, and leadership and management positions, etc.

6.5.2.4 Poorly defined job roles

Policymakers in this study noted a gap in healthcare workers’ understanding of their job roles which in turn causes IPGCs in the health system.

“...when a doctor has a surgical procedure, it is the nurse’s role to provide what the doctor needs and if a nurse doesn’t know that’s part of her job, she may think this young doctor want to ride me or order me around.” - (P.11 Senior policymaker/Doctor/ Likely to support NMA)

The policymaker above comments on frontline healthcare service delivery, citing an example of interprofessional relationship between doctors and nurses. According to this policymaker,
nurses’ job description includes providing doctors with tools needed for surgical procedures and doctor’s prompt may trigger a feeling of insult especially if the doctor was younger.

The participant suggest that the nurse could have performed the task without feeling insulted if there was a clear job description. Such micro level conflicts have escalated to IPGCs due to its common occurrence. Although job role boundary encroachment doesn’t always generate a breakdown of social order in a health system due to its flexibility and malleability (Apesoa-Varano, 2013, Nancarrow and Borthwick, 2005), it becomes a concern for health planners and policymakers when blurring job roles create more conflicts than cooperation. In Nigeria context where there is economic undertone to who does what, lack of clearly defined job roles would likely escalate existing tensions among healthcare professionals. Hence, there is a need for a well negotiated and accepted policy which delineates expected roles of different professional groups at all levels (Nancarrow and Borthwick, 2005, Badejo et al., 2020).

Another Policymaker highlighted the causes of IPGCs between pathologists and medical laboratory scientists:

“...there is a current issue we are trying to resolve between the Pathologists who are doctors and the Medical Laboratory Scientists. Instead of working together on producing the best results for adequate diagnosis, the two groups are fighting over who controls the laboratory” - P.7 (Senior Policymaker/Pharmacist/International Partner/Likely to be neutral)

Pathologists and medical laboratory scientists work in the same laboratory, sometimes sharing desk spaces. However, conflicts regarding job roles and control of resources in the laboratory is a common source of IPGCs. The medical laboratory scientists through their professional association and JOHESU claimed that pathologists are not licenced to practice in the laboratory and that their role is mainly to interpret test results. On the other hand, the Pathologists believe they are the head of the laboratory department and medical laboratory science is to support their role. Lack of clearly defined job roles has implications on the timeliness and quality of laboratory test which support clinical diagnosis. Patient harm can be caused by delays
in the release of laboratory test result or there could be misdiagnosis due to role ambiguity. Yet, there is a knowledge gap among health workers on the differences in job roles between medical laboratory scientists and clinical pathologists (Archibong et al., 2021).

Another participant commented on the lack of clearly defined job roles in the laboratory:

“...from the time a sample arrives at a laboratory, what are the processes to obtaining a result because these days you go to the laboratory for tests and laboratory technician or professional will be making diagnosis. I don’t think it’s proper.” - P.12 (Senior Policymaker/Doctor/International Schedule Officer/ Likely to support NMA)

This participant believes it is improper for laboratory technicians to make diagnosis after carrying out a test as it is being currently practiced in some hospitals. To guarantee the safety of patients, laboratory test results would need to be interpreted by considering other variables relating to patients. Almost half the participants in a study by Archibong et al. (2021) did not know that sample analyses is the role of pathologist in clinical laboratory according to international best practice.

“...but from the perspective of doctors who have gone back to specialise in laboratory medicine, they are trained to marry clinical diagnoses together with laboratory results.” - P. 12 (Senior Policymaker/Doctor/International Schedule Officer)

The argument regarding who is qualified to collect samples, run diagnostic tests, or make diagnoses in the hospitals is an indication of poorly defined job roles in the health system and this is a major source of IPGCs according to the policymaker above. Despite historical dominance of medical profession on control of job roles in Nigeria health system, recent evidence suggests a change in role-boundary which necessitate negotiations in conflictual or consensual areas (Badejo et al., 2020). Increasing sophistication of technology, improvements in methods and professionalisation activities are facilitators of changes in job roles between doctors and other healthcare professionals.
Clinical audit is a systematic assessment of practices against the standards set by an organisation to promote accountability in patient management and a planned pathway to change (Gicheha et al., 2017, Hussein et al., 2016). Considering the frontline healthcare service delivery, many professional misconducts that negatively affect patients go unreported in Nigeria health system due to lack of clinical pathway on one hand and poor accountability in patient management on the other hand. Contributing to this lack of accountability is a situation where unions shield their members from taking responsibilities for their actions (or negligence) in the interprofessional team as some policymakers in this study found to be both a consequence and a contributing factor to IPGC in the health system.

“So, we need to get a test immediately, you call the lab for those results, the lab scientist tells you those machines are not working but the machines are working. The next day, you make a case to their boss, and they protect them because the important thing is that you cannot expose their member.” – P.6

(Senior Policymaker/Doctor/Likely to support NMA)

Although professionalisation can cause IPGCs, IPGCs can also enervate professionalisation in the sense that intraprofessional support system is bolstered through the activities of professional associations. Since professional regulatory councils have strong affiliations with professional associations, accountability process in patients’ care by different professionals can be weakened. This also links to poor oversight or regulation of professional regulatory councils on how they handle cases of professional misconduct. Hence, reported misconducts are treated as a continuation of the rivalry between them. Lack of accountability creates anarchy in the health system, a situation where healthcare workers do what they like knowing they have the protection of their professional bodies.

“There is no way a doctor will openly blame another doctor. Even when they make mistakes where other professionals are present, they will protect you
Cover up can also be due to poor handling of patient safety practices. One of the key principles of patient safety is the recognition that humans are infallible. Hence, errors are handled in ways that absolve health workers from blames rather than punishing them (Havens and Boroughs, 2000). This is however different from professional misconduct which requires punitive approach to discourage a culture of indiscipline (Wachter and Pronovost, 2009). An environment rankled by fear and hostility is prone to conflicts and also creates difficulty in assessing patient safety due to many unreported errors (Marshall and Robson, 2005). Clinical audits can help to identify pathways for change and limit IPGCs by establishing patient safety culture with positive approach to errors (Cooper et al., 2017). These measures require proactive organisational planning, policies, and apposite management strategies.

6.5.2.6 Lack of organisational support for interprofessional communication

Poor communication among interdependent professional groups who have different professional values can lead to IPGCs (Havens and Boroughs, 2000). There is a lack of organisational structure for Interprofessional communication as one of the main causes of IPGCs in the health system. Narrating an experience of a conflict between a doctor and a pharmacist, one participant reported:

“...I can still remember then when a consultant wrote a prescription for one of our patients and the patients went to pharmacy. The chief pharmacist questioned the prescription, and the patient came back to meet the doctor. The doctor went to meet the pharmacist and there was a shouting match between them”. - P. 3 (Senior Policymaker/NGO Partner/Likely to be neutral)

“The patient was there, the medical students were there, and they were just shouting at each other. I just felt it was wrong.” - P.3 (Senior Policymaker/Doctor/NGO partner/Likely to be neutral)
First, the above scenario depicts a lack of modern communication facilities such as Computerised Prescription Order Entry (CPOE) and Clinical Decision Support (CDS) which improve interprofessional communication, workflow and work coordination, when optimised with trainings on technology handling (Pontefract et al., 2018). In the scenario, doctor and pharmacist communicated through patient which is against interprofessional communication best practice. Another point from the scenario is that other healthcare professionals should be able to affirm their opinions when doctors make errors without creating a feeling of humiliation. Also, doctors should be able to appreciate, trust and reassess such corrections without emotional anger or frustration (Busari, 2019, Oweis and Diabat, 2005). An organisational support to enhance interprofessional communication can eliminate unnecessary interprofessional tensions such as by introducing ICT and staff training. In a situation where ICT cannot be effectively deployed due to lack of internet facility, a trained messenger can be employed to convey important messages between doctors and pharmacists instead of through patients.

Another participant noted that poor organisational support for communication limits transparent information sharing leading to IPGCs in the health system.

“A memo was raised for a training programme that require people to apply. The first person that saw it in the memo profile removed the memo and hid it from other professional cadres. When the list of successful applicants came out, only members of a professional group were selected.” - P.21 (Senior Policymaker/Scientific Officer)

Resentment among rival interprofessional groups can make them hide or hoard important information that could benefit others. Poor interprofessional communication is known to constraint information sharing and hinder mutual understanding in LMICs (Busari et al., 2017, Hailu et al., 2016) but digitisation has been found to improve information sharing among interprofessional team members (Carboni et al., 2022). There are dedicated digital software that allow effective communication between interprofessional healthcare teams and between healthcare teams and patients (Pontefract, 2018). However, technology as simple as WhatsApp
videos, Zoom, Google Meet and Skype can enhance interprofessional communication and reduce IPGCs due to poor interprofessional communications (Waldman et al., 2020). This policymaker also implies that manual information sharing is susceptible to hoarding of important information which is meant to benefit all professional groups whereas having an alternative digital memo would create a transparent information sharing.

6.5.2.7 Leadership and management lapses

Some of the policymakers blamed leadership and management of the health system for the IPGCs. Leadership is one of the most important factors in organising modern health system (Gilson and Agyepong, 2018a). Nigeria health system appears to have poor leadership at all levels. The system is characterised by an inherent complexity predicated by inadequate resources, conflicting interests and duality of roles which necessitate inclusive, transformative, and authentic leadership navigation (Gilson and Agyepong, 2018a).

Since leadership is the ability to have a vision and influence people to pursue such vision, a leader who is trusted, creative, passionate, and charismatic is contingent on functionalising IPGCs in the health system and by extension, to improving the general performance of the health system. For instance, current situations require leaders who would consider and include relevant stakeholders in key decision-making to avoid perceptions of bias. Doctors are powerful stakeholders in the health system whose interests are to maintain status quo or negotiate changes on their terms based their professional power as the lead profession. The powers of other health workers are also increasing and their interests in changes that reflect more autonomy and reward are mostly in conflicts with doctors’ positions. Effective leadership entails being able to balance these multiple interests through negotiated order for the benefits of organisational goals and objectives.

6.5.2.7.1 Lack of resources for managing IPGCs

One of the management lapses described by policymakers is lack of resources such as guidelines that are specific to operationalising the parts of NHA 2014 which address IPGCs in the health system.
“...we have not done enough! Though I’m no longer there (Human Resources for Health Unit) but I still feel the pain that government has not provided certain things that could be done...Although there is National Health Act, 2014 and there is a component under human resources that suggest they should handle interprofessional rivalry. But then, in the human resources for health, not much has been done in that part. It’s like a dead end in that part because we don’t have the tools to coordinate (manage) interprofessional rivalry...”  - P.5 (Senior policymaker/Monitoring and Evaluation Officer/Medical Laboratory Scientist/Likely to support JOHESU

Managing IPGCs requires certain resources such as funding, human resource, toolkits, policies, and guidelines for effective delivery. A health system that is already constraint of these resources might be tempted to prioritise other urgent and important challenges. In line with functionalism theory, a state of order is necessary for the optimal performance of any social institution. Such efforts may be counter-productive because dysfunctional conflict can limit efforts at addressing other health system challenges. For instance, there could be wastage of resources due to poor motivation, litigation, and crisis management. Training in negotiation is important to enhance the skills of clinicians, managers, and healthcare executives (Clay-Williams et al., 2018) but setting up training programmes also requires fund and human resources. Fund is also needed to set up interdisciplinary conflict management committee that will develop and sustain a conflict management strategy for the health system and ensure fulfilment of negotiated agreements.

6.5.2.7.2 Not following through with agreements

Some participants noted that the leadership or management is complacent by not honouring previous agreements hence deepening IPGCs in the health system.

“Well, I felt this has even lingered for as long as anyone would think. The major reason for this could be that government has not actually taken this seriously because every time you keep hearing same things. A promise that
was made at that time has not yet been fulfilled or answered to.” - - P.4
(Senior Policymaker/Doctor/Health Administrator/Likely to support NMA)

Government’s failures to fulfil previously negotiated agreements have extended the conflicts as suggested by this policymaker. Not fulfilling agreement can negatively impact staff motivation and cause bigger conflicts. Also, perceptions that government is not serious with healthcare workers’ demands increase the likelihood that IPGCs will lead to industrial action. Reneging on negotiated agreement may exacerbate the perception that doctors in management positions are biased against JOHESU whereas there could be other reasons why government default agreement. A complex adaptive system such as Nigeria health system requires generative relationships which entails proactive management through effective communication and engagement (Plsek and Wilson, 2001).

6.5.2.7.3 Staff shortage

Some participants perceive that shortage of staff is a contributing factor to IPGCs in the health system. One of such participants is an administrator with background in medicine who noted that staff are overworked.

“... (there is) inadequate manpower. Contrary to the WHO recommended number of patients to doctor ratio, you will see a doctor being overworked and he is not adequately being remunerated accordingly. The same thing with other professionals too” – P.11 (Senior Policymaker/Doctor/Likely to support NMA)

Shortage of staff combined with poor remuneration creates tension among the different professional groups. Staff shortage impacts negatively on staff wellbeing, patient outcomes and performance of the health system. Poor remuneration, poor leadership and management and poor working conditions are often reported as push factors which enhance brain drain and staff shortage in Nigeria (Adetayo, 2010).
Whereas, another policymaker noted that despite the shortage of doctors in the health system, more doctors are working as administrators in the ministries instead of caring for patients in the hospitals where they are mostly needed. This suggests that maldistribution of human resource for health contributes to workforce crisis in Nigeria health system.

“You won’t blame the doctors as well because most of them don’t have work to do and that’s why they are encroaching on other person’s job. Also, we don’t have enough doctors in the clinics yet many of them are carrying files up and down. So, let government try as much as possible to provide tools they will use for them.” - P. 20 (Senior Policymaker/Legislative Officer)

According to the policymaker, inadequate availability of working tools for doctors has pushed them to other roles which is different from their core clinical duties. Nigeria currently has about 80,000 registered doctors’ majority of whom are deployed to urban secondary and tertiary hospitals. While doctors overpopulate urban hospitals where they experience frequent clashes with other health workers, they are scarcely available in Primary Health Centres (PHCs). Whereas most PHCs serve majority of Nigerian population in the rural areas but they are poorly organised. Rural PHCs are not suitable for doctors due to lack of standard equipment, infrastructural facilities, rising insecurity, and frequent stock out of essential medication and supplies.

6.5.2.7.4 Poor interpersonal conflict resolution

Poor organisational strategies for resolving interpersonal conflicts between individuals from different professional groups (usually task-related interpersonal conflicts) can also contribute to IPGCs as reported by one policymaker. When smaller conflicts are not properly resolved, they tend to escalate (Henry, 2009). While power and conflict management styles play significant roles in how conflicts can be managed (Amaeshi, 2021), using power or non-integrative approach to conflict management is known to have statistically significant negative impacts on organisational performance (Longe, 2015). As observed by this policymaker, the micro-level management sometimes uses power and non-inclusive approach to conflict management which often predicate IPGCs as issues are supressed with autocratic authority.
“If there is a conflict between myself and a doctor, there is a leader to report to who also reports to the admin and eventually the admin table the issue before all other leaders of the healthcare. I observe that they (management) are practicing an autocratic leadership. They are not allowing other people in the conflict to contribute to the matter.” - P.10 (Senior Policymaker/Registered Nurse/Likely to support JOHESU)

“...They are not carrying people along and they are making the other leaders like the figure head leaders, and they are not contributing so much to resolving conflicts.” - P.10 (Senior Policymaker/Registered Nurse/ Likely to support JOHESU)

Having a non-inclusive approach to conflict management with an intention to suppress interpersonal conflicts would compound and generate negative stereotypes which when allowed to fester can lead to IPGCs.

6.5.3 Economic factors

This theme relates to how economic resources or benefits are distributed among the professional groups as well as their responses. Consistently with literature, Policymakers reported that economic factor is a major cause of IPGCs in the health system. Economic factor is also noted as the root cause of other conflicts in the health system. This themes contain sub-themes such as remuneration, lack of adequate funding for health, corruption, and economic recession.

Table 18: Sub-theme overview for economic factors

<table>
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<th>Theme</th>
<th>Section</th>
<th>Summary</th>
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<tr>
<td>Remuneration</td>
<td>6.5.3.1</td>
<td>This sub-theme highlights issues with pay parity, harmonization, unilateral treatment, and lack of inclusive opportunities for special allowances. These</td>
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factors lead to IPGCs. There is a perception that equal pay for work of equal value is not practiced. Also, separation of wage structure and lack of inclusive opportunities create dissatisfaction among the health workers of JOHESU extraction.

<table>
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<tr>
<th>Lack of adequate funding for health</th>
<th>6.5.3.2</th>
<th>Inadequate funding for health negatively impacts critical aspects of the health system including interprofessional group relationships.</th>
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<tr>
<td>Corruption</td>
<td>6.5.3.3</td>
<td>Corrupt practices create tensions among professional groups leading to dysfunctional interprofessional group relationships.</td>
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<tr>
<td>Economic recession</td>
<td>6.5.3.4</td>
<td>Economic recession means remuneration is not sufficient to satisfy basic needs of health workers.</td>
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6.5.3.1 Remuneration

Remuneration in this context is described as salaries, allowances (statutory) and special allowances (due to additional work demands that are different from the normal work schedule). The following economic elements are developed under this sub-theme:

6.5.3.1.1 Parity

Remuneration parity is one of the major causes of interprofessional conflicts highlighted by participants in this study. Parity accentuates equity in pay structures such that there is equal pay for work of equal value. Parity can be achieved through job evaluation which is a systematic process of allocating reward for different job categories based on their relative value to organisation (Koziol and Mikos, 2020). There are instances where job evaluation or organisational reward system has been rejected by both union and employers especially due to lack of transparency, cooperation or inclusive participation (Livy, 2020). To enjoy optimal employee commitment, reward system should be data-driven, objective and devoid of subjective social narratives (Koziol and Mikos, 2020). This implies jettisoning the prescription of social constructionism theory which stipulate that society determines the value of professions subjectively (Section 3.3.4). A feeling of remuneration injustice affects employee satisfaction,
engagement and productivity (Juchnowicz and Kinowska, 2018). This study finds that how NMA views remuneration parity is quite different from JOHESU. JOHESU members feel dissatisfied with the gap in remuneration between them and doctors. At the same time, they believe that NMA’s interference in efforts to claim more benefits from government destroys interprofessional relationship.

“...we are not saying reduce what medical doctors get. Nobody wants to lose his advantage. But why there will be any problem is if you are earning 100 and I was earning 50, and I begin to earn 80 or 90, I mean how has it offended you?” - P.8 (Senior policymaker/private practitioner/pharmacist/Likely to support JOHESU)

“...but sometimes if you want to raise other health workers’ pay, those earning more than them (doctors) want to maintain the gap and say you must also increase mine and that is what government has problem dealing with” - P.8 (Senior policymaker/private practitioner/pharmacist/Likely to support JOHESU)

Historically, NMA influenced remuneration structure upon which government approved a separate salary structure (CONMESS) for them (Alubo and Hunduh, 2017). This is different from the CONHESS salary scale on which other healthcare professionals are placed.

However, doctors believe that relativity in remuneration between them and other healthcare professionals must be maintained in line with global best practices. Similar findings were reported in a study by (LanreKamoru et al., 2019).

“There is also the issue of remuneration. Some people (other health professionals) feel that if you pay a doctor 10 Naira, you should (also) pay a nurse, that is at that cadre, 10 Naira but there is already a structure (relativity) for that...and at some point, they came up with this issue of they want to skip a grade level...and when they skip that grade level, they will start earning the same thing that doctors earn and then doctors joined in that matter in court and when the court said they can, they also granted that
**doctors skip a grade level. It became an issue cos (because) that’s the only way they (the government) can establish that relativity**” - P.6 (Senior Policymaker/Doctor/NMA Executive)

Doctor’s insistence on maintaining pay relativity between them and other health workers has constantly been defended by NMA including through legal battles at industrial court (Ogbonnaya et al., 2007). Globally, doctors are known to earn more than other health workers but pay injustice along profession or gender lines has been found to create crisis in different health systems around the world (Cohen and Kiran, 2020, Rimmer, 2017). Pay parity often necessitate job evaluation and salary review for transparent reward system acceptable to all groups in the health system (Sani et al., 2019). In the context of Nigeria health system, the current salary scales have not been properly negotiated and the influence of doctors on the reward system is easily linked to doctors’ presence in top management positions (LanreKamoru et al., 2019).

6.5.3.1.2 Harmonisation

Still on Remuneration, another participant noted that remuneration is not harmonised across professional groups and the process by which salaries are determined is not standardised and/or communicated clearly leading to poor motivation and IPGCs in the health system. Doctors are placed on CONMESS salary structure while other health workers are placed on CONHESS salary structure although they work in the same environment. Although relativity may exist between doctors and other health workers, placing them on separate reward structures might come across as unfair practices to JOHESU members hence leading to IPGCs.

“**...If the remuneration, salary, wages are not well paid or the scale by which professionals are paid is at disparity; and if there is no written document to what each professional earn at the end of the month, that may lead to IPGC.**”
- P.4 (Senior Policymaker/Doctor/Health Administrator/Likely to support NMA)

To harmonise the remuneration of health workers as a means of ending IPGCs in Nigeria health system, Sani et al. (2019) recommends a singular wage structure for all healthcare
professionals. The proposed wage structure called Harmonised Health Salary Structure (HHSS), or Unified Health Salary Structure (UHSS) will be based on transparent job evaluation and review of the current CONMESS and CONHESS dichotomy. It can be hypothesised that a common wage structure would reduce perception of bias and reduce class sentiments among interprofessional groups.

6.5.3.1.3 Unilateral treatment

Another sub-theme on remuneration is unilateral treatment relating to salaries and wages.

“If nurses ask for something and the management grants it, immediately that thing is released to them, doctors will go on strike the next day to ask for their own…” - P.19 (Senior Policymaker/Private sector/Likely to be neutral)

This policymaker’s comments reveal that negotiating with professional groups in fragments and on case-by-case basis escalate existing tensions in the health system. The health system is a multi-interest environment that requires a holistic view of requests. Preventing IPGCs would entail treating each case after a careful analysis of other stakeholders’ response (ILO, 2019, Le et al., 2021).

Commenting on how management handled striking health workers in the past, another participant noted that management unilaterally paid doctors without paying other health workers who are JOHESU members.

“...most of the CMDs in the hospitals are doctors and they are at the highest leadership in the hospitals. They paid their members while they did not pay other healthcare professionals especially the JOHESU members.” - P.14 (Senior policymaker/Pharmacist/Likely to support JOHESU)

“Another point is unilateral approval of certain allowances and welfare to the doctors and not for other health care professionals and we are in the same environment because they were the head of the hospitals, so those
things start to generate a lot of conflicts” – P.14 (Senior policymaker/Pharmacist/ Likely to support JOHESU)

In an environment where doctors occupy most top-level management positions, perception of unilateral treatment can be conceived as favouritism hence escalating existing IPGCs.

6.5.3.1.4 Lack of inclusive opportunities for special allowances

Another cause of IPGCs is the lack of inclusive opportunities for special allowances. Special allowances are not part of health workers’ usual monthly remuneration but are paid based on additional tasks or inconvenience. Such allowance may be in form of estacode, field work allowance or supervision allowance.

“...but since we get some allowances from these supervisions and all these field trips, other cadres don’t feel happy that we doctors are the ones that are always on the field. They are agitating for equal opportunity to field trips because of the allowance.” - P.2 (Senior Policymaker/Doctor/Programme Officer/Likely to support NMA)

One of such special allowances is teaching allowance which is paid to some doctors who combine clinical and academic duties. Medical education is mostly delivered by doctors who practice but also engage in training/teaching new generations of doctors thereby making their work more demanding. Doctors believe such additional contribution deserve a special allowance to shore up their motivations. This allowance is not available to other health workers who claim they also have academic duties hence contributing to IPGCs in the health system.

“...statutorily, such people taking care of patients and at the same time are taking teaching others for residency, housemanship or even research work going on, they are entitled to teaching allowance, so I know a category of doctors get this kind of allowance." - P.12 (Senior Policymaker/Doctor/International Schedule Officer/ Likely to support NMA)
“At a point, other professional bodies wanted the same entitlement claiming that sometimes they too have reasons to teach their upcoming professionals under them, so they have a kind of conflict because of this...” – P.12 (Senior Policymaker/Doctor/International Schedule Officer/Likely to support NMA)

Doctors believe that other health workers are not entitled to teaching allowance as they don’t have teaching roles like doctors. Whereas other health workers claim they also have teaching roles. Entitlement to special allowance is also linked to poorly defined job roles in the sense that a clearly written scheme of service for such category of doctors is not widely published. Perhaps, a new career path in medicine that accommodates doctors in research or teaching would not only help to reduce IPGCs by removing ambiguous role complexities but also strengthen medical education and training.

“If you are not teaching, why should you demand for teaching allowance? If you are not taking calls in the hospitals, why should you get call allowances? So, we need to state clearly and have policies that will help us to manage employee-employers’ relationships.” – P.12 Senior Policymaker/Doctor/International Schedule Officer/Likely to support NMA)

Here, the policymaker suggests a lack of policy for dealing with special allowances such as teaching allowance hence causing IPGCs in the health system. Special allowances are not structured with staff’s remuneration package. They are paid as the need arises hence difficult to enumerate. Opportunities for accessing special allowances are also limited and sometimes skewed. IPGCs occur due to uneven distribution of opportunities for such special allowances especially when it favours doctors to the disadvantage of other healthcare professionals.

6.5.3.2 Lack of adequate funding for health

Generally, funding for health is inadequate in the country. Some participants believe lack of adequate funding for health is one of the major reasons for intractable IPGCs in the health system. Although government spending on healthcare in LMICs is showing some promising
trend as resources from pooled sources are increasing, Nigeria still falls behind the UN
recommended 8% to 10% GDP spending on health (World Health, 2018).

“Government should invest more in health. The resources budgeted for
health is not enough compared to global standards.” - P.14 (Senior
Policymaker/Pharmacist/ Likely to support JOHESU)

“...but in Nigeria, the health insurance is not so robust, and if the government
make it robust, there will be a lot of money to cater for health of our people.”
- P. 11 (Senior Policymaker/Doctor/NARD Executive)

While health insurance in developed countries provide relatively better funding for health
services health insurance in Nigeria does not avail an adequate funding for health. The
implication of scarce resources is that different professional groups lobby to have a share of
available resources and the business of caring for patients becomes secondary.

6.5.3.3 Corruption

Participant observed the presence of corruption in the health system. One participant alleged
that unentitled doctors at ministry of health use their powers to earn call duty and consultancy
allowance. There are reports of corruption in health systems from around the world, but it
appears incidence of corrupt practices are quite common in LMICs (Budiarsih, 2021, Mackey et
al., 2016). There are tendencies for health system planners and policymakers in LMICs to
concentrate their efforts on health system financing without simultaneously planning methods
to reduce loopholes which can lead to corrupt practices. Other scholars have reported
economic corruption as one of the major challenges facing Nigerian health system and
contributing to IPGCs between NMA and JOHESU (Abba-Aji et al., 2021)

“If you go to the teaching hospital, you can have calls 2 or 3 times a week but
staff at the ministry are carrying files and some policymakers want them to
earn call duty and consultancy allowance.” - – P.5 (Senior
Plans to grant call duty and consultancy allowance to unentitled doctors is perceived as corruption by other health workers and that has also become a source of IPGCs. Scholars such as Hutchinson et al. (2019) believe corruption in the health system is complex *inta alia* because it is broad in definition and some corrupt practices are means of getting dysfunctional system to work. This implies that some practices that are termed corruption by one party might not be seen as corruption by another and confronting such practices head on might shut-down operations in whole or part of a sector. Many doctors at the ministry of health do not undergo residency training but attempt to claim consultancy titles like those in clinical practice. One policymaker described this as a corrupt practice.

“...ask me how corruption comes into this. Most doctors here at the ministry of health didn’t go to postgraduate medical college but because they are on grade level 16, they also call themselves consultants like high ranked doctors in clinical practice.” - P.5 (Senior policymaker/Monitoring and Evaluation Officer/Medical Laboratory Scientist/Likely to support JOHESU)

Doctors who chose to work in the management role have a completely different job roles and career path to those working in the clinical setting. They contribute to policy formulation, leadership and management decisions that shape how the health system delivers healthcare objectives to the public rather than treating individual patients like clinicians.

“What causes most of these conflicts is money and most of those monies are looted because the hospitals generate a lot of money, yet government is not seeing it. The Healthcare system is not free. People pay for the services, medication, scan, everything then where is the money?” - P.14 (Senior Policymaker/Pharmacist/ Likely to support JOHESU)

With a clear job description and career path definition, some of these areas can be clarified.
6.5.3.4 Economic recession

Policymakers acknowledge that economic recession has caused a decline in performance of the health system and contribute to IPGCs. Nigeria experienced bouts of economic recession between 2016 and 2018 which impacted circular flow of income, quality of life and standard of living of the general population (Shido-Ikwu, 2017). The economic recession and rising inflation imply that average income of healthcare professional is not sufficient to care for their personal and family needs (Nwude, 2013) thereby escalating existing tensions at work.

“I actually think that the health sector has degenerated. Economy of the country has plunged so everything went down with it.” - P.6 (Senior Policymaker/Doctor/NMA Executive)

“Doctors feel after spending years in the medical school, you cannot still attend to basic needs. Same way a pharmacist, nurses and everyone in the sector feels. As far as I’m working, I should be able to address some basic/major needs.” - P.5 (Senior policymaker/Monitoring and Evaluation Officer/Medical Laboratory Scientist/Likely to support JOHESU)

Health does not exist without the socio-economic factors that facilitate it and economic recession usually constraints the optimal performance of the health system (Weida et al., 2020, Benach et al., 2014). Social and economic factors also affect health workers’ commitment to work schedules and increases professional group activities designed to protect the welfare and advantages of their members (Caramanis, 2005).

Economic recession has made many healthcare professionals reassess their priorities. One policymaker noted that the need to survive and thrive has made many healthcare workers lose focus of their professional calling.

“...many people abandoned their callings, and they went for the money and because of that there is a lot of corruption and non-accountability in the system, and these bring conflicts.” - P.14 (Senior Policymaker/Pharmacist/Likely to support JOHESU)
The policymaker above acknowledged that economic recession caused health workers to abandon their professional callings in pursuit of money which they sometimes get through corrupt means. Whereas Focus on economic benefits limits interprofessional working relationships (Allareddy et al., 2007).

“Everyone is going to the same market. We all face the same economic challenges. Nobody says nurses should earn same allowances as doctors depending on the provision but there shouldn’t be much difference in the salaries.” - P. 5 (Senior Policymaker/Medical Laboratory Scientist)

Rising inflation will likely shift the focus of health workers to seeking better economic opportunities. According to this policymaker, other health workers are not aspiring to earn the same salary as doctors, but the gap should be reasonably balanced given that economic recession affects everyone.

6.5.4 Historical factors

This theme describes historical issues that generate conflicts in Nigeria health system. There are four sub-themes in this category including history of antagonistic department, history of favouritism, historical loss of unity and common representation, and colonial influence.

Table 19: Theme overview for historical factors

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of antagonistic department</td>
<td>6.5.4.1</td>
<td>Cases of intergroup antagonistic behaviors in the past are constantly referenced as one of the causes of interprofessional group conflicts.</td>
</tr>
<tr>
<td>History of favouritism</td>
<td>6.5.4.2</td>
<td>Historically, health workers enjoy positive intergroup working relationship which became eliminated due to favouritism.</td>
</tr>
<tr>
<td>Historical loss of unity and common representation</td>
<td>6.5.4.3</td>
<td>The unity and common representation among professional groups disappear with time leading to negative competitions and interprofessional group conflicts.</td>
</tr>
<tr>
<td>Colonial influence</td>
<td>6.5.4.4</td>
<td>The hierarchies introduced during colonial era has</td>
</tr>
</tbody>
</table>
6.5.4.1 History of antagonistic deportment

Doctors have once petitioned the Federal Government on the appointment of a Minister of Health belonging to pharmacist association in the 1990s. Such petition is perceived as belligerent and antagonistic. The fact that a minister of health was removed from office because he was not a medical doctor signals unending IPGCs that can only be appeased by appointing a non-doctor minister of health. It also demonstrates the extent of power wielded by NMA, their influence over government’s decision and their grip of the health system.

“You cannot be a minister of health in Nigeria if you’re not a doctor. in the early 90s, a pharmacist was appointed as minister of health. Doctors wrote lots of petitions against him until he was removed in 6 months” - P.8 (Senior policymaker/private practitioner/pharmacist/Likely to support JOHESU)

Such history of antagonistic deportment in the health system contributes to the formation of JOHESU as a formidable union capable of waging a stronger opposition to NMA. Several other studies have found that historical factors contribute significantly to the dynamics of interprofessional relationships in the health system with some scholars reporting anxiety, sabotage and lobbying as a result of poor interprofessional experience (Hanks, 2017).

6.5.4.2 History of favouritism

Historically, health professionals were keen on harmonious interprofessional relationship until 1990s when the gap in remuneration between doctors and other professions became unacceptably widened for the first time. Apparently, the struggle to restore the history of equity in remuneration has contributed to IPGCs between doctors who want to maintain their advantage and other healthcare professionals who desire a more equitable reward system.
We were having a fairly good relationship until somewhere in the 90s, a doctor became minister of health and decided to give doctors a different category and kept the other health workers in a different category. That was the major problem. He separated the health team by putting the medical doctors in a different compensation category and the rest of others differently. That’s the genesis of this problem and rather than me and my fellow doctor colleagues having 1 or 2 steps difference, the difference between the entry point for young Pharmacist and a doctor became so large it was completely inequitable and I believe that was also the feeling of other healthcare professions. - P.8 (Senior policymaker/private practitioner/pharmacist/Likely to support JOHESU)

Before 1990s, interprofessional relationships were good because the relativity in remuneration and status between doctors and other health workers are acceptable. This policymaker believes doctor’s dominance was introduced at a time in history and IPGCs has since become a norm in the health system.

6.5.4.3 Historical loss of unity and common representation

Narrating an experience which dates to 1975, a participant observed the presence of unity and common representation among professional groups which disappear due to reforms and professionalisation in the health system.

I remember very well that among the group of 8 trainees. A house officer and all the fairly fresh members of the health trainees at the time, I was elected as their leader and all the interactions we have with all the director of administration, and the leadership and management of the hospital, I lead my team. We didn’t know the difference. Except that we had different skills and do different jobs, but we believe we all had similar problems so that’s why I could represent doctors, physiotherapists, and medical lab scientists at
Historically, healthcare professionals, irrespective of their profession see themselves as one. They are united by a common purpose and have a common representation. The population of healthcare workers was also at a manageable size during which makes professional group identity less pronounced. Major reforms, increase in numerical strength, specialisation and professionalisation is reported to have change the landscape of interprofessional relationships in the health system leading to a loss of unity and common representation among the healthcare professionals.

6.5.4.4 Colonial influence

Nigeria health system is built on British colonial health system model which is heavily centred on medical services and doctors have absolute control over patient treatments. Doctors also have monopoly of knowledge in other clinical fields including pharmacy, laboratory diagnosis and medical research. Doctors are believed to have trained other emerging health professions due to shortage supply of doctors. The colonial hierarchical arrangement also see the establishment of Chief Medical Adviser, a position occupied by a medical doctor, who oversees the affairs of the health system and coordinate health communication between Britain and West African states (Nkwam, 1988). While the British health system has been transformed significantly through several reforms since the Second World War, Nigeria still operates some of the colonial era principles of how the health system is structured.

“I know that some of these issues even started with colonial masters when they brought healthcare to Nigeria, but they have changed the way health workers relate while we are still practicing old ways.” - P.9 (Senior Policymaker/Pharmacist/International NGO partners/Likely to be neutral)

A significant reform in UK health system includes the introduction of Beveridge NHS model which decentralised healthcare and guarantees access to services as at when needed without having to pay on the spot. Expansion of NPM see Chief Executive Officers (CEOs) head the NHS
Trusts instead of medical doctors. Although some NHS Trusts use a hybrid system where medical doctors with additional qualifications in management are appointed as CEO.

6.5.5 Political factors

Table 20: Theme overview for political factors

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political interests</td>
<td>6.5.5.1</td>
<td>Political interests inform policy direction which favours one professional group over another thereby leading to IPGCs.</td>
</tr>
<tr>
<td>Lack of political will</td>
<td>6.5.5.2</td>
<td>Government’s lack of political will to effectively resolve the conflicts is due scarcity of resources. This is reported as exacerbating IPGCs.</td>
</tr>
<tr>
<td>Pressure to win political union/association elections</td>
<td>6.5.5.3</td>
<td>Intraprofessional politics exacerbate IPGCs as candidates promise to protect members of their profession at the cost of healthy interprofessional relationships.</td>
</tr>
</tbody>
</table>

This theme is a description of the political activities that generate or contribute to IPGCs in the health system. There are three sub-themes developed under this theme including political interests, lack of political will and pressure to win professional union/association elections.

6.5.5.1 Political interests

Some policymakers believe that political interests contribute to IPGCs in the health system. Politics is an intricate part of policymaking which requires ardent stakeholders’ management. There are vested interests with influence over broad or specific areas of health which may promote or resist a macro level policy. One policymaker suggested that the presence of doctors in legislative government implies NMA’s interests will be defended in law making.

“Doctors are more participatory in politics than other health workers. For instance, doctors hold position in the legislative.” - P.19 (Senior Policymaker/Private sector/Likely to be neutral)
“Political influence plays a major role in affecting, instigating, or fuelling interprofessional group conflicts as regards to interest of the government of the day. That alone could cause IPGCs.” - P.4 (Senior Policymaker/Doctor/Health Administrator/Likely to support NMA)

While the work of legislative committee on health is to carry out political/legislative oversight of public health in the country, having a medical doctor as chairman of senate committee as it currently is may reinforce other health workers believe that political interest affects resource distribution in favour of doctors hence escalating the IPGCs between NMA and JOHESU.

6.5.5.2 Lack of political will

Some participants argue that government lacks the political will to resolve IPGCs because the conflicts distract attention from its ability to adequately fund the health system.

“I think our government hasn't been sincere. They appear to be happy with the unions’ rivalry because they can use it as a tool to keep everybody shut. We are no longer talking about what should be done to improve healthcare.”
- P6. (Senior Policymaker/Doctor/NMA Executive)

As suggested by the policymaker above, IPGCs distract health workers attention from the inadequacies of management/government. For instance, the health system is faced with unresolved challenges inter alia poor infrastructural facilities, poor coverage of health care financing, high maternal mortality statistics and poor working conditions. This policymaker believes that government is reluctant in managing the conflicts to distract health workers attention from such discourse.

6.5.5.3 Pressure to win professional union/association elections

Health system is highly unionised. Within the unions, the internal politics of becoming union representatives promotes low level of discipline among professionals as noted by one participant. Occupying executive positions in a professional association has some incentives which sometimes intensify intraprofessional politics.
“Professional union leaders don't want to punish anybody. If you're a union leader or in management, you don't need people’s favours to remain there so you should be able to discipline so that people can learn from their mistakes and from those examples.” - P6. (Senior Policymaker/Doctor/Likely to support NMA)

During professional associations/union elections, healthcare professionals will likely vote candidates who promise to protect their rights and welfare including shielding them from blame or litigation when elected. Although unintended, lack of accountability in patient management do occur due to efforts of professional union/association leaders to win a seat or retain their seats as executives. This is regarded as one of the causes of IPGCs.

6.5.6 Human Factors

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological complexes.</td>
<td>6.5.6.1</td>
<td>Psychological complexes including superiority and inferiority complexes disrupts interprofessional relationships and socialisation.</td>
</tr>
<tr>
<td>Desire for dignity, respect, and recognition.</td>
<td>6.5.6.2</td>
<td>Desire for dignity, respect and recognition is triggered by the perceptions of injustice and unfair treatment leading to agitations, interprofessional conflicts and industrial crisis.</td>
</tr>
<tr>
<td>Tendency to demand for more benefits.</td>
<td>6.5.6.3</td>
<td>Reports of health workers unending agitation for more benefit create continuous tension in the health system.</td>
</tr>
</tbody>
</table>

Human factors such as psychological complexes (inferiority and superiority complexes), desire for dignity, respect, and recognition as well as the natural tendency to want more are reported to cause IPGCs in this theme.

Many policymakers affiliated to JOHESU believe that doctors have ego and superiority complexes which consciously or unconsciously affect their attitudes to work as well as their
relationship with other healthcare professionals. Whereas policymakers affiliated to NMA are of the opinion that other healthcare professionals have inferiority complexes.

“Basically, I will say it’s just an unnecessary ego on the part of the medical doctors. Seeing themselves as more important than other professionals. They may spend more time than other professionals in the health institutions but it’s just unnecessary ego.” - P.16 (Senior Policymaker/Population Programme Officer/Likely to neutral)

“...superiority mindset in the sense that every doctor sees themselves as the alfa and omega in the hospital. To some extent this is correct however, we have to recognise that we are dealing with human beings so our ego should not obstruct interpersonal or interprofessional relationships”. - P.15 (Senior Policymaker/Health Administrator/Likely to be neutral)

Doctors by the reason of their roles and responsibilities in the health system are indispensable. This assertion is agreed by many policymakers in this study. However, they believe doctors have ego which is impacting patient care and the performance of health system.

Another policymaker observed that other professionals in the health system also want to feel respected by the doctors. Hence, lack of respect causes IPGCs.

“Other professionals are also relevant. As you want them to respect you, respect them. Nobody wants to be disrespected and when you respect someone, you get a double respect, so respect is earned and not commanded but people are fighting for respect.” - P.17 (Junior Policymaker/Physiotherapist/Likely to support JOHESU)

“When the doctor comes to clerk the patient and they want to claim this is their order and want you to carry them out as prescribed without acknowledging or appreciate your part or sharing knowledge together on how we can improve the patient care.” - P.10 (Senior Policymaker/Registered nurse/ Likely to support JOHESU)
Doctors affiliated with NMA however believe that other healthcare professionals affiliated with JOHESU had wanted to study medicine but failed due to occupation closure hence they are being rivalled out of jealousy.

“Most people want to study medicine and because it’s usually a very competitive area, those that are unable to get set pass mark may eventually study the other courses. That rivalry stems from there.” - P.6 (Senior Policymaker/Doctor/Likely to support NMA)

Medicine is a highly competitive course in Nigeria due to medical closure hence doctors are accorded high prestige and respect in the society. Many healthcare professionals who ended up studying other courses are believed to have initially intended to study medicine hence there is a perception of jealousy among doctors.

Another sub-theme is the insatiable nature of man. The tendencies for healthcare professionals to lose appreciation for what they earn by demanding for more earnings.

“The reasons are very clear. You know human demands are insatiable. People keep making demands from time to time especially in the health industry, there seem to be insatiable demands from both groups.” - P.18 (Senior policymaker/Conciliation officer/Likely to be neutral)

This policymaker attribute IPGC to the rise of greedocracy, a narrative of the modern age where people want more irrespective of what they already have (Sim, 2017). However, considering job demands and the remuneration of the political class in Nigeria, healthcare workers can be exonerated from demanding better remuneration.

6.6 Result of content/document analysis

Table 22: Theme overview for content/document analysis

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document review</td>
<td>6.6.1</td>
<td>Most relevant official documents did not address interprofessional group conflicts in the health system. However, the NHA 2014 recognises interprofessional teamworking as a necessary requirement for</td>
</tr>
</tbody>
</table>
achieving quality care. The NHA also situates healthcare as an essential service and prohibits health workers from embarking on strike action. However, strikes have continued.

<table>
<thead>
<tr>
<th>Lack of policy and infrastructure for interprofessional communication</th>
<th>6.6.2.1</th>
<th>Absence of policy and infrastructure to facilitate positive interprofessional group engagement creates assumptions and lack of trust thereby leading to interprofessional group conflicts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class struggle</td>
<td>6.6.2.2</td>
<td>Class struggle pertains to social class differential, hierarchies, and lack of interprofessional socialisation cause IPGCs.</td>
</tr>
<tr>
<td>Poor implementation of relevant laws</td>
<td>6.6.2.3</td>
<td>Important rules which mitigate IPGCs are not implemented thereby causing conflicts in the health system.</td>
</tr>
<tr>
<td>Lack of mutual trust</td>
<td>6.6.2.4</td>
<td>Interprofessional group conflicts occur due to lack of trust in the leadership and management of the health system.</td>
</tr>
</tbody>
</table>

6.6.1 Document analysis

Most of the official documents collected did not comment on IPGCs in the health system. The National Health Act (2014) recognises interprofessional teamworking as a necessary requirement for achieving quality public healthcare and highlighted the roles of different stakeholders in health policymaking and service delivery. The NHA recognises National Council on Health as the highest decision-making body on human resource for health in the health system.

“The National Council shall develop policy and guidelines for, and monitor the provision, distribution, development, management and utilisation of, human resources within the national health system.” - (Part v, article 1 of NHA)

This implies that the NCH is primarily responsible for strategic decisions regarding the management of IPGCs in the health system. Although the composition of NCH may be structurally skewed in favour of doctors, the NCH is well inclusive and representative of all
professional groups. As the highest decision-making body on health in the country, NCH is made up of some of the best brains in policymaking in the country, howbeit, there may still be individual and group interests which can influence policy decisions.

To protect citizens, the NHA emphasises health care as essential service which limits the rights of healthcare workers to embark on industrial strike actions and mandate the honourable minister of health to address IPGCs proactively.

“Without prejudice to the right of all cadres and all groups of Health Professionals to Industrial Dispute, demand for better conditions of service, health services shall be classified as Essential Service, and subject to the provisions of the relevant law.” - Part v I (WHO)

“Pursuant to subsection (WHO) of this section, industrial disputes in the public sector of Health shall be treated seriously and shall on no account cause the total disruption of health services delivery in public institutions of health in the federation or in any part thereof.” - Part v I (2)

“Where the disruption of health services has occurred in any sector of National Health System, the Minister shall apply all reasonable measures to ensure a return to normalcy of any such disruption within fourteen days of the occurrence thereof.” - Part v I (3)

Despite the provisions of the law, IPGCs still occur on a frequent basis in the health system due to apparent lack of regulation of professional group activities.

6.6.2 Results of content analysis

Content analysis of the documents collected revealed that IPGCs in the health system are caused by lack of policy and infrastructure for interprofessional communication, class struggle, poor application of relevant rules and lack of mutual trust.

6.6.2.1 Lack of policy and infrastructure for interprofessional communication
First, there is a lack of policy on interprofessional communication between doctors and other healthcare professionals in the documents analysed. While mentions are made of interprofessional teamwork and collaboration, there is no policy that establishes communications between the unions or associations of doctors and other healthcare professionals (i.e., NMA and JOHESU). Hence, there are opposing views and divergent opinions on key issues as reported in the thematic analysis. Such opposing views are also highlighted in the report of the joint committee on interprofessional relationship produced by NMA and PSN.

Also, this lack of policy or organisational mechanism for doctors and other healthcare professionals to engage in continuous social dialogue creates room for assumptions, misunderstandings and lack of mutual trust which eventually result in IPGCs.

“The opposing views across both professional groups suggest poor communication among members of the two professional groups.” - (NMA/PSN)

Although National Health Council can be considered a forum that brings all professionals together at macro level and such platform should compel dialogue and open communications between NMA and JOHESU members, NHC was not constituted specifically for interprofessional rapprochement. Rather, NHA section 5 highlighted the functions of the NHC to include focus on healthcare goals and objectives as well as formulating strategies to deliver quality healthcare services to the public.

Furthermore, National Health ICT Strategic Framework 2015 – 2020 which has now expired highlighted the use of information communication technology to enhance the achievement of UHC by 2020. While update is expected, the framework envisioned the “effective use of ICT for decision support and within the continuum of care” amongst other things. The goal to improve the ICT infrastructure such as clinical health record system or prescription order entry system would reduce IPGCs by delineating roles, promoting accountability, and enhancing interprofessional communications along the care continuum as indicated in P. 17 of the document. However, implementation of this strategy has not yet been fully developed due to different reasons such as lack of funding, poor electricity, and internet supply.
One of the implications of absence of a comprehensive policy for interprofessional communication is that when healthcare professionals have differences in views, opinions or ideas relating to key health system discourse, they lobby the public to push such views rather than talk to each other hence there are plethora of news conferences, blog posts, social medial advertisements and conventional new media reporting on issues that could be resolved within the health system.

Similarly, there are no provisions for technology enhanced interprofessional communication between doctors and other health workers at micro level. Although, a mention of this was captured in NSHDP II document, goal 40 Page 89 – 90.

“Evidently, harmonious interprofessional relationship among healthcare professionals in Nigeria was lost over time due to poor communication among other issues leaving gaps for faulty perceptions and class struggle that characterized the health sector in Nigeria.” – (NSHDP II)

6.6.2.2 Class struggle

As contained in the quote above, the interprofessional joint committee report between NMA and PSN identified class struggle as one of the interprofessional conflict issues in the health system. As highlighted in the thematic analysis, the existence of class struggle between NMA and JOHESU has multifactorial dimensions such as in job roles, remuneration and social status. Nancarrow and Borthwick (2005) describe a dynamic shift in role boundaries that see doctors shelve some roles of lesser status to other healthcare professionals and the willingness to take them back when the health systems experience excess supply of doctors.

The NHA section V2 part C empowers and encourages minister of health to “create new categories of healthcare personnel to be educated or trained in conjunction with the appropriate authority.” (Page 19). Creation of new categories of healthcare personnel predisposes the health system to more professionalisation. For instance, Community Extension Workers (CHEWS) were created in the 1980s to work in the PHCs. They now have additional trainings to obtain Community Health Officer (CHO) with a competitive status to senior nurses
Contrary to the submissions of policymakers, document analysis revealed that Nigeria Federal Ministry of Health developed task-shifting and task sharing policy for essential health care services in 2014. The policy focuses on promoting redistribution of tasks for optimum utilisation of human resource for health in the national health system. Similarly, Strategic pillar three of NSHDP II (P.89) covers task sharing and task shifting objectives to strengthen the health system.

Another dimension is class differential between doctors and other healthcare professionals (Price et al., 2014). Socialisation pattern among health workers in LMICs is often linked to hierarchical structure in the health system and can potentially improve interprofessional relationships (Jayasuriya-Illesinghe et al., 2016). However, low level of socialisation between doctors and other health workers is commonly reported in literature (Ayanbode and Nwagwu, 2021, Jayasuriya-Illesinghe et al., 2016).

### Poor implementation of relevant rules

The NHA is an important document which serves as framework for operationalising the health system in its entirety including the different components of health system such as the human resource for health. Analysis of the document revealed the existence of some relevant rules which are poorly implemented or enforced. One of such rules is contained in the NHA 2014, part (V) subsection 2a, 2b and 2c which emphasised the need to provide adequate resource for education and training of all healthcare professionals in the health system including re-certification programmes through continuous professional development (Page 20). This indicates the existence of supportive legal framework to develop interprofessional training programmes for health workers. However, this part of the act has not been properly implemented.

Although subsection (h) specifies the need to define and clarify the roles and functions of FMOH, SMOH and Local government department of health on the administration of human resource for health, details regarding the roles of different professionals as well as how they can work together are missed out. Similarly, the NSHDP II (2018-2022) focused on the production, training, retention, and motivation of human resource for health but missed out
the key elements of teamworking, role clarification and conflict management despite the experience and negative consequences of IPGCs in the health system (Page 87).

Also, the NHA in section (V) recognises the existence or possibility of industrial disputes and proactively emphasise that health is an essential service (Page 20). This assertion is in alignment with the provisions of Trade Unions Act amended section 30, subsections 6 and Trade Dispute Act Cap 432 (1990) which is the principal act. As an essential service, healthcare professionals are prohibited from embarking on industrial strike actions due to industrial relations dispute unless certain requirements are met. The provisions of this act should limit healthcare professionals’ reliance on industrial strike action as a tool for pressing home their demands.

6.6.2.4 Lack of mutual trust

Report of the Yayahle Ahmed Presidential committee on interprofessional relationship in public health sector highlighted lack of mutual trust between NMA and JOHESU which creates unnecessary anxiety, tension and IPGCs.

“He promised the committee would do a thorough and perfect job and be an unbiased umpire. Not the headship of the organisation that matters but raising a team to deliver the best for our patients in line with the best practices across the globe.” – (Presidential committee report)

A trust in the leadership and management of the health system irrespective of group affiliations would mean minimal interprofessional crisis and patient-focused healthcare team (Yuan et al., 2021).

6.7 Summary of chapter six

This chapter highlights the result of thematic analysis on the causes of IPGCs in Nigeria health system. Findings show that causes of interprofessional conflicts are complex and multifactorial (Fig.15). Six themes were produced from the reflective thematic analysis including unregulated professionalisation, organisational factors, economic factors, historical factors, political factors, and human factors. The findings of content/documentary analysis corroborate that of thematic
analysis. Four themes were produced in the content analysis including lack of policy and infrastructure for interprofessional communication, class struggle, poor implementation of relevant rules and lack of mutual trust.

![Diagram of Causes of Interprofessional Group Conflicts]

*Figure 15: Causes of Interprofessional Group Conflicts*
CHAPTER SEVEN

RESULTS: APPRAISAL OF EXISTING STRATEGIES FOR MANAGING INTERPROFESSIONAL GROUP CONFLICTS

7.1 Introduction

This chapter describes and appraises the current strategies for managing IPG conflicts in the health system. Understanding how the conflict is currently managed provides insight into what works and what doesn’t. This helps in navigating better strategies for managing IPGCs in the health system. Also in this chapter, results of resource analysis are presented. Effective management of conflicts requires resources such as funds, human, and communication resources. Identifying what resources are available for managing conflict can help to navigate gaps in current management efforts as well as where more efforts are required.

7.2 Current conflict management strategies

Table 23: Theme overview for current conflict management strategies

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies and processes</td>
<td>7.2.1</td>
<td>Although there are conflict resolution processes as part of administrative tools but there is no comprehensive conflict management policy in place in the health system.</td>
</tr>
<tr>
<td>Reactive approach</td>
<td>7.2.2</td>
<td>The current approach for managing interprofessional group conflicts is reactive rather than proactive. Conflicts are resolved on case-by-case basis without a comprehensive management strategy.</td>
</tr>
<tr>
<td>Social dialogue</td>
<td>7.2.3</td>
<td>The use of social dialogue is reported which proffer opportunities for conflict resolution. However, lack of comprehensive policy limits the effectiveness of social dialogues.</td>
</tr>
<tr>
<td>Lack of trust in management</td>
<td>7.2.4</td>
<td>There is lack of trust in hybrid management structure due to duality of roles which introduces perception of bias in conflict resolution.</td>
</tr>
</tbody>
</table>
There is no effort to learn from the conflicts with a view to preventing recurrence of dysfunctional conflicts.

### 7.2.1 Policies and processes

Result shows a clear conflict resolution process without a supportive comprehensive conflict management policy. When IPGCs occur in the health system, policymakers immediately search for any policy or management instrument within the organisation that can be applied to resolve it before it is escalated. An instrument that is commonly applied is the civil service rule which contains the terms and conditions of service for all civil servants as well as the scheme of service which outlines the roles of each professional cadre. However, the civil service rules are often not applicable when there is conflict because some terms and conditions of service are being disputed in the first place. The Human Resource for Health (HRH) unit of FMOH and the HR department are usually in charge of facilitating dialogue between NMA and JOHESU at this level. At the frontline of health system, a mix of task-oriented interprofessional conflicts which forms part of a larger IPGCs discourse are handled by the administrators and healthcare leaders.

“There are hierarchies in every profession. For instance, if there is a conflict between me and a doctor, there is a leader to report to who also reports to the admin and eventually the admin tables the issue before all other leaders of the health care.” - P.10 (Senior Policymaker/Registered Nurse/Likely to support JOHESU)

“...if it’s just a simple internal issue within the ministry that does not involve other parastatals, agencies or other stakeholders in health sector, the ministry of health can handle this alone.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

Reports of macro level IPGCs are prepared by HRH unit and the Human Resource Management (HR) department before being transmitted to the office of the Permanent Secretary.
Ultimately, the reports are transmitted to the Honourable Minister of Health who uses his discretion to resolve the conflict within the ministry.

“...the onus is on the honourable minister to call the two parties together through their leadership and find a way to mediate between both of them.” - P.16 (Senior Policymaker/Population Programme Officer/Likely to neutral)

The Minister of Health negotiates with representatives of professional groups as a state agent and if an agreement is reached, such agreement may require the approval of the President during the Federal Executive Council (FEC) meeting. This would require a presentation explaining the situations by the Minister of Health and recommendations on ways forward. Approval at FEC may require budgetary provision on matters that concerns remuneration or Civil Service Commission and Head of Service on matters relating to promotions and career advancement. The Ministry of Finance and the Budget Office then receive memo to implement the agreement involving financial benefits to health workers affected.

“The department of health planning research and statistics present a memo of the honourable minister of health which is taken to the federal executive council for presentation.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

“...once an approval is given in form of FEC Memo, we begin to implement the decision in the memo and sometimes if it requires budgetary provision, it goes out of the ministry to the ministry of finance.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

However, the honourable Minister of Health may not be able to resolve the IPGCs within the Ministry of Health. In such case, the conflict is escalated to the Ministry of Labour and Employment. The Minister of Health in conjunction with the Minister of Labour and Employment, as well as the leadership of professional associations/unions engage in dialogue to resolve the conflicts.
“...because of the frequency that we have seen over time, it has now become necessary to have a whole ministry in charge of such conflicts among professionals not only in health but also other unions.” - P.12 (Senior Policymaker/Doctor/International Schedule Officer/ Likely to support NMA)

Hence, the ministry of labour and productivity *inter alia* is dedicated to managing industrial disputes not only for the Ministry of Health but also for all other sectors in the public service.

The Ministry of Labour and Employment refers the cases that cannot be settled at Ministry level to arbitration panel and eventually to Industrial Court.

“Usually, we escalate to the industrial arbitration panel which hears cases that cannot be resolved amicably at the ministry level. Thereafter, if matters are not even addressed there, the parties that are in disputes may decide to take the case to national industrial court.” - P.18 (Senior Policymaker/Conciliation Officer/Likely to be neutral)

The Industrial Court delivers judgement that is final and binding on the conflicting parties and for which the Federal Government through the relevant Ministries, Departments and Agencies implement (Ukonu and Emerole, 2016, Talabi, 2015).

7.2.2 Reactive approach

Conflict management as it is currently being practiced is largely reactive. Conflicts are usually dealt with on case-by-case bases without a definite policy or strategy to coordinate conflict response and more importantly, learn from conflict events. Although IPGCs are often highlighted as a problem and there are yearnings for interprofessional teamworking, policymakers could not identify any comprehensive conflict management policy or strategy for proactive management of IPGCs in the health system.

“Directly, there is no policy document on conflict management especially between JOHESU and NMA. You only have policy documents that address one or two issues but I'm not aware of policy document on conflict
resolution/management between NMA and JOHESU” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

“I’m not aware of any policy documents in place for managing interprofessional conflicts within the federal ministry of health. May be there are and maybe there are none, I’m not so sure.” - P.16 (Senior Policymaker/Population Programme Officer/Likely to neutral)

However, one participant acknowledged that an office of Special Adviser to the Honourable Minister on HRH once existed in the past which advice the minister on proactive ways to manage IPGCs.

I recall the last 2 ministers created an office of special adviser to honourable minister on human resource for health which covers and see to interprofessional conflicts and the conflicts in health in general. He relates very well with all the professionals so before there is any conflict, he quickly comes and nips them in the bud. So early detection or identification of any conflicts which is about to happen and before it happens, they quickly provide solution, so they don’t allow it to happen. He worked closely with us, with all the regulatory bodies and all the professional associations and with human resources management. - P.12 (Senior Policymaker/Doctor/International Schedule Officer/ Likely to support NMA)

The last two Ministers correspond to the time IPGCs was at the peak in the health system (Oleribe et al., 2016) which means the office was created in response to the conflicts and when the conflicts are abated, the office appears to have been scrapped whereas IPGCs is an ongoing experience in the health system (Balogun, 2021a, Mayaki and Stewart, 2020, Nwobodo et al., 2021). Also, since such proactive measures are not captured in policies, they could not be sustained with a change in Minister.

The ministry of labour and productivity is a government institution saddled with inter-alia, mediation of industrial conflicts. The institution has internal policies and work procedures that allows it to function as mediators in industrial conflict resolution. However, conflict cases that
are reported at this level have missed opportunities for proactive management at organisational level. Similarly, cases that cannot be resolved at the ministry of labour are directed to industrial court which is the highest arbitration body on industrial relations matters.

“We undertake conciliation as professional level officer, our duty is to conciliate based on the provisions of the law but if conciliation fails to avert conflicts, usually we escalate to the industrial arbitration panel which hears cases that cannot be resolved amicably at the ministry level.” - P.18 (Senior Policymaker/Conciliation Officer/Likely to be neutral)

7.2.3 Social dialogue

Although reactive approach is being applied to conflict management due to lack of policies, structures, and comprehensive strategies for managing IPGCs within the Ministry of Health, there is evidence that social dialogue is constantly being used to resolve IPGCs in the health system.

“Yeah, it’s been by calling the professionals to table and discuss on solutions, they go back and forth. Eventually, they have an agreement.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

“Especially when workers are on strike in the sector, it requires the Minister of Labour and the Minister of Health to invite the cadres involved for discussions until an agreement is reached, until they reach a consensus and decide to call off the strike.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

Dialogue is an indication that all healthcare professionals are heard. It also denotes an opportunity to resolve conflicts quickly and effectively through collective bargaining and negotiated order. Since conflicts occur frequently in the health system, dialogue has helped to prevent several conflicts from escalating to industrial actions which have negative consequences on the patients and performance of the health system. However, lack of comprehensive policy
and management strategies at different levels along continuum of conflict management means dialogues are mere reactive quick fixes for resolving IPGCs.

“So, ministry of labour and productivity together with other union bodies have sat together having prolonged meetings. I’m not aware we have policy statements because at the level of these ministries, we should be able to have a concrete policy that will take care of some of these conflicts.” - P.12 (Senior Policymaker/Doctor/International Schedule Officer/ Likely to support NMA)

Whereas dialogue has yielded agreements in previous conflicts which are not binding on any party hence the conflicts linger due to unfulfilled agreement especially on the part of the government. Unfulfilled agreement has often led to lack of trust in the dialogue process and even bigger conflicts.

“Government has not actually taken this seriously because every time you keep hearing same things. A promise that was made at that time has not yet been fulfilled.” - P.4 (Senior Policymaker/Doctor/Health Administrator)

“Take for instance the conflicts among the health professionals. If government is not taking a side very seriously, that could further worsen or could break down the relationship between the health professionals.” - - P.4 (Senior Policymaker/Doctor/Health Administrator/Likely to support NMA)

Despite evidence of dialogues, few participants believe the conflict management strategies are rather top-down and autocratic. Responding to how IPGC is being managed in the health system one participant noted:

“...people tend to settle it in a different way, and I feel that most of the time, it's a top-down approach. It's more like an order. It's more like a command, like saying you have to follow it this way.” - P.10 (Senior Policymaker/Registered Nurse/ Likely to support JOHESU)
The perception that a top-down approach is used to resolve conflict may be one of the reasons why interprofessional conflicts and industrial relations have lingered/become intractable. Management and macro level state actors in charge of conflict resolution sometime need to be assertive in their position. However, perpetual autocratic top-down approach to conflict management would be counter-productive to the goals of conflict management.

7.2.4 Lack of trust in the management

One of the sub-themes in the current management strategies is the duality of roles among policymakers who are doctors which is breeding mistrusts and limiting conflict management efforts. Majority of policymakers in the ministry of health either belongs to NMA or JOHESU. For instance, the current Honourable Minister of Health, the Honourable Minister of State for Health and the Honourable Minister of Labour and Employment have their backgrounds in medicine. Similarly, several directors and head of departments are medical doctors. Although there are members of JOHESU at directorate level also. JOHESU members perceive that doctor have quickly risen to directorate cadre because of 9 years advantage over other healthcare professionals. With these coincidences, policymakers affiliated to JOHESU perceive that conflict negotiations and decisions will not be to their favours. This is evident in the number of IPGCs and industrial relations cases that are determined at arbitration panel or industrial court where they hope to obtain unbiased judgement.

“…if a health institution has an organogram that has been led by a medical doctor. The medical doctor himself is also part of the conflict. There are levels of trust that the people themselves have in such a person leading.” - P.14 (Senior Policymaker/Pharmacist/ Likely to support JOHESU)

“It’s just like you cannot be a judge in your own case but in this case, you are the judge and you’re also the offender.” - P.14 (Senior Policymaker/Pharmacist/ Likely to support JOHESU)

“We still feel marginalised because the people that will address the issues from top management offices are members of a professional group. The only
way is for other group to take laws into their own hands by being rebellious.”
- P.13 (Senior Policymaker/Scientific Officer/ Likely to support JOHESU)

“When it comes to decision making in Nigeria, the doctors have a higher hand. It appears there is voice speaking for them at the top. Until JOHESU has a kind of similar voice speaking for them in some key decisions, there will always be a problem.” - P.19 (Senior Policymaker/Private Sector/Likely to be neutral)

Cases of insubordination and indiscipline were also suggested in the presidential committee report just as this policymaker maintained that crisis in the health system is a way of expressing their lack of trust and satisfaction for unfair management decisions.

Perceptions of autocratic leadership styles at hospital management level may also be due to doctor’s headship of departments (HOD), Chief Medical Advisory Committee (CMAC) and Chief Medical Directors (CMD). The implication of this arrangement is that conflict resolution is determined by members of the medical profession which constitute the hospital leadership while contributions of other health workers are suppressed.

“I observe that they are practicing an autocratic leadership. They are not carrying people along and some JOHESU leaders are like figure heads. They are not able to contribute so much to resolving conflicts.” - P.10 (Senior Policymaker/Registered Nurse/ Likely to support JOHESU)

However, despite the presence of dialogue, few participants stated that top-down approach to conflict management is being practiced in some cases due to lack of structures or protocols for conflict management.

“If there are existing structures, people tend to settle it in a different way and I feel that most of the time, it’s a top-down approach. It’s more like a command it's more like saying you must follow it this way. It's more like an order.” - P.17 (Junior Policymaker/Physiotherapist/Likely to support JOHESU).
7.2.5 Poor conflict learning

Sustainable conflict management requires an active learning process that allows health system leaders and managers to understand the dynamics of conflicts and best strategies to manage them (Tjosvold, 2008). Conflict learning is even more important due to the complex and dynamic nature of health system. There is no evidence of conflict learning, a systematic process of collecting and analysing data on conflicts to understand patterns and develop a conflict management strategy towards functional conflict management. The Policymaker in the last quote noticed a lack of structure on conflict management. This lack of structure underscores the different elements of conflict management including a learning process.

7.3 Availability of resources for managing interprofessional group conflicts

Conflict management requires investment in resources that facilitates all management activities necessary to achieve functional conflicts (Dziubiński et al., 2016). Although most studies in organisational conflict management do not consider resources needed to make conflict management possible, studies on arms conflict recognise that achieving peace has a cost (Genicot and Skaperdas, 2002). While few studies recognise that health system leaders and managers often delay conflict management because of the costs associated with it, high performing organisations identify the cost-effectiveness and long-term benefits of proactive conflict management. This section describes the resources available in Nigeria health system which have been or can be leveraged for managing IPGCs.

*Table 24: Theme overview for available resources for managing interprofessional group conflicts*

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication resources</td>
<td>7.3.1</td>
<td>Communication resources are necessary to facilitate interprofessional interactions and socialisation. Circulars and Memos were identified.</td>
</tr>
<tr>
<td>Financial resources</td>
<td>7.3.2</td>
<td>It is important to identify sources of funds for managing interprofessional conflicts including remuneration settlement. Budget and union dues were identified.</td>
</tr>
</tbody>
</table>
Human resource  7.3.3  Managing IPGCs requires human resource especially qualified and trained personnel. Professional association technical group is identified as an important human resource that can facilitate functional interprofessional conflict management.

Media  7.3.4  Professional association have used the media to propagate their individual professional interests. However, it serves as a resource that can be utilised for functional interprofessional group conflict management.

Official resources  7.3.5  These are government resources that have been or can be utilised for conflict management. The civil service rules, scheme of service, industrial court, and conciliation committee/arbitration panel are identified.

7.3.1  Communication resources

Conflict management requires adequate communication between the conflicting parties and the mediators. The sub-sections below describe the available resources being used to facilitate communication for managing IPGCs.

7.3.1.1  Circulars

One participant mentioned that circulars have always been a useful tool for communicating with all professionals on information relating to IPGCs.

“In a situation where such policies do not exist. Once an agreement is reached, this is translated into circulars or white papers that are released to various departments for the purpose of documentation…” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

Circular is an effective organisational communication tool that is used to communicate with staff (Kung'u, 2007). As indicated by this policymaker, circular is used to disseminate
information on outcomes of negotiation between the representatives of professional association and the management.

7.3.1.2 Memos

Memo is also described as one of the tools that have been used in managing IPGCs. Memo is used to convey instructions that will be implemented by policymakers.

“Once approval is given, this is done in form of Federal Executive Council (FEC) Memo. The department of health planning research and statistics present a memo of the honourable minister of health which is taken to the federal executive council for presentation. Once approval is given, you begin to implement the decision in the memo.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

Memo is more official compared to circular and it is used to write official reports and instructions that will be implemented.

7.3.2 Financial resource

7.3.2.1 Budget

Another tool that is important for managing IPGC in the health system is budget. When an agreement is reached that involves finance, the negotiated agreement requiring fund must reflect in the national budget for disbursement of funds to the professional group(s) involved.

“The budget office of the federation is also involved to ensure that budgetary provision is made in the national budget to fund such request if it has to do with money.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

The budget office is cited by this policymaker as one of the key offices for strategic implementation of negotiated agreements.
7.3.2.2 Union dues

To facilitate professional union/association governance and activities, dues are collected by the government on behalf of professional associations/unions which are remitted at intervals in line with Trade unions act 2004. Professional association/union dues constitute an important financial resource for managing IPGCs in the health system. Due to conflict of interests, professional associations/union cannot depend on the government for finances to run their associations/union activities such as administrative and legal costs.

“Once a trade union is registered and is recognised by law, we remit cheque of dues which are dues that are deducted from professionals’ salaries in line with the labours act and remitted into unions account and helps the unions run their own government.” - P.18 (Senior Policymaker/Conciliation officer/Likely to be neutral)

In the presidential committee report on interprofessional harmony, JOHESU argued that NMA is not a registered union but a professional association. Based on this point, JOHESU attribute NMA’s capacity to negotiate with the government as illegal.

7.3.3 Human resource

Human resources in required to manage IPGCs. The process of dialogue, conciliation, resolution, conflict management, industrial arbitration panel and industrial court are made possible by trained personnel.

7.3.3.1 Professional association technical group

Professional associations/unions are reported to have resourceful technical groups that strategise how their professions can be better positioned for opportunities in the health system including how they can develop good interprofessional relationships with other professional associations and their members. Professional association technical groups can be leveraged for managing IPGCs.
“…in Nigeria, many of these associations (professional associations) have technical groups that are supposed to ensure that interrelationships with other professions are good.” - P.9 (Senior Policymaker/Pharmacist/International NGO Partner/Likely to be neutral)

Commenting further on the usefulness of such technical group, the participant stated:

“…in the recent time during the COVID outbreak in Nigeria, we found medical doctors writing joint statements with the nurses, we found the pharmacy association partnering with the nurses and the medical doctors, writing joint statement and generally providing advisory to the public…” - P.9 (Senior Policymaker/Pharmacist/International NGO Partner)

“…and also providing suggestions to the federal government, to the ministries, as to how they feel the pandemic can be managed. That shows you that there is an existing structure for interprofessional relations.” - P.9 (Senior Policymaker/Pharmacist/International NGO Partner/ Likely to be neutral)

Few participants noted that the technical groups of professional associations have conducted research and written articles to advice the government on ways to manage the IPGCs. One participant noted that NMA has published several documents which were sent to the government for considerations.

“…NMA prepared a lot of black and white (documents) that has been presented to the ministry of health. The ratio of pay between doctors and nurses is part of the document presented with case studies from all over the world. We have those document in our confines.” - P.11 (Senior Policymaker/Doctor/Likely to support NMA)

The participant specifically mentioned a document written by NMA on remuneration relativity among different professional cadres in the health system. The document presented to the government understudied the pay ratio between doctors and nurses in other parts of the world
and can become a useful tool in remuneration review. However, conflict of interests is a confounding factor for such documents.

7.3.4 Media

Some policymakers believe the media is one of the most used resources deployed as a tool for discussing and debating IPGC issues especially by the professional association/union positions.

“...but I will tell you that the most used tool of dispute resolution or communicating our positions is the media. The social media, the tv stations and press. What we see in most times is each of the groups going to tv and discussing their positions to win the public to their side rather than sit together.” - P.9 (Senior Policymaker/Pharmacist/International NGO Partner)

“I think in a way, the media is also part of the problem. Because by the time you celebrate things like that and a man or woman who is taking deliveries for the past 30 years up to 1000 deliveries in a year and nobody is even celebrating them.” - P.3 (Senior Policymaker/Doctor/NGO Partner)

The professional associations/unions use the media to win over the public to their side of argument. They also use the media to pressure government for improved healthcare services and working conditions (Adeloye et al., 2017). In other studies, government is also reported to use media for restricting health workers from embarking on industrial actions (Adeloye et al., 2017).

7.3.5 Official resources

These are institutionalised resources in the health system that are provided by the government to guide the management of IPGCs.

7.3.5.1 Civil service rules

One participant noted that the civil service rules which are contained in the civil service handbook is a veritable tool that can be referenced in the management of IPGCs.
“...It is part of civil service rule generally. When you channel your complaint, first we expect that the head of the department should be able to handle issue that does not necessarily attract disciplinary committee for things that they need to investigate. But if it’s an issue of assault or stuff like that then it has to go through the human resource mechanism through the head of department who investigates the claims” - P.13 (Senior Policymaker/Scientific Officer/ Likely to support JOHESU)

The civil service rules are set of statutory terms and conditions of service which guides the conduct of all civil servants including healthcare workers. Violating the civil service rules can be subjected to disciplinary action such as suspension or termination of employment depending on the gravity of the offence. IPGCs do not fall within the purview of civil service rules but can be a veritable resource in reducing the incidence of misconducts that contributes to IPGCs.

7.3.5.2 Scheme of service

Contrary to submissions of several policymakers highlighted in the thematic analysis, scheme of service is an official document that describes the basic duties of all professional cadres in the civil service including the different healthcare professional cadres. It also contains promotion/career advancement path and qualification requirements for each level.

7.3.5.3 Industrial court

Some participants mentioned industrial court as one of the resource the government put in place to manage IPGCs.

“You know we have arbitration like when some of these crises being taken to industrial court of arbitration. So, I think it’s one of the steps the government has put in place to be able to arbitrate between these two bodies.” - P.12 (Senior Policymaker/Doctor/International Schedule Officer/ Likely to support NMA)
Industrial court has the power to arbitrate in conflicts situations between professional groups and between employees and government. The industrial court judgement is binding and final which means judgement cannot be appealed (Talabi, 2015) hence making it one of the most powerful organisations with respect to IPGCs.

7.3.5.4 Conciliation committee/arbitration panel

One participant posited that mediation committee chaired by honourable minister of health is a resource being set up to mediate in conflicts between NMA and JOHESU.

“...but I know that the resources that are available and being used is the Human Resources. That is having to set up mediation committee to involve members of both the NMA and JOHESU so that both of them will have a term of reference for what they need to discuss and come up with a way forward and next steps.” - P.9 (Senior Policymaker/Pharmacist/International NGO Partner/Likely to be neutral)

The mediation committee usually involves representatives of both NMA and JOHESU and they meet to discuss areas of conflicts and ways forward.

7.4 Protracted dysfunctional conflict (Intractable Conflict)

On why the conflicts have lingered for long, one policymaker noted that conflict as a part of human experience is an ongoing process.

“Depending on the peculiar issue that brought about that conflict and if that has been looked into and they continued working together, something may come up again, depending on the interests of the two groups, that may still bring about conflicts, so it’s not a one-off issue.” - P.18 (Senior Policymaker/Conciliation officer/Likely to be neutral)

As stated in chapter one, conflict in any organisation is an unavoidable by-product of human interaction. In the case of health system where interaction is more frequent, conflicts is even
more pronounced, complex, and dynamic. Issues that cause or contribute to IPGCs in Nigeria health system are varied with time hence difficult to resolve without a comprehensive management. Hence the conflict can be described as intractable. The implication of this is that conflict management system with a flexible approach is needed to address a diverse range of issues that predicate IPGCs.
CHAPTER EIGHT
RESULTS: POLICYMAKERS’ ANALYSIS

8.1 Introduction

This chapter is a result of policymakers’ analysis conducted to understand how Stakeholders are positioned in the health system. Their roles, power and interests relating to interprofessional group conflicts in the health system are highlighted. The Stakeholders in this study are Policymakers’ who are directly or indirectly affected by the situation of interprofessional group conflicts in the health system, have played an active role in how the conflicts are managed and/or can potentially contribute to how interprofessional group conflicts can be managed in the health system. In this stakeholder analysis, organisations are mapped differently from individual offices to understand general and specific roles of policymakers on the management of IPGCs.

8.2 Organisation

8.2.1 The Presidency

The Presidency consist of the office of the President who is the commander in chief of the armed forces and political head of the country. There is also the office of the Vice President and all the relevant government agencies/parastatals that work directly with the President including the office of the Secretary to the Federal Government (SGF), National Salaries Income and Wages Commission (NSIWC) and National Orientation Agency.

The office of the president is constitutionally the most powerful and most interested party in any case or situation affecting the health and wellbeing of every citizen in the country including the prevention of IPGC. The president has the constitutional powers to appoint the Minister of Health, the permanent secretary, and Executive Directors of MDAs under the Ministry of Health or other ministries that work to promote the health of every citizen in the federation. The president also determines what resources are allocated to the health system amidst other national priorities. The SGF office serves as the secretariat, advisory and liaison office on all
matters including IPGC. Also, NSIWC is responsible for determining the remuneration of all public servants including salary inspection, pay review and job evaluation while NOA is saddled with the responsibility of orientation, (or reorientation) and advocacy.

8.2.2 The National Council on Health

The National Council on Health is the highest decision-making body in the health system and members consists of the minister of health (Chairman of NCH), Commissioners of Health in the 36 states and the Secretary of Health and Human Services in the FCT, delegates from MDAs of federal and state ministries including health and human services secretariat of FCT, development partners and CSO, delegates from the federal ministry of science and technology, delegates from health regulatory bodies and professional associations as well as MDs/CMDs of federal tertiary institutions.

Recently, state council on health has been proposed which will be the highest decision-making body in matters relating to health in the states. This is to promote participation at all levels and facilitate common goal on implementation of national health plans. The NCH is convened about twice in a year and sometimes emergency meetings are held as the need arises (NHA, 2014a)

Article 5 of the NHA highlight the roles of NCH and those related to the management of IPGCs in the health system can be found in subsection (a) and (b):

“...the protection, promotion, improvement and maintenance of the health of the citizens of Nigeria, and the formulation of policies and prescription of measures necessary for achieving the responsibilities specified under this paragraph” NHA 2014 5a Page 4.

This implies that the NCH, chaired by the Minister of Health, has the responsibility to, among other duties, formulate policies and strategies for managing interprofessional conflicts in the health system.

“...offer advice to the Government of the Federation, through the Minister, on matters relating to the development of national guidelines on health and the
implementation and administration of the National Health Policy” NHA 2014

5b Page 4.

This article recognises the NHC as the highest advisory body to the Government on matters relating to the implementation and administration of the National Health Policy including how the human resource for health is managed and administered in the health system.

“...identify health goals and priorities for the nation as a whole and monitor the progress of their implementation” NHA 2014 5f Page 4

The NCH also has the responsibility to develop goals and priorities for the health system and monitor the implementation of such goals and priorities including the management of interprofessional teamworking and how interprofessional conflicts are managed in the health system.

8.2.3 The Federal Ministry of Health

According to the National Health Act 2014, the functions of the Federal Ministry of Health that is relevant to interprofessional teamworking include to:

1. Develop National Health Policy and blueprints for the implementation of the policy.
2. Coordinate the implementation of National Health policy by communicating and collaborating with states and local government health structures.
3. Collaborate with other countries’ health department and international agencies on health matters.
5. Ensure the collection and analysis of data for monitoring and evaluation of health indices and performance of the health system.
6. Collaborate with other sectors and ministries to promote health.
7. Conduct and facilitate health system research for planning, evaluation, and management of health services.
8. Determine resource allocation based on data-driven decisions.
Also, the article 2 of the Act highlighted that FMOH shall develop strategic, medium-term health and human resource plans to facilitate the delivery of its constitutional roles (sub-section a) and ensure such plans align with the provisions of National Health Policy (sub-section c). FMOH as the organisation coordinating all health activities in the country is vested with power, influence, and responsibility to ensure the optimal performance of the health system within limited resources available and it is the interest of the ministry to avoid dysfunctional interprofessional conflicts that can deter its ability to deliver on its key objectives.

The FMOH, through the department of Health Planning, Research, and Statistics (HPSR), particularly division of health system strengthening and human resource for health unit is saddled with the responsibility of coordinating the formulation of policies, guidelines, and strategies for adequate supply of the right quality, quantity and mix of human resource for health as well as ensuring their training, welfare, retention, remuneration and productivity for optimal performance of the health system. Strategies and policies relating to interprofessional teamworking in the country are to be coordinated by this division in collaboration with the division of policy and planning both within HPSR department. Altogether, the HPSR department at the federal ministry of health is accountable for initiating evidenced-based policies and management strategies as well as coordinate other stakeholders toward resolving IPGCs in the health system as part of its duty to ensure the proper functioning of the health system.

8.2.4 Professional regulatory councils

The professional regulatory councils are independent agencies of the federal government under the supervision of the FMOH, established either by decree or parliamentary/legislative act. Some of the main objectives is to regulate the professional standards and practice of their respective professions as well as create a register of professionals practicing in their respective fields. There are 14 regulatory councils in Nigeria, each headed by a Registrar and established by different legislative Acts. There is usually a strong relationship between the professional regulatory councils and their respective professional associations. Such influence often enhances or hinders the ability of professional regulatory councils to perform their duties. For
instance, MDCN and NMA has a 70-30 sharing arrangement for professional practicing licence fee according to section 14(WHO) of the Dental and Medical practitioner Act. This implies the professional regulatory councils are not fully autonomous. Also, many previous registrars of the regulatory councils needed the nomination and endorsement of their professional association to be appointed.

8.2.5 Professional unions/associations

Professional unions/associations are pressure groups, employee representatives or labour unions organised to protect the professions and the interests/welfare of their members. Their interests often conflict with one another and with the interests of the ministry of health hence, they are perceived as the main driver of IPGCs in the health system. One participant noted that both NMA and JOHESU holds the key to the cause and the solution of the interprofessional conflicts.

“Of course, they are the mouthpiece of both ends (NMA and JOHESU). I will call them the ones leading the rebellious groups against each other. They are the origin of it. They might also be the end of it anyways, who knows but they are the origin of it.” - P.14 (Senior Policymaker/Pharmacist/Likely to support JOHESU)

Another participant noted that the welfare of their members is the primary concerns or interests of the professional associations/ unions.

“We are primarily to make sure that the welfare of our colleagues is well taken care of. That our welfare is at the front burner. which is also what JOHESU do, so we are more or less at par with them. They struggle for their people; we struggle for our people.” - P.6 (Senior Policymaker/Doctor/NMA Executive)
Essentially, professional association/unions are organised primarily to protect the interests of their members even when it contradicts individual values and professional ethos as contained in their respective hypocritic oaths. Whereas the hypocritic oaths emphasis that the interests of patients will be prioritised during their practice. One can infer that the activities of professional councils are not as impacting on interprofessional relationship as professional associations/unions whose main agenda is to protect the interests of their members.

Describing their role as a professional association, another participant stated that they promote their standard of practice as well as recognition and reward of their profession.

“...my job is essentially to see that the professional standards of the practice of my profession are sustained and indeed develop educational standards and also that the place of my profession in the health care team is better understood and better recognised and rewarded.” - P.8 (Senior policymaker/private practitioner/pharmacist/Likely to support JOHESU)

The professional associations do not only attempt to protect the status of their professions but also appear to vilify the status of other professions.

“I believe strongly that they (NMA and JOHESU) also offer that...protection to their members...I think both are culpable bodies. They are culpable because they always not only promote the interests of their own members but run down the other professions which always ends up in making disputes linger”
- P.9 (Senior Policymaker/Pharmacist/NGO Partner)

The perception of this policymakers about the roles of professional association may be based on the experience of IPGCs in the health system especially the tendencies of professional associations/unions to lobby the society by creating narratives of how they are being victimised by other professions.
To protect their acclaimed rights, professional unions/associations often embark on industrial actions (Oleribe et al., 2016). However, according to the NHA 2014, Section 45 (WHO), public health services are classified as essential services which means professional groups are prohibited from embarking on industrial action (page 20). It is concerning that professional associations/unions are still able to embark on strikes despite a law prohibiting such.

8.2.6 The National Assembly

The constitution of the Federal Republic of Nigeria recognises the National assembly as one of the 3 arms of government vested with legislative and oversight power of public institutions including the health system. In its oversight duty, the national assembly may ask questions on conflict management in the health system with a view to render legislative assistance to the Minister of Health through the instrumentality of its committees on health. The national assembly also has the power to legislate for the establishment of professional regulatory councils, unions, professional associations/unions.

“The National Assembly shall have power to make laws for the peace, order and good government of the Federation or any part thereof with respect to any matter included in the Exclusive Legislative List set out in Part I of the Second Schedule to this Constitution”. - Nigeria Constitution Part II (page 6)

Number 49 of the second schedule of the constitution also highlighted professional occupation as part of the exclusive legislative list on which the national assembly has jurisdiction. Currently, the legislative acts that provide legal frameworks for the establishment of professional regulatory councils and associations are fragmented thereby giving rooms for IPGCs. Although some of the acts are dated back to the military era where laws are made by decrees, there is a need for an umbrella law to regulate all the regulatory councils, identify areas of conflicts and encourage interprofessional teamwork.
8.2.7 The National Industrial Court

The National Industrial Court is an interventionist superior court of record established initially by Trade Disputes Decree No 7 of 1976. Being a superior court of record implies that decisions of IC in industrial or trade relations dispute is binding and final on all parties (Talabi, 2015). NIC is headed by the President and other judges who are qualified to adjudicate on industrial disputes without fear or favour knowing their decisions are unappealable (Ekanem and Daniel, 2017). Although some scholars have written extensively about the absoluteness of industrial court powers, there has however never been any concerns with regards the fairness of judgements received from the court so far.

8.3 Individuals offices

8.3.1 The President

The president has the political power to nominate and appoint all the ministers in his cabinet including the minister of health. Such appointment is usually based on his/her discretion, political advice, and networks. Without prejudice to the qualification, experience or technical skill of the individual, the president has the prerogative to nominate who he/she deem capable of leading the health system. Sometimes, political appointments are determined by elite politicians (or godfathers) in the president’s political party (Adeoye, 2009, Abdullahi and Sakariyau, 2013). However, president’s nomination is constitutionally subjected to verification exercise by the legislative government for confirmation of the ministerial candidate. Unless a new president is aware of the best practice in appointing a Minister of Health or the sensitive nature of the Nigerian health system, there is no legal restrictions to the president’s choice of Health Minister.

8.3.2 The Federal Minister of Health

The Minister of Health is a political office appointed by the President and confirmed by the parliament after rigorous verification processes. He/She heads the Federal Ministry of Health
and is statutorily saddled with the responsibility of ensuring the national health system delivers on its key mandate which according to article NHA 2014 (C) is to “provide for persons living in Nigeria, the best possible health services within the limits of available resources.” (Page 1).

The Act also highlighted the importance of Interprofessional Teamworking in the health system with article B of the Act which states that the health minister should “promote a spirit of cooperation and shared responsibility among all providers of health services in the Federation and any part thereof”. This implies that one of the primary duties of the minister is to ensure that all healthcare professionals work as a team towards achieving the health system goals.

Subsequent sections and sub-sections of the NHA empower the health minister to treat industrial disputes in the health system seriously (Section 45 sub-section 2) and ensure return to normalcy caused by dysfunctional disputes within 14 days (Section 45, sub-section 3).

The provision of this Act implies that the Minister of Health would be legally empowered and resourcefully equipped to respond to dysfunctional conflicts. For instance, he/she has the legislative power under the NHA to convey and chair the NCH which is the highest decision-making body in the health system. The performance of the health system will depend on his/her ability to manage available resources and relationships effectively. Also, Article B of the NHA underscores the recognition and priority given to relationship management as foundational to health.

Hence, the Minister of Health has more responsibility and influence than any other policymakers in the health system. The overall responsibility of ensuring the health system function in such a way as to deliver optimum public health services at all levels rests on the Minister of Health. The NHA empowers the Minister of health with legislative authority to decide how resources are prioritised and distributed in the health system.

8.3.3 The Federal Minister of Labour and Employment

The minister of labour and employment, like the minister of health, is a political appointee of the President whose responsibility is to ensure that Nigeria’s economic workforce in all sectors is productive and deliver the economic targets of the country.
One participant noted that complex IPGC at macro level usually involves the contributions of the Minister of Labour and Employment who together with the Minister of Health mediate in IPGCs by meeting with the conflicting interprofessional groups.

“...such issues will have to involve the minister of labour who is in charge of all public servants in the county. The responsibility of the ministry of health is to take up the cases/conflicts and present them to the ministry of labour/minister of labour who also liaises with his colleague, the minister of health and together with the cadres involved, they try to negotiate/talk.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

Another participant noted that the Ministry of Labour and Employment became necessary due to the frequent occurrence of IPGCs in the health system and other industrial sectors.

“We have the ministry of labour and productivity who would usually act like an intermediary to appease the two bodies. Because of the frequency that we have seen over time, it has now become necessary to have a whole ministry in charge of such conflicts among professionals not only in health but also other unions” - (P.12 Senior Policymaker/Doctor/International Schedule Officer)

Table 25: Policymakers’ Analysis Matrix illustrating the key roles, interests/powers, and contributions of Policymakers

<table>
<thead>
<tr>
<th>Policymaker</th>
<th>Key roles relating to IPGC</th>
<th>Interests</th>
<th>Power</th>
<th>Prospective contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>President of the Federal Republic of Nigeria</td>
<td>The first role is to prioritise health by allocating more resources to the health</td>
<td>High</td>
<td>High</td>
<td>The President’s interest is to ensure the</td>
</tr>
</tbody>
</table>
system for improving staff training and remuneration. The President also has the power to provide resources and hold the Ministers accountable for how the resources are being expended.

<table>
<thead>
<tr>
<th><strong>Minister of Health and Minister of State for Health</strong></th>
<th><strong>High</strong></th>
<th><strong>High</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>With advice from the Permanent Secretary, Directors and Scientific Experts, the Minister has the capacity to advice the President on resources needed to manage the health system including IPGC, prioritise and deploy such resources, coordinate negotiations that leads to order and harmony in the health system and foster interprofessional teamworking.</td>
<td><strong>Demonstrate leadership in discharging his/her duties, the Minister should not be perceived to be biased especially if he/she belongs to any of the conflicting professional groups. Adequate communication and involvement of all stakeholders is important. Coordinate and deploy resources for managing IPGCs.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Minister of Labour and Employment</strong></td>
<td>In collaborations with the minister of health, He/she mediate in IPGCs and ensure returns to normalcy. Although not stated in the NHA, the Minister of Labour and Employment plays a crucial role in managing IPGC in the health system.</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>NCH technical working committee</strong></td>
<td>Advises the NCH on how to manage IPGC. Develops policies and guidelines for managing IPGCs as contained in NCH resolutions. Formulate policies and management strategies for IPGCs on behalf of NHC to advice FMOH.</td>
<td>High</td>
</tr>
<tr>
<td><strong>Registrars of professional regulatory councils</strong></td>
<td>They coordinate and maintain the register of all health care professionals within their council. Coordinate the standard and</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Presidents of professional unions/associations</strong></td>
<td>regulation of professional education, trainings, and practice.</td>
<td>registration by collaborating with other councils and MDAs.</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Private health care providers</strong></td>
<td>IPGCs is not usually pronounced in private hospitals but they are also affected by national policies. For instance, cracking down on quackery, ensuring compliance with trainings and promoting interprofessional teamworking</td>
<td>Identify unique IPGCs issues and communicate with Ministry of Health. Ensure compliance with guidelines, policies, and procedures. Create a working environment that discourage IPGCs.</td>
</tr>
<tr>
<td>Committee on Health</td>
<td>Functions on the performance of the health system and other related matters. Legislate on establishment of professional bodies and other key health system issues.</td>
<td>Ministry of Health to identify solutions to IPGCs and provide legislative support where required. Advise the Executive President on the nature of appointees to lead the health system in the best interests of the health system.</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Industrial Court judges</strong></td>
<td>Adjudicate on industrial relations conflicts</td>
<td>Low High Maintain unbiased judgement.</td>
</tr>
<tr>
<td><strong>Chairman, NSIWC</strong></td>
<td>Carry out annual reviews of salaries and wages of public servants. Carry out job evaluation and make recommendations to the President.</td>
<td>Low Medium Carry out a transparent job evaluation and salary review including considerations of a combined salary scale. Engage stakeholders in job evaluation and salary review.</td>
</tr>
</tbody>
</table>
The above policymakers’ analysis matrix shows the roles, powers/influence, and prospective contributions of Policymakers in the health system. The Federal Minister of Health has huge a responsibility in coordination other stakeholders, including the President, for the management of IPGCs. It is important to adopt a system thinking approach to managing IPGCs which may require that IPGCs is inclusive of all stakeholders in the health system (not just policymakers) and that IPGCs is integrated with a larger interprofessional teamwork framework. Understanding the havoc dysfunctional IPGCs has already caused in the health system, and how it has limited progress towards achieving health related sustainable development goals can be a motivation for prioritising and committing efforts at functional management. Although not...
exhaustive, the policymakers’ analysis matrix can help accountability process for ensuring that policymakers deliver their assignment within the conflict management committee.
CHAPTER NINE

RESULTS: APPROACHES FOR MANAGING INTERPROFESSIONAL GROUP CONFLICTS

9.1 Introduction

This chapter is the result of analysis on policymakers’ ideas for functional management of Interprofessional Group Conflicts (IPGCs) in the Nigerian health system. Most participants took the causes they identified as entry point to suggesting or recommending ideas for managing IPGCs in the health system.

Table 26: Overview of themes for management approach

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Section</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity in appointment to leadership and management positions</td>
<td>9.2.1</td>
<td>Recommendations on which profession should occupy leadership and management positions in the health system is disputed between health workers affiliated with NMA and JOHESU. Perceptions of bias in hybrid management structure triggers agitations by JOHESU health workers to either lead or allow management experts to lead the health system.</td>
</tr>
<tr>
<td>Payment of living wage and equitable remuneration</td>
<td>9.2.2</td>
<td>Paying health workers, a living wage that is sufficient to meet their basic needs as well as ensuring equity in remuneration is recommended.</td>
</tr>
<tr>
<td>Institutionalising Interprofessional education and training</td>
<td>9.2.3</td>
<td>The Policymakers recommend institutionalising interprofessional education and training to functionally manage IPGCs in the health system.</td>
</tr>
<tr>
<td>Complete structural and financial reform</td>
<td>9.2.4</td>
<td>The Policymakers recommend a complete reformed due to intractable interprofessional conflicts and other health system challenges.</td>
</tr>
<tr>
<td>Regulating professionalisation</td>
<td>9.2.5</td>
<td>The Policymakers also recommend regulating professionalisation such as by merging the 14 professional regulatory bodies.</td>
</tr>
<tr>
<td>Conduct transparent job evaluation and salary review</td>
<td>9.2.6</td>
<td>To achieve remuneration parity and eliminate perception of salary injustice, policymakers recommend job evaluation and salary review.</td>
</tr>
<tr>
<td>Establishing conflict management office</td>
<td>9.2.7</td>
<td>Policymakers recommend a dedicated conflict management office that will take complaints and address them before they become aggravated into conflicts.</td>
</tr>
<tr>
<td>Engaging in social dialogue</td>
<td>9.2.8</td>
<td>Policymakers emphasis engaging in open and continuous social dialogue as a strategy to manage the IPGCs.</td>
</tr>
<tr>
<td>Promoting proactive leadership</td>
<td>9.2.9</td>
<td>Political will and sincerity on the part of government based on the understanding that performance of the health system is determined by the quality of leaders in charge.</td>
</tr>
<tr>
<td>Clarifying term and conditions of service</td>
<td>9.2.10</td>
<td>A clearly spelt out terms and conditions of service</td>
</tr>
<tr>
<td>Promoting common goal</td>
<td>9.2.11</td>
<td>Putting patients at centre of the health system decisions and making this a common goal by all stakeholders.</td>
</tr>
<tr>
<td>Exploring global best practices</td>
<td>9.2.12</td>
<td>Understudying and learning from how successful health system manage IPGCs.</td>
</tr>
<tr>
<td>Conducting orientation and reorientation</td>
<td>9.2.13</td>
<td>Creating awareness on the importance of interprofessional teamworking through conferences and seminars.</td>
</tr>
<tr>
<td>Promoting respect and recognition</td>
<td>9.2.14</td>
<td>Valuing and rewarding the contributions of all professional groups.</td>
</tr>
</tbody>
</table>

### 9.2 Approaches for managing interprofessional group conflicts

Health system governance consists of leaders and managers at micro level (Head of Hospital Departments), meso level (Chief Medical Directors or Chief Medical Advisory Councils of tertiary hospitals) and macro level (Minister of Health) (Figueroa et al., 2019, Caldwell and Mays, 2012). Although several scholars have narrated the differences between leadership and management in literature, the two terms are integrated in a classical definition which states that “leadership is quality that sets great managers apart from good ones” (Azad et al., 2017).
This definition implies that governance requires both leadership and management/administrative skills hence, the two terms are used synonymously in this thesis.

9.2.1 Equity in appointment to leadership and management positions

As highlighted in chapter four, there are differing opinions and perceptions among the policymakers regarding appointments into leadership positions. Presently, medical doctors who are members of NMA occupy most leadership positions. Other health workers affiliated to JOHESU have risen to contest this arrangement leading to dominance-countervailing interprofessional struggles. Also, perceptions of bias in management decisions increased JOHESU’s aspirations to occupy management positions or perhaps compel government to reserve the positions to management experts.

To manage IPGCs due to unbalanced opportunities for management positions, three sub-themes are developed. First, there are views that management positions are reserved exclusively to doctors as it has been the tradition in the health system for many decades. These views are projected by policymakers associated with NMA. A policymaker speaking on the position of CMD and CMAC noted:

“Chief Medical Director must always be a medical doctor because that’s what that position is about.” - P.6 (Senior Policymaker/Doctor/NMA Executive)

In this statement, the policymaker believes the “medical” in CMD connotes that medical doctor are the sole occupant of the position and the position cannot be held by other professional cadres in the health system.

Similarly, another participant noted that doctors have extensive knowledge in almost every area of patient management which position them for management role.

“...doctors have vast knowledge about different departments when it comes to health, so it gives them understanding compared to other health professions who don't get intensive training like the way doctors do” - P.2 (Senior Policymaker/Doctor/Programme Officer/Likely to support NMA)
Doctors’ education and trainings are believed to be rigorous, hence they more prepared to understand and manage every area of the health system.

Another view is that such positions are made open to any professional irrespective of their cadres or affiliation, and that making the positions competitive for the right candidate to emerge will promote peace in the health system. Commenting on programme lead position, one participant recommends:

“...management has nothing to do with clinical science or any science. Management is an ability to have a blueprint, set a goal and move human resources as well as create a conducive environment to achieve those goal.” - P13. (Senior Policymaker/Scientific officer)

“...we should be able to compete well for the role without any discipline saying this is my domain and I’m more competent here than any other discipline.” - P. 13 (Policymaker/Scientific officer)

As suggested by this policymaker, management role has nothing to do with profession and creating a competitive environment rather than reserving the role to a doctor will help to check dysfunctional IPGCs in the health system.

Another sub-theme is that management positions are reserved exclusively to seasoned managers who have management or administrative trainings. Policymakers in support of this perceive that government will be able to eliminate bias in decision making by nominating a professional administrator who has no affiliations to any professional association/union.

“I think a neutral person that is not in health profession should be nominated and placed in that position of authority so that whatever decision is made, they won’t say he is biased.” - P.17 (Junior Policymaker/Physiotherapist/Likely to support JOHESU)

By selecting a neutral administrator, this policymaker believes perceptions of bias among healthcare professionals can be curtailed. Consequently, IPGCs will be managed.
Another policymaker commented on the position of Health Ministers.

“I don’t really think medical doctors should be Ministers of Health. There are people who studied health economics, budget, health administration, things like that. These people are better positioned to plan the health system.” - P.20 (Senior Policymaker/Scientific Officer/Likely to support JOHESU)

This policymaker believes managing IPGCs would entail nominating health managers and administrators, who are well trained in health system planning, to minister of health role in place of medical doctors.

Lastly, some policymakers believe creating a balance with a mix of different professionals in management positions would better help to manage IPGCs in the health system.

“...for example, if the chief medical director of the hospital is a doctor you can have an assistant or the deputy who can be from other professions. That will also help.” - P.2 (Senior Policymaker/Doctor/Programme Officer/Likely to support NMA)

This policymaker is of the view that sharing the head and deputy positions among the different professional cadres would help to reduce IPGCs. For instance, appointing the Minister of Health with background in medicine/affiliated with NMA can be complemented with a Minister of State for Health appointed from the JOHESU extraction.

9.2.2 Payment of living wage and equitable remuneration

Some participants believe the wages earned by health care professionals are not sufficient to meet their basic needs, hence, the rivalry. To manage the IPGCs, they suggest that government pay a living wage which is a wage sufficient for individual health workers to meet their basis needs.
“...government should pay a living wage that can address their basic needs. Doctors feel after spending years in the medical school, you cannot still attend to basic needs. Same way a pharmacists feel. Same way nurses feel. Same way everyone in the sector feel.” - – P.5 (Senior policymaker/Monitoring and Evaluation Officer/Medical Laboratory Scientist/Likely to support JOHESU)

In agreement with Maslow’s theory of needs and the corresponding theories of basic need explained in chapter two, a threat to individuals’ basic need is predicted to elicit conflicts.

Another participant noted that health workers put in more hours to their work than most other professions due to the nature of their work hence deserve to be paid well.

Government should increase the remuneration of health workers. If you look at the health workers perhaps, they are the only group that put in a lot of time. There are so many holidays for other workers, but doctors don’t go on holidays, nurses don’t just go on holidays. If you are on duty, you just have to come. Odd hours, working late into the night and all that. A surgeon cannot say my work stopped at 7 while he is still operating on the patient. He has to finish the operation and make sure the patient is stable before you can go home. Even though his work stops 5 hours ago. - P.11 (Senior Policymaker/Doctor/Likely to support NMA)

Like military and paramilitary professions such as the army, police, civil defence and fire safety department, healthcare professionals are required to put in considerable amount of time to their work. Their job demands that they work during holidays, difficult and out-of-office hours. Due to inconveniences and risks, policymakers believe increasing the remuneration of healthcare professionals to meet their basic needs would help to effectively manage IPGCs.

9.2.3 Institutionalising interprofessional education and training
As highlighted in chapter 4, lack of organisational support for interprofessional training was reported by policymakers as one of the major causes of IPGCs. Policymakers believe IPGCs can be managed effectively through interprofessional education at undergraduate level.

“We need to allow health professionals in training such as medical students, pharmacy students, nursing students, medical lab science students etc. to interact while in training.” - P3. (Senior Policymaker/Doctor/NGO Partner)

“Going beyond just asking them to interact, we need to design the curriculum in such a way that it creates an opportunity for them to respect each other understanding that one profession cannot do the work of other professions.”
- P3. (Senior Policymaker/Doctor/NGO Partner)

Another suggestion for managing IPGCs as highlighted in the policymaker’s statement include creating an environment that fosters interprofessional interactions among different health care professional cadres in training. Similarly, healthcare professionals should go through trainings in managing interprofessional conflicts as part of the requirements for practice registration.

“Maybe different professions should take courses on dealing with interprofessional rivalry as a prerequisite for registration after graduation.” - P.5 (Senior policymaker/Monitoring and Evaluation Officer/Medical Laboratory Scientist/Likely to support JOHESU

Presently, there are no courses on interprofessional training and a course on interprofessional training is not a requirement to obtaining a degree in any health discipline or for obtaining a licence to practice in any profession.

9.2.4 Complete structural and financial reform

Some health workers believe that a complete and holistic reform of the health system especially one that includes a significant degree of privatisation will help to resolve the IPGCs in the health system.

“Just like telecommunications industry, the entire health structure should be privatised. Give it to a non-governmental organisation. People that are ready
to do the business of health. They will structure a proper organogram, wages and salaries and roles.” - P.4 (Senior Policymaker/Doctor/Health Administrator/Likely to support NMA)

The Nigerian telecommunications industry experienced a remarkable transformation with improved service efficiency after a major government reform which attracted investments from the private sector. Since private investors are motivated by profit, they leveraged innovation to establish efficient and productive service delivery in the industry. The idea of managing IPGCs highlighted by the policymaker above is inclined towards such example. However, the profit-making motives of private organisations require ethical balance as health is a social good. Privatisation can be designed to maintain health equity such as in UK National Health Service.

Another reform suggested by some policymakers is that government should increase budget spending on health. One policymaker noted that present investment in health falls short of the global standards.

“Government should invest more in health. The resources budgeted for health is not enough compared to global standards.” - P.14 (Senior Policymaker/Pharmacist/ Likely to support JOHESU)

The World Health Organisation (WHO) prescribe that countries spend at least 8% of their GDP on health. Whereas Nigeria is spending 3.9% of GDP on health (FMOH, 2018). More investment in health would improve condition of service for healthcare workers and help to manage IPGCs in the health system.

Another reform consideration is that government strictly abide by the rule that no politician or public office holder should travel abroad for medical treatments.

Let our politicians know what they are doing. I could remember when they said no opportunity will be granted to political office holders for international treatments. - P.19 (Senior Policymaker/Private sector/ Likely to be neutral)
This policymaker believes that preventing politicians from traveling overseas for medical treatment would encourage them to find a lasting solution to IPGCs and other major challenges confronting the health system.

One policymaker also suggested the elimination of doctor’s dual practice, which is contributing to corruption, poor performance of the public hospitals and IPGCs.

“Doctors are quick to go on strike because it benefits them if they have a private practice. I think government should make sure anyone that wants to work with the government are not in the private practice.” - P.20 (policymaker/Scientific officer/Likely to support JOHESU)

“If they threaten the government that they want to down tool, the private practitioners can take care of the health of the citizens.” - (P.20 Policymaker/Scientific Officer/Likely to be neutral)

Some doctors work with the government in public hospitals but also have their own private hospitals. This policymaker believes such practice is a threat to the government and other healthcare workers in the health system as it gives doctors more power to embark on strike. Limiting healthcare professional’s powers to threaten industrial strike may encourage more dialogue and alternative conflict resolution as suggested by the policymaker.

9.2.5 Regulating professionalisation

Taking an entry from the theme “unregulated professionalisation” in chapter four, one participant suggested that government’s intervention is needed in regulating professionalisation in the health system. Specifically, the policymaker is of the opinion that merging the 14 regulatory bodies into one would mean single representation of all professional bodies and all professionals.

“…merge the 14 regulatory bodies together into one professional regulatory body. Let the pharmacist, nurses, doctors etc take their own departments so
there will be 14 departments of the interprofessional regulatory body.” - P.5
(Senior Policymaker/Medical Laboratory Scientist)

“Someone from one profession heads for two years. After two years, another profession takes over as the head. These issues will die a natural death because each person is being represented.” - P.5 (Senior policymaker/Monitoring and Evaluation Officer/Medical Laboratory Scientist/Likely to support JOHESU)

Regulatory councils conduct the registrations and licence of healthcare professions. To ensure accountability in the licences and practice registration process and ensure quality healthcare services, this policymaker suggested the need to coordinate the activities of the regulatory councils. Interprofessional rivalry is often caused by opposing interests of professional bodies (councils and associations/unions) and proliferation of regulatory councils would mean more divergent interests while merging would mean more convergent interests.

Another policymaker suggests a similar approach that government should either dismantle JOHESU back to their individual unions/associations or merge NMA with JOHESU to have a single healthcare professional union.

“I also think that JOHESU should be dismantled so that every group stands on their own or the doctors even join the union. If doctors can join the union maybe, we will be able to neutralise the whole problem.” - P.6 (Senior Policymaker/Doctor/NMA Executive)

As introduced in chapter one, JOHESU is an amalgamation of other healthcare professional associations/unions in the health system apart from doctors. They formed a merger to gain more power against NMA’s dominance of the health system so a merger of JOHESU and NMA would only be possible on the condition that certain agreements are reached.

“...but then the doctors are not ready to join the union because the union was formed to attack doctors.” - P.6 (Senior Policymaker/Doctor/NMA Executive)
This statement underscores the lack of trust and unity between NMA and JOHESU. NMA is reluctant to join JHESU because of the perceived hostility by JOHESU.

9.2.6. Conducting transparent job evaluation and salary review

One of the most reported causes of IPGCs as highlighted in chapter four is conflicts on remuneration. Policymakers suggest job evaluation and salary review as means of achieving remuneration parity. Some policymakers suggested a comprehensive review of salary which considers all healthcare professionals.

“If you want to increase allowance, increase for everybody, and don’t say because you are doctor, you must be on different salary scale. We are all health workers, and everybody is important.” – P.17 (Junior Policymaker/Physiotherapist/Likely to support JOHESU)

Previously, remuneration reviews have been carried out in fragments (Sani et al., 2019). This practice creates animosity and resentment among the rival health professional associations and unions. Having a comprehensive salary review will communicate fairness and recognition to all healthcare professionals.

However, few policymakers noted that remuneration relativity (the differences in remuneration) is as important as parity (equity and fairness). Policymakers with this view believe that a gap in remuneration must constantly be observed between doctors and other health workers based on their relative level of training, number of working hours and level of direct responsibility to patients.

“In fairness, nurses cannot claim same salaries with doctors likewise a community health officer should not claim the same salary with nurses. So, everything is in categories.” - P.15 (Senior Policymaker/Health Administrator/Likely to be neutral)

Although they work in the same health system, there are differences in the levels of training, risks and responsibilities which categorise their remuneration as suggested by this policymaker.
Doctors all over the world are known to earn more than other healthcare professionals due to their work demands.

On job evaluation, one policymaker recommends a job evaluation software developed by WHO which can help to determine number of working hours.

“I know at a point, WHO developed a software (not sure of the name) that helps to calculate the efforts health workers put into their work so if we are able to use such instrument to gauge their work, that should be matched with their remuneration.” - P.12 (Senior Policymaker/Doctor/International Schedule Officer/ Likely to support NMA)

The use of technology to gauge health workers’ contributions and determine their remuneration would improve accountability in the health system. Such technology would give a transparent method of determining remuneration that can be trusted and accepted by all.

Other policymakers however draw attention to the often-neglected level of risks associated with different professions and demand for a more equitable job evaluation that considers more than level of training or number of working hours.

“When we talk about pay parity somebody was saying I see 1000 patients in the day and that is the essence of receiving more pay. You might see 1000 patients but how much of a risk are you exposed to when you see these 1000 patients?” - P.7 (Senior Policymaker/Pharmacist/International Partner/Likely to be neutral)

“My position which I argue anywhere is that we are not looking for equality but what we are looking for is equity. Which means you look at my job content, investment, and risk against your own, and it has to be done by an uninterested party.” - P.8 (Senior Policymaker/Pharmacist/JOHESU Executive)

Although doctors have higher level of training and work longer hours than most other healthcare professionals, risks of infections are higher in junior health workers such as cleaners and nurses, hence an equitable job evaluation and salary review process must consider their
level of risk to determine relativity. Beyond this, one policymaker noted that every profession or occupation in the health system is important and a remuneration package that reflect this reality must be organised.

“If the theatre is dirty, nobody will do surgery there. Even after the surgery, the doctor cannot keep taking care of the patients. It’s the nurses that will continue with it so they should know that everybody is important.” - P.17 (Junior Policymaker/Physiotherapist/Likely to support JOHESU)

Another participant observed that Covid-19 global pandemic has magnified the realities in the hospitals with some junior health workers having higher exposure to deadly infections than their seniors.

“This COVID has exposed everybody and show that first line responders who are in the field such as cleaners and ward attendants who clean the place and make it aseptic play a lot of roles. So, we shouldn’t undervalue anybody.” - P.8 (Senior policymaker/private practitioner/pharmacist/Likely to support JOHESU)

Doctors, nurses, medical laboratory scientists, healthcare assistants and health record officers are exposed to almost the same level of infections due to covid-19 as doctors. Hence, a salary structure that reflect the valuable contributions made by all professional cadres will help in managing IPGCs in the health system.

9.2.7 Establishing conflict management office

Some participants recommend a conflict management office that involves all stakeholders and give an avenue for all health workers to register their grievances with confidence that such grievances will be addressed.

“...we should have some people whose schedule it would be to manage some of these conflicts. What stops such groups or desk officers from having courses on conflict resolution and having a tour study of how things work in
While there are civil service rules for reporting conflicts especially at the micro level of the health system, there is no office dedicated to either managing the interprofessional relationship dynamics among healthcare professionals or specifically, IPGCs. As indicated in chapter five, policymakers use reactive and uncoordinated approach to manage IPGCs on case-by-case basis, having a conflict management office as suggested by this policymaker will engender effective and efficient management of IPGCs in the health system. Administrators in charge of such conflict management office would require adequate training and exposure to international best practices to do their job well.

Furthermore, another participant suggested a clearly documented guidelines for managing IPGCs and the importance of involving all the relevant stakeholders in the management process.

"Another way is in the course of your work, if you have a legitimate reason to feel agitated about a certain condition of service, there should be ways and avenues of managing them clearly stated. They should be properly addressed by all stakeholders." - P.12 (Senior Policymaker/Doctor/International Schedule Officer/ Likely to support NMA)

The policymaker further noted that such conflict management office should be unbiased to win the trusts of all the professionals.

"It is when you seem to be fair to both parties, that's when there will be mutual trust from some of these professional bodies to trust you." - P.12 (Senior Policymaker/Doctor/International Schedule Officer/ Likely to support NMA)

This statement suggests that perceptions of favoritisms erode mutual trust and fairness is crucial for achieving interprofessional harmony.
Participants consistently stated that having an open dialogue will be beneficial to managing IPGCs in the health system.

“Social Dialogue is very key in managing conflicts. Be it interprofessional, inter-union or intra-professional. The ILO (International Labour Organisation) emphasises that if the parties keep on dialoguing over issues, it gives opening as to how resolutions can be reached.” - P.18 (Senior Policymaker/Conciliation Officer/Likely to be neutral)

As narrated by this policymaker, International Labour Organisation (ILO) recommends continuous social dialogue as a way of solving industrial conflicts either between employees and employers or among the different employee groups. As highlighted in chapter 4 and 8, IPGCs in Nigeria health system sometimes begin at the micro level before transmitting to macro level and subsequently, issues are referred to the Ministry of Labour and Employment where conflict resolution processes are applied based on ILO recommendations and internal procedure of the ministry. The Ministry of Labour and Employment usually engages all the parties involved in social dialogue to resolve IPGCs.

Another participant recommends mutual dialogue as well as counselling and constant engagements.

“There is a need for mutual dialogue and there is what I will call guidance and counselling or advocacy or constant contact engagements of all the various professionals with one another. I think it will go a long way to help.” - P.15 (Senior Policymaker/Health Administrator/ Likely to be neutral)

Dialogue can give opportunity for the rival professional associations/unions to identify common grounds. As this policymaker suggested, a process of constant engagement that keeps the communication line between NMA and JOHESU open increases trust and understanding which helps to manage the conflicts effectively.
Another policymaker noted that dialogue is a good conflict management strategy when government is constraint with meeting the demands of professional unions.

“The inability of the government to meet some of the demands, they can resolve to dialogue. So, management adopts dialogue. That is why the conciliation process, arbitration, and alternative dispute resolution ADR are all part of social dialogue.” - P.18 (Senior Policymaker/Conciliation Officer/Likely to be neutral)

Government usually makes economic decisions within scarce resources and other pressing priorities in the country. Transparently engaging the professional groups on the prevailing challenges is germane to managing IPGCs.

9.2.9 Ensuring proactive leadership

Leadership is central to how IPGCs is managed, and most participants affirm this assertion. Some policymakers suggest the need for government to show more political will and sincerity in managing the conflicts.

“There is a need for willingness or enabling political power. Government wants to talk to this one and talk to the other side separately but if there is sincerity, there are lots of suggested recommendations. Implementation of those things is another thing.” - P.14 (Senior Policymaker/Pharmacist/ Likely to support JOHESU)

As suggested by this policymaker, government must demonstrate political will and create an environment that enhances proper management of IPGCs. There are recommendations that can be implemented for proper management of the conflicts but requires political will to implement them. As highlighted in chapter 8, some of the policymakers in this study work directly with the government and occupy positions where they can trigger the desired conflict management action. However, approval of major resources required to implement policies and recommendations can only be made by the Minister of Health and/or Minister of Labour and
Employment who are directly or indirectly acting the President’s political blueprint in the health sector.

Another policymaker noted that a conducive environment and improved remuneration would require proactive leadership by the government.

“If government takes the bull by the horn and provide a more conducive environment for health workers in the country. When your job environment is conducive and you are well remunerated, health workers will complain less.” - P.11 (Senior Policymaker/Doctor/Likely to support NMA)

Remuneration is a key causative factor of IPGCs in Nigeria health system, hence it can be hypothesised that government’s proactive measures in this area would make a huge difference in managing IPGCs.

Leadership of the professional bodies have a great influence on their members, and it is essential to use their leadership influence in ways that promote interprofessional harmony. One policymaker noted that leaders of professional associations/unions often make a promise to protect the interests of their members at all costs without considerations for how their interests might impact patients, other professionals, or the health system.

“...from when campaigns start within those organisations, we hear people make promises to deliver a “we-centric” kind of leadership. A leadership that will help their profession achieve their interests at the expense of any other profession.” - P.9 (Senior Policymaker/Pharmacist/International NGO Partner/Likely to be neutral)

Leadership of the professional association/unions can champion management of IPGCs by using their influence positively before and after association/union elections. This policymaker suggests changing the internal political narratives in professional associations/unions will help to effectively manage IPGCs in the health system.

Another policymaker noted that leadership is very important and recommends an improvement to leadership of the health system at all levels as a way of managing IPGCs.
I would like to say that leadership is everything. Everywhere you have a group not functioning well, a nation not doing well, a community not doing well, please look for the leader or leaders. There may be categories of leaders and not just the apex leadership, so the healthcare system is not working well and part of it is poor leadership. I’m asking that we should improve the type of leadership we have in our health sector.  - P.8 (Senior Policymaker/Private Practitioner/JOHESU Executive)

Since leadership is all about influence, every individual or group in the health system is a leader because they have different levels of influence. Presently, there are no leadership trainings to enhance how leaders in the professional associations/unions interact with one another and the health system. Hence, improving the leadership of the health system as recommended by this policymaker would require leadership training.

9.2.10 Clarifying terms and conditions of service

One participant suggested that having an agreed terms and conditions of service in job contracts from the point of entry into service will help in managing the conflicts.

“Another way that I think this can be managed is having people sign a compact before they get on the job. They have terms and conditions guiding their service delivery at entry point so that they are guided from the beginning.” - P.12 (Senior Policymaker/Doctor/International Schedule Officer/Likely to support NMA)

Having a written document that clearly spells the responsibilities, benefits and conditions of service is suggested by this policymaker. Although, there are civil service rules, employment letter and scheme of service which convey some human resource policies, roles, and expectations. Such document can be reviewed and updated to become more comprehensive and acceptable by all stakeholders. Presently, there are terms and conditions in the civil service rules that are being contested leading to IPGCs in the first instance.
“If the health workers now do otherwise, then they are stepping out of their bounds, and they can be liable for it such as disciplinary actions or sanctions. So, if we have such, people will learn.” - P.12 (Senior Policymaker/Doctor/International Schedule Officer/ Likely to support NMA)

The policymaker furthered that violating the terms and conditions of service should attract disciplinary action that will serve as a deterrent to health workers.

9.2.11 Promoting common goal (Patient-centred decisions)

Most participant recommended that prioritising having a common purpose, which is the health of the patients or citizens, and the performance of the health system is key to managing IPGCs.

“I think the main thing is for all of us to have a goal and that goal is about the patient. Have we treated this patient well? if we have not, what should nurses contribute and what should doctor trade-off so that this patient would be treated well.” - P.6 (Senior Policymaker/Doctor/NMA Executive)

As highlighted in previous chapters, professionalisation activities draw the attention of healthcare professionals away from patient care to fulfilling their own interests. This is often an unintended outcome but awakening the consciousness of healthcare workers to the realities of their actions may bring reflections and learning that help in managing the IPGCs. As identified by this policymaker, having a patient-centred goal entails commitment and compromises of the professional groups.

Another policymaker discussed refocusing the groups’ interest to healthcare system goals as developed by FMOH.

“...when they see each other (NMA and JOHESU) working together to achieve one purpose which is meeting up with the aims, missions, and goals of the federal ministry of health, that will help to mitigate against whatever conflict they may want to have.” - P.16 (Senior Policymaker/Population Programme Officer/Likely to neutral)
The mandate of the FMOH is highlighted in chapter six. FMOH has simplified them for easy access and understanding. Creating more awareness of the missions and goals of the macro health system in key to improving health workers’ alignment to those strategic positions and help to reduce IPGCs.

Having a common goal can also help to improve teamwork and reduce IPGCs.

“We are all members of a team. We need to acknowledge that teamwork is what will get us that desired result. Together we can achieve that desired goal but once we work against each other, the longer it takes to get to our destination.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

Having a common goal is essential to teamwork where individuals and groups within the team relinquish their interests to prioritise the common goal. NMA and JOHESU need to refocus their priorities on the common goal as suggested by this policymaker.

Another policymaker recommends that pursuing a common goal will give NMA and JOHESU a stronger bargaining power with the government rather than the current individual group negotiations.

“If NMA and JOHESU can resolve their own differences and have a common voice, they can present their voice to the government. I believe things will work together rather than antagonising each other.” - P.19 (Senior Policymaker/Private Sector/Likely to be neutral)

“We are all still thinking that we are very important, but can we forget about that and focus on the patients? A patient is the most important member of the health system. Then if we believe that, we should bury our ego and focus on the patients.” - P.14 (Senior Policymaker/Pharmacist/Likely to support JOHESU)

9.2.12 Exploring global best practices
Some policymakers cited global best practices as a way of managing the IPGCs. Having a study of what other health systems around the world are practicing on each of the conflict themes can give an insight into managing the conflicts.

anyone can argue their position regarding interprofessional conflicts in Nigeria healthcare based on global best practices. Doctors earn 3 or 4 times the salary of a registered nurse and a registered nurse can become a consultant in his/her own field and that increases his/her own earning power, close to a medical doctor as a specialist nurse. All based on global best practices. Mostly, they are both correct, but they only want to play the side of global best practices that suits them and ignore the ones that work for other members of the healthcare family. - P.7 (Senior Policymaker/Pharmacist/International Partner/Likely to be neutral)

Working practices in other context may be adapted to effectively manage IPGCs in Nigeria health system. However, this policymaker believes professional groups have cited global best practices that support their arguments but ignore the ones that go against their positions.

9.2.13 Conducting orientation and reorientation

Few participants perceived that organising conferences and seminars as fora for interprofessional teamworking and conflict resolution will help to manage interprofessional group conflicts.

“I think bringing the health workers together at a conference or at some other seminars for them to rub minds together and air their views. That will help them to see that they can actually work together as a team.” – P.16 (Senior Policymaker/Population Programme Officer/Likely to neutral)

Organising interprofessional conferences may help in bridging the professional divide between NMA and JOHESU and provide a platform for reorientating health workers.

9.2.14 Promoting respect and recognition
It is established that every professional cadre in the health system is important. With this understanding, recognition and respect must be accorded to all. Respect and recognition of a profession is often a social construct as explained by social constructionism theory in chapter two. Hence, professions use the media to project positive image of their profession in the society.

“It is important to acknowledge the efforts of every professional cadre, to ensure that no cadre is relegated to the background and of course every cadre is treated with the respect they deserve.”  - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

There are tendencies to undervalue the contributions of some occupational or professional cadre in the health system. The role of cleaners, healthcare assistants, drivers, and other administrative staff complements and completes that of doctors, nurses, pharmacists, medical laboratory scientists and other health cadres working in the hospital. Similarly, scientific officers, population officers, monitoring and evaluation officers, human resource officers, logistics officers and other staff at the ministry of health must recognise the contributions of others as a means of managing IPGCs.

In some situations, healthcare professionals play important role that warrant recognition but social construct of their profession or their position make them uncelebrated.

“There was a case of a doctor in the US who carried out a surgery on a fetus that has tumour. Everybody praised the doctor but why is that doctor more important than a midwife in Borno state who is taking deliveries and bullets are flying over her head?”  - P.3 (Senior Policymaker/ Doctor/NGO partner/Likely to be neutral)

Society and the media have the proclivity to accord recognition and respect to doctors than other health workers. This may be due to the technical and professional nature of doctor’s role in the health system. However, this participant suggests the need to recognise other healthcare professionals who are equally contributing their knowledge and skills to patients and the health system.
“I feel the media reporting some of these things should balance the narratives. We must celebrate the midwives and the community health workers who are working under difficult situations and taking deliveries they are not even trained for.” - P.3 (Senior Policymaker/ Doctor/NGO partner/Likely to be neutral)

Society’s perceptions are shaped by media narratives and biased media reporting means lack recognition of some important professional cadres. Hence, the policymaker suggestion to balance media narratives to recognise every professional cadre as an essential practice to managing IPGCs.

9.3 Sustaining efforts at managing interprofessional group conflicts

Policymakers were also asked for suggestions to sustain effective management of IPGCs in the health system. Some policymakers mentioned the need for government to be unbiased in their decisions.

“To also sustain these efforts, governments must not give preferential treatments to a professional cadre. It’s just like in a house where you have 2 children, the moment one child notices the parent prefer one child, you are already nursing animosity between them.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)

Especially if the leaders of the health system are medical doctors, making decisions that appear to favour doctors against other healthcare professionals may disrupt strategies developed to manage IPGCs. This does not mean doctors should be displeased to please other healthcare professionals as it would amount to similar result. However, creating a neutral perception when making decisions that affect both NMA and JOHESU will help to sustain management of IPGCs in the health system.

“Government must also show sincerity especially when implementing decisions that have been collectively agreed with the various professional cadres.” - P.1 (Senior Policymaker/Administrative Officer/Likely to be neutral)
Another view on sustaining management effort is that government should strive to fulfil any agreement reached at any resolution meeting. This will foster trust and sustain management effort as recommended by this policymaker. Failure to meet agreement may lead to industrial actions and bigger conflicts.

9.4 Factors militating against effective implementation of management strategies

One of the themes identified as factors impacting strategies for managing IPGCs is insatiable demands by healthcare professions. This describes the tendencies for healthcare professionals to keep demanding for more benefits from the government. Such may discourage management efforts and cause a relapse into IPGCs.

“There seem to be insatiable demands from both sectors. Once attempts are made to meet up the demands of NMA, JOHESU will came out with own demands because they claim they are from the same industry. They perform the same functions. That prompts a lot of counter demands.” - P.18 (Senior Policymaker/Conciliation Officer/Likely to be neutral)

“Accusation and counter accusations. NMA comes up with their own demands. While government is trying to address it, JOHESU also comes up with theirs insisting that whatever has been done to NMA must be done to them.” - P.18 (Senior Policymaker/Conciliation Officer/Likely to be neutral)

Demands and counter-demands between NMA and JOHESU can force government’s withdrawal of efforts at fulfilling existing agreement. It may also mean lack of maturity in the approach of professional groups which further strengthens the argument for government’s intervention at coordinating/regulating professionalisation.

Another theme is conflicting priorities. Government is often faced with numerous agenda which are equally urgent and important hence settling conflict is not usually seen as a priority unless it disrupts healthcare service delivery.
“...Government has a number of responsibilities and there are several unions in the country. So, the matter of NMA and JOHESU alone cannot be a matter that government will just divert attention to the detriments of other sectors.” - P.18 (Senior Policymaker/Conciliation Officer/Likely to be neutral)

Although healthcare is very important to the economy of a country, government has other pressing priorities such as security and poverty reduction. Besides this, other sectors are equally demanding government’s attention for one issue or the other. Hence such conflicting priorities may limit efforts at managing IPGCs.

Another policymaker believes fund is a very important resource limiting efforts at managing IPGCs.

“There may be limiting factors in the sense that how often the management try to bring all the professionals on board. The limiting factors may be funds. Calling for meetings require some expenses so funds may be a limiting factor.” - P.15 (Senior Policymaker/Health Administrator/ Likely to be neutral)

Dialogue entails that representative of different professional associations/unions are invited to negotiation tables. Such meeting requires some time and financial resources amid scarce resources hence constraining efforts at managing IPGCS in the health system.

“...management having the right person in place, an unbiased umpire. Somebody who will not see himself as belonging to any of those associations even if he belongs to any, he should see his role as a management and be neutral.” - P.15 (Senior Policymaker/Health Administrator/ Likely to be neutral)

Conflict management is often not captured in health system budget hence management of conflict is often constrained of the needed resources to achieve it’s as suggested by this policymaker.

9.5 Front-end initiatives for managing interprofessional group conflicts
Some front-end initiatives are reported to be effective at managing IPGCs. Lessons can be drawn for managing IPGCs at the macro health system level. As stated in chapter two, interprofessional conflicts in Nigeria health system often transcends the micro-meso-macro boundaries hence micro level initiatives when scaled may be useful in managing IPGCs at the macro health system level. Drawing from front-end management initiatives can help to converge a better and coherent strategies for managing IPGCs which can be applied consistently to the national health system.

9.5.1 Clinical Pharmacy

Many doctors in Nigeria health system are reported to be against clinical pharmacy practice which makes it possible for pharmacists to attend ward rounds and contribute to interprofessional patient management especially in the areas of medication administration. One policymaker note that University of Jos Teaching Hospital is already practicing clinical pharmacy at the discretion of management in that hospital. The initiative has helped in minimising IPGCs with positive impact on patients and the health system.

Jos university teaching hospital is believed to be number one when it comes to studying pharmacy in Nigeria. Doctors in that hospital know early enough the roles pharmacist can play in the system so they allow the pharmacists to come very close to them even as a student so the decision to use or change a medication is taken by all of us (interprofessional groups) not just by one person. - P.14 (Senior Policymaker/Pharmacist/ Likely to support JOHESU)

Reports from the systematic mapping review conducted in preparations for this thesis showed that doctors’ expectations of pharmacists’ role are majorly to dispense medications and advice patients on their use. Clinical pharmacy role is not yet a national policy in many LMICs including Nigeria. However, this policymaker reported that clinical pharmacy practice is allowed in Jos university teaching hospital at the discretion of the hospital management.
9.5.2  Rotation and inclusiveness

Another theme in this category is rotation and inclusiveness being practiced at hospitals. Rotation has been noted to reduce IPGCs in situations where opportunities are limited. One policymaker noted that a mid-level manager was able to reduce IPGCs by rotating opportunities for staff that are posted to field works and arrange them in multidisciplinary teams rather than in homogenous team.

“The national coordinator in my office has a way of regulating the number of people who go for field work. For example, if you have been traveling for 4 weeks, she tries to reduce it so that others can also have the opportunity to travel.” - P.2 (Senior Policymaker/Doctor/Programme Officer/Likely to support NMA)

The national coordinator referred to by this policymaker was able to manage IPGCs by rotating healthcare professionals for inclusive opportunities. Such rotation and inclusive opportunities demonstrate recognition, value for and respect for everyone on the team. It also showed fairness and unbiased allocation of resources hence maintains harmonious working relationships among the different cadres in the team.

Deliberately creating heterogenous team fosters interprofessional socialisation and mutual trust among different cadres as the policymaker went further to explain.

“A supervision team to contain different cadres according to area of strength, needs and qualifications just to avoid conflicts. For example, a supervisory team might include a doctor, lab scientist, M&E officer and maybe 1 person from advocacy and social mobilization department, so that we go as a team” - P.2 (Senior Policymaker/Doctor/Programme Officer/Likely to support NMA)

This statement suggests that sensitivity to team composition and even allocation of resources is important to create a perception of fairness. Practicing inclusive leadership promotes team spirit as depicted in the statement above.
9.5.3 Job descriptions

Some participants noted that job descriptions are being developed by their hospital management which helps in managing IPGCs.

“When we found out that one of the most important reasons why IPC has lingered this long is that people don’t know their job description, my hospital about 2 years ago, rolled out job descriptions for doctors, nurses etc so...already you have a job description and that one goes a long way to reduce the argument.” - P.11 (Senior Policymaker/Doctor/Likely to support NMA)

While scheme of service developed by the federal civil service may not adequately address job descriptions at operational level, this policymaker noted that hospital management can intervene by developing job description for their hospitals.

9.6 Benefits of managing interprofessional group conflicts in Nigeria health system

Effective management of IPGCs has some benefits which serve as motivation for eliciting the commitment of all stakeholders. By asking policymakers, “How can your organisation benefit from effective management of interprofessional group conflicts in Nigeria health system”, I was able to produce some themes on perceptions of policymakers regarding benefits of managing IPGCs effectively.

9.6.1 Improved quality of care

Some participants believe that patients will benefit from effective management of IPGCs.

“...for the citizens, they will benefit more because the quality of health services that they will receive will be of high value.” – P.16 (Senior Policymaker/Population Programme Officer/Likely to neutral)
Effective management of IPGCs can help to improve the safety and quality of care enjoyed by patients as well as improve performance of the health system in general.

As highlighted in chapter two, Dysfunctional IPGCs negatively affects patients and worsen their suffering especially when it leads to strikes.

“It will help in the management of the patients because when they are not in good terms, you will discover that the patients suffer the most. It will help in improving patient’s health conditions.” - P.10 (Senior Policymaker/Registered Nurse/ Likely to support JOHESU)

Here, the policymaker linked IPGCs to patients’ suffering and suggests that effective management of IPGCs would lead to quality patient care.

9.6.2 Focus on important duties

Another policymaker observed that IPGCs are distractions for all stakeholders which affect their concentration on important duties.

“A lot because it will assist the authorities to be focused on carrying out their responsibilities. For example, the honourable ministers will not be distracted in carrying out his responsibilities. Attending to conflicts today, conflicts tomorrow then other directors or directorate people will be focused on ensuring that the mandates of their departments are achieved.” - P.16 (Senior Policymaker/Population Programme Officer/Likely to neutral)

One of the most important resources in the health system is time. Dysfunctional IPGCs create distractions that waste crucial time in efforts to resolve them. Moreso, policymakers are already inundated with multivariate challenges bedevilling the health system and dysfunctional IPGCs adds to the burden of work confronting them.
9.6.3 Friendly work environment

Hostile environment limits creativity and productivity. Also, disruptions to health workers’ emotional stability can lead to costly errors. One policymaker suggests that managing IPGCs effectively will engender a friendly work environment for all health workers.

“If there is no emotional stability, either because health workers are looking over their backs or think the person next to them doesn’t want their good or progress or would do everything to stifle them, they can’t be relaxed to do your best.” - P.8 (Senior policymaker/private practitioner/pharmacist/Likely to support JOHESU)

On the other hand, managing IPGCs effectively would bring out the best in every staff as they are emotional stability to contribute meaningfully.

9.6.4 Interprofessional Harmony

One participant mentioned that managing IPGCs in the health system will foster interprofessional harmony in the health system.

“Well, the benefits are enormous, I gave you an example that because of the new rapport between us and NMA, they came to the floor of the house (House of Assembly) and stood on our side. Previously they wanted to oppose us” - P.8 (Senior policymaker/private practitioner/pharmacist/Likely to support JOHESU)

Managing IPGCs effectively can lead to professional groups supporting each other to achieve professional development rather than opposing one another. Consequently, that will improve interprofessional disharmony as suggested by the policymaker above.
CHAPTER TEN

DISCUSSIONS AND RECOMMENDATIONS

10.1 Introduction

This chapter begins with a reminder of the research questions and a description of how they have been answered. This is followed by discussions on the causes of IPGCs, the effectiveness of current strategies, stakeholders’ analysis and finally, recommendations on managing IPGCs in the health system which are constructed through ideation. Key themes discussed in this chapter are integrated with the relevant theories highlighted in chapter three and the results in chapter six, seven, eight and nine to expound on causes and management of IPGCs in Nigeria health system.

First, I examine the causes of IPGCs from chapter six especially in themes including uncoordinated professionalisation, organisational factors, and economic factors. Furthermore, I discuss current conflict management strategies, resources available and stakeholders’ analysis after which I draw on policymakers’ ideas to make recommendations on management of IPGCs in Nigeria health system.

Before proceeding with the discussions, it would be helpful to re-emphasise that IPGCs transcend the three levels of healthcare system. Hence, the narrative at micro level is essentially the same as meso and macro level but with differences in scale and positions affected. For instance, one of the causes of IPGCs under the theme “organisational factors” is perceptions of bias in opportunities for leadership and management positions in which doctors are believed to reserve key management positions exclusively for members of Nigerian Medical Association (NMA). This theme is considered at the level of departmental head, Chief Medical Director (CMD) and Minister of Health.

Beyond the specific themes highlighted as causes of IPGCs in chapter six, conflicts connote differences in views and opinions between health workers affiliated with NMA and JOHESU. Except for few policymakers who argued in favour of opposite profession, which somewhat
demonstrate their neutrality, most policymakers state their views from the perspective of their profession. Doctors argue to support NMA’s position while other professions argue to support JOHESU’s position.

10.2 Review of the research questions

Primary:

✓ What are the perceptions of health policymakers on interprofessional group conflicts in Nigeria health system?
✓ How do health policymakers contribute to managing interprofessional group conflicts in Nigeria health system?

Table 27: Review of Research Questions (Specific questions)

<table>
<thead>
<tr>
<th>Research questions</th>
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<tbody>
<tr>
<td>What do health policymakers perceive as the causes or contributing factors to IPGCs between NMA and JOHESU?</td>
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<tr>
<td>How are health policymakers positioned in terms of powers, roles and influence in the management of interprofessional group conflicts in Nigeria health system?</td>
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<tr>
<td>What are the existing national strategies for managing interprofessional group conflicts and how effective are they?</td>
</tr>
<tr>
<td>How can interprofessional group conflicts be sustainably and effectively managed in the Nigerian health system?</td>
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10.3 Discussions on causes of interprofessional group conflicts

10.3.1 Professionalisation in Nigeria health system

As discussed in section (3.3.6.1), professionalisation involves strategies adopted by different professions to protect or gain more status, recognition, and reward for their work within the health system (Gunn et al., 2019). In chapter four, I discussed how professionalisation impacts
the dynamics of interprofessional relationships in the health system and how managerial control of professions is limited due to professionalisation (section 3.3.6.3). Another characteristic of theory on interprofessional relationship in the health sector which I described in chapter three is the dominance-countervailing power dynamics where medical dominance is constantly being challenged by other professions aiming to achieve more autonomy and status (section 3.3.3).

One of the major causes of IPGCs as identified in section (6.5.1.1) is the proliferation of professional bodies including professional councils, associations, and unions as part of professionalisation activities engaged by both NMA and JOHESU. Policymakers reported that each of the professions push their agenda and interests through the professional bodies which often conflict with the interests of other professions and the objectives of the health system. This finding is supported by professionalisation theory. To corroborate this finding, document review analysis showed that legislative acts for the establishment of each profession are pursued individually (Section 7.1.6). Such fragmented legislation prevents identification of areas where conflicts in roles and interests might occur thereby accentuating the need for regulatory and legislative harmonisation. Other authors such as (Omisore et al., 2017a) have corroborated that professional associations are focused on pursuing their group interests, and their activities often exacerbate IPGCs in the health system.

Furthermore, results showed professional power and dominance where NMA possesses institutionalised power to control appointments, resource distribution and job roles in the health system (6.5.1.2). This finding is supported by the result of content analysis which highlighted a Marxism-like class struggle between NMA and JOHESU (Section 6.6.2.2). Professionalisation in the context of Nigeria health system appears to have intensified the dominance-countervailing power dynamics as JOHESU resists NMA in multiple areas of dominance, hence making IPGCs more pronounced, dysfunctional and intractable (Badejo et al., 2020).

Interestingly, policymakers who are doctors did not recognise medical dominance, and their arguments suggest that they are equally victimised. A similar view is presented by Navarro
who stipulated that medical profession is proletarianised by state bureaucrats. However, the critical dimension in the case of NMA and JOHESU is that doctors also dominate bureaucratic leadership and management positions in the hybrid management structure (section 7.1.4). Badejo et al. (2020) corroborated that health system where management is dependent on health professionals instead of specialist managers is susceptible to aggravated interprofessional conflicts. However the views of doctors elicit questions on whether doctors in management positions, acting as state bureaucrats have formed a new class of healthcare profession whose status, interests and agenda is completely different from that of other doctors (Belrhiti et al., 2021, Ehrenreich and Ehrenreich, 1979). This differences in views contribute to the intractability of the conflicts in the health system and underscore how group identity contributes to interprofessional conflicts in line with social identity theory.

Other studies from Europe and America also corroborates the findings of this study. Results of a study by Sena (2017) reported that medical dominance and the state legal system supress nurses’ autonomy in Italy leading to IPGCs as nursing profession strive to achieve full professional autonomy. It is however instructive to note that professional dominance is not always perpetrated by the medical profession as reported by Salhani and Coulter (2009) and Coburn (1988). Nurses in Canada reportedly pursue dominance of other non-medical professions after securing autonomy from medical dominance. In a similar mechanism as institutionalised medical dominance reported in this thesis, nurses in Canada gain powers through political affiliation and members loyalty to achieve their professionalisation agenda (Salhani and Coulter, 2009).

In Denmark, Ernst (2020) reported the opportunities in claims to professionalisation that see nurses advance their practice to Advance Practice Nurse (APN) thereby challenging existing role boundaries between doctors and nurses. In the current study, poorly defined job roles and perception of inequity in career and advancements are described as some of the organisational inadequacies that ignite IPGCs (Section 6.5.2.3 and 6.5.2.4). Beyond mere professionalisation agenda, APN reported in Denmark is strategic to healthcare goals by complementing doctor’s shortage. This underscores the importance of considering context peculiarities in determining how interprofessional relationships can be optimised to achieve health system goals.
As reported in this thesis, strong professional identity creates faultlines and uncooperative attitudes due to misunderstanding of values and norms of other professions (section 6.4.1.3). Belonging to a professional group that offer protection is reported to elicit strong loyalty among professionals even against the ethics of their profession and to the detriment of the health system (section 6.4.1.4). Although most health workers disagree with industrial actions, professional loyalty compel them to participate in it (Oleribe et al., 2016). Apparently, professional loyalty strengthens professional power mediated by enlightened self-interests (Gazley and Dignam, 2010), hence industrial conflicts are more intensified. This phenomenon can be explained by social identity theory and social dominance/realistic conflict theories which stipulate the benefits of belonging to a professional association/union as a motivation for in-group favouritism. The complex elements of professionalisation entails effective stakeholder’s management and negotiated order bearing the reality that formation of JOHESU has increased the discretionary powers of other health workers against the dominant NMA whose members represent less than 5% of the total health workforce in Nigeria (Adeloye et al., 2017).

10.3.2 Organisational inadequacies

Another theme on the causes of IPGCs is organisational factors which highlighted the lapses in organisational structures and processes. Eight themes were developed including lack of organisational support for interprofessional training, perception of inequity in opportunities for leadership and management positions, perception of inequity in promotion and career advancement, poorly defined job roles, lack of organisational support for accountability in patient management, lack of organisational support for interprofessional communication, complacent leadership and management, and poor interpersonal conflict resolution were identified (Section 6.4.2).

Policymakers in this study identified that current approach to educating and training HRH in the health system undermine interprofessional relationships and practice (Section 6.4.2.1). The practice of training health workers independently prevents socialisation, mutual understanding and knowledge of the competencies and capabilities of other professionals (Vaismoradi et al., 2013). This means interpersonal and task relationships are strained and health workers feel
unsatisfied with their jobs. Strengthening support for interprofessional trainings is necessary to achieve strong interprofessional teamwork and collaboration by enabling clarification of role boundaries within teams and improving interprofessional communication. This assertion is supported by results of the systematic mapping review in chapter two which reported effective communication as one of the critical elements of interprofessional teamworking (Section 2.4.2.2).

Results of the policymaker’s analysis revealed that government through the NCH technical committee, and FMOH have the responsibility to coordinate interprofessional education/training. Such efforts would require the collaboration of other relevant organisations such as the National University Commission (Santolaya et al., 2013) and professional bodies (regulatory councils, associations, and unions)(Section 9.1.5).

Interprofessional education/training has consistently been recommended as necessary for improving interprofessional practice at different levels of Nigeria health system (Vincent-Onabajo et al., 2019, Odole et al., 2018, Busari, 2019, Balogun, 2021b). To implement it, there are challenges that must first be scaled. A strategic framework for enacting the recommendations for IPT/C in relevant official documents such as the NHA 2014, must first be developed to serve as a blueprint for operationalising teamworking/collaboration including conflict management. Secondly, recognising the benefits of IPE/T is necessary to generate strong political drive among stakeholders. Organising IPE/T may cost the health system additional human and financial resources within a health system that is already constraint, however, policymakers can base their commitment on the understanding that managing conflicts effectively has a cumulative long-term benefit on the health system.

This study also identified inequity in opportunities for leadership and management positions in the health system. Health workers affiliated with JOHESU were reportedly not satisfied with the current arrangement of selecting or appointing leaders and managers at different levels of the health system. Doctors on the other hand believe they have legitimate claims to the positions they occupy (section 6.4.2.2). On the appointment of health minister, document analysis revealed that the President of Nigeria possesses the prerogative to appoint minister of health
based on nominations from his political networks. As such, the minister cannot be considered a member of any professional association but rather a competent politician or bureaucrat who is appointed to implement administrative blueprint of government in the health sector. The implication is that President’s choice of a minister cannot be challenged as medical dominance. Nevertheless, the ability of minister to separate his role from his position as a member of a professional association is critical to successful leadership of the health system (Section 6.4.2.2).

Theoretically, there are concerns regarding whether healthcare professionals in leadership/management positions belonging to a professional association/union would act in the interests of all health workers (section 2.3.5). Such concerns necessitate the introduction of NPM to balance excessive professional powers and improve performance (section 3.3.6.2). While reforms such as NPM have been attributed to increased tension between doctors, nurses, and health managers in Morocco (Belrhibi et al., 2021), NPM is known to stabilise power dynamics among the different groups of health workers in modern health systems (Noordegraaf, 2020).

Similar to this thesis, other scholars have highlighted leadership of healthcare team as one of the key conflict issues in the health system including the appointment of minister of health, Chief Medical Director (CMD), and Chairman of the Medical Advisory Committee (CMAC) (Alubo and Hunduh, 2017, Oluyemi and Adejoke, 2020). As posited by Alubo and Hunduh (2017) one implication of having an unbalanced mix of professional cadres or health administrators in key positions is the proclivity for policymakers to equate healthcare with medical care and giving priorities to curative services while preventive services such as immunisation, health education, nutrition and environmental health services receive little attention. By all indices, this approach has not improved the performance of Nigeria health system.

On perceptions of inequity in promotion and career progression, results showed that doctors are more favoured in promotions and career advancements which affects other health workers motivation and cause IPGCs. Policymakers affiliated to JOHESU believe doctors strategically structured the health system to favour members of their profession hence there are explicit
and implicit agitations for equity in promotions and career advancements (section 6.5.2.3). Other scholars such as Alubo and Hunduh (2017) and Akin-Otiko et al. (2019) also reported career progression as one of the conflict issues in the health system.

Doctor’s 9 years advantage at entry level is often considered a disproportionate scale by policymakers hence other health workers are deciding additional trainings that will improve their opportunities for promotion and career advancement (section 6.5.2.3). Similar to this study, a study by Obeta et al. (2019) reported poor job satisfaction due to poor availability of opportunities for advancement in trainings that are necessary for career advancement. In line with this argument, issues regarding Doctor of Pharmacy and Nurse Consultants/Specialist practice have been reported as major conflict issues between NMA and JOHESU (Ekpenyong et al., 2018, Adeloye et al., 2017). This implies a strong professionalisation activities around opportunities for promotion and career advancement. It also underscores the need for macro-level intervention for a comprehensive review of training pathways, promotion scales and career advancement.

Another theme is poorly defined job role. Policymakers believe there is no comprehensive job description for health workers at macro level, hence different hospitals, departments, or programmes adopt job descriptions as deemed suitable by mid-level managers (section 7.4). Similar to this result, almost half the participants in a study by Archibong et al. (2021) did not know that sample analyses is the role of pathologist in clinical laboratory according to international best practice. While role boundaries in health system requires constant negotiation, the implication of poorly defined job role is encroachment, lack of consistency in practice and task-related conflicts which negatively impact patient safety.

Although results of the content analysis show that terms and conditions of service contained in the scheme of service are provided to guide health workers at entry point (section 7.2.5.2), policymakers are however not aware of any comprehensive job description in the health system. Perhaps, detailed job description is considered an operational management responsibility rather than a strategic level responsibility. Whereas the health system will benefit
from a comprehensive macro-level job description for consistency in practice, treatment, and performance management (Badejo et al., 2020).

On lack of accountability in patient management, policymakers narrated their experience of frustration due to negligence of health workers and the impunity with which such negligence is perpetrated at micro-level of the health system. Health workers are shielded from taking responsibilities for their actions/inactions by their professional association/union, hence, there is no accountability in patient management. Whereas result of the documentary review identified that maintaining professional standard is primarily the responsibility of professional regulatory councils [section 9.1.4]. The 14 professional regulatory councils in Nigeria have individual procedures for maintaining the standards of their professions and ensuring the disciplines of erring professionals at macro-level of the health system. Fragmented regulation may be ineffective and contradictory without an organisation that regulates the activities of regulatory councils especially given the strong influence of professional associations/unions on the regulatory councils. For a similar reason, only few healthcare professionals face litigation due to negligence. Although cost of litigation is mostly unbearable for patients, the protection offered by professional bodies to their members deter justice and prevents accountability in patient management.

Policymakers also noted avoidable IPGCs due to lack of communication infrastructure such as Computerised Prescription Order Entry (CPOE). The practice of handing prescriptions to patients reduces opportunities for interprofessional teamwork and exposes the health system to errors in patient management (Section 6.5.2.6). Results of the document reviews confirms lack of policy or strategic plan for digitisation of health information in Nigeria. This suggests that patients’ records are still being managed using physical files hence creating communication gaps between interdependent professional groups responsible for patient management. Whereas in advanced countries, technology such as CPOE, e-health, electronic patient records and other health information technology have been found to improve interprofessional relationships and patient safety at micro-level of the health system (Barr et al., 2017).
This study also report complacency in leadership including lack of tools for managing IPGCs, not following through with agreements, staff shortage and poor interpersonal conflict management. One policymaker believes that leadership at the ministry of health has not done enough to provide adequate resource such as policies or strategic framework for managing IPGCs. Also, government’s failure to fulfil previous agreements are believed to cause more conflicts including industrial strike actions by the professional groups. Not providing adequate staff is reported in this study as a contributing factor to IPGCS similar to reports of other studies in the country (Balogun, 2021a, Mayaki and Stewart, 2020)

10.3.3 Economic factors

Results presented in this theme highlight how distribution of financial resources cause or contribute to IPGCs between doctors and other health workers in the health system. Four themes were developed under this category including remuneration, lack of adequate funding for health, corruption, and economic recession. Issues with remuneration identified includes parity, harmonisation, unilateral treatment, and lack of inclusive opportunities for special allowances.

Results show that while policymakers affiliated with NMA are agitating to protect the relativity between them and other health workers, policymakers affiliated with JOHESU believe there should be equity in pay structures that is reflected in remuneration relativity between them and doctors. Presently, macro-level arrangement places doctors on CONMESS salary structure while other health workers are placed on CONHESS salary structure. Some policymakers questioned the rationale behind this discrepancy given that all health workers work within the health system.

Policymakers affiliated with NMA believe the difference in pay structure is a ratio of relativity between doctors and other health workers. On the average, doctors at entry level earn 150,000 Naira, Nurses earn 75,000 Naira, Pharmacists earn 100,000 Naira, Medical laboratory scientists earn 80,000 Naira. This relativity reflects level of responsibility in the health system which also complement doctors’ status.
Some of the policymakers affiliated with JOHESU recognise that doctors are the head of clinical teams hence, they accept relativity, and their agitation is not directed towards pay equality. However, they explicitly expressed dissatisfaction that JOHESU’s negotiations for salary increase with government have been met with interference from NMA in their agenda to maintain the relativity in pay structure. This has become a major source of IPGCs in the health system. To JOHESU, NMA appear to be confrontational in their approach.

The feeling that doctors stifle the economic opportunities of other health workers constraints team relationship at all levels. Management has to balance the relativity positions in ways that maintains the motivation of doctors without jeopardising the motivation of other health workers (Uma et al., 2013b). Several other studies have reported on the remuneration issues between doctors and non-doctors in Nigeria health system (Dakwat et al., 2018, Akanbi, 2020, Essien, 2018). Similar to the findings of this study, Essien (2018) reported poor remuneration, denial of salary review and non-payment of accrued salaries are major causes of industrial action in Akwa-Ibom state. In a health system led by doctors, denial of salary review may escalate the perception of bias hence intensifying the IPGCs among health workers (Akanbi, 2020).

Another sub-theme identified under this theme is the lack of inclusive opportunities for special allowances which is different from the structured monthly remuneration entitled to healthcare professionals. Since these special allowances are based on additional tasks or inconveniences, there is no policy on how such opportunities are distributed. Hence, other healthcare professionals believe the available opportunities are skewed in favour of doctors. Although doctors believe their opportunities are earned based on possession of unique technical skills and their level of responsibilities in the health system, other health workers attribute their disadvantage to doctors’ occupation of key health system positions.

Another sub-theme identified is the practice of unilateral treatment in negotiations relating to remuneration. Policymakers believe government should adopt a holistic approach to salary review rather than the unilateral approach. To create a balance, treatment of salaries especially because of the multi-interest nature of the health system, should be done holistically.
Policymakers’ analysis showed that National Income and Wages Commission is an agency of the presidency responsible for determining the remuneration of all workers in the public institutions. To achieve this, they carry out systematic research into salary, job evaluation, and pay reviews (NIWC, 2017). The current CONMESS and CONHESS wage structure was established in 2010 through a macro-level agreement between the government, NMA and JOHESU. Although the collective bargaining process led to an agreement, the pay structure was believed to be short of a proper job evaluation process hence, leading to poor motivation and IPGCs in the health system (Sani et al., 2019). Available studies show that health workers are strongly in support of a new job evaluation to promote pay parity which is equal pay for work of equal work value (Sani et al., 2019). Furthermore, one policymaker in this study noted that Covid-19 pandemic revealed some gaps in the current wage structure as health worker cadres such as cleaners, healthcare assistants and nurses are exposed to more risks than doctors (Section 7.1.6). Hence, there is a renewed call for hazard allowance review.

Other causes of IPGCs identified in this category include lack of adequate funding for healthcare, corruption, and economic recession. Generally, funding of the health system affects health workers remuneration and work condition thereby causing tension as different professional groups seek to have a good share of the available scarce resources. The lack of funding for health is further exacerbated by rising inflation and bouts of economic recession affecting the country. Some policymakers comment that health workers’ remuneration, irrespective of profession, is not sufficient to meet their basic need. Changes in sociological behaviours relating to defending physiological needs is explained by the theory of basic need highlighted in chapter three. Based on propositions of Maslow’s theory and without prejudice to other role or ethical priorities, meeting basic needs is human’s primary motivation and proclivity for conflicts increases with threats to their basic needs. Policymakers believe that poor coverage of the National health insurance constraint fund availability for staff welfare leading to IPGCs.

Inadequate funding for health sector also encourages corruption which was highlighted as another major cause of IPGCs by some policymakers in this study. Some policymakers alleged that revenues from the hospitals are being looted by hospital management and some
professionals claim titles for improved economic benefit without qualifications. These findings are similar to a study by Onwujekwe et al. (2020) who identified corrupt practices in procurement, health financing and employment in the health sector. Since Nigeria health system has not fully adopt managerialism, professionals in hybrid management positions are constantly exposed to opportunities for corrupt practices (Onwujekwe et al., 2020). Corruption in Nigeria is a systemic challenge which affects almost every sector. Government’s efforts at curbing corruption will benefit the health system and help to promote harmony among health workers.

Economic recession is highlighted as one of the reasons behind inadequate funding for health. Behaviours and priorities of health workers have changed during the economic recession. Part of this change in behaviour is the increase in IPGCs. Different professions device means to protect their members from the impact of economic recession which often contradicts the plans of other professions. According to karl max conflict theory, scarce resources places individuals or groups with higher purchasing powers at advantage but threats to basic need attracts resistance based on the theory of basic need.  

Not only can economic recession cause or contribute to IPGCs, according to Jolayemi and Fatomilola (2020), increase in economic growth can also cause increase in industrial actions as health workers are more likely going to demand for pay increase with improved economy. However, their study, which used economic data analysis, measured a long-term association over the period between 1986 to 2018. They also found that industrial action in turn lead to greater distortion in Nigeria economy mediated by greater man-day lost.  

Similar to findings of this study, studies by Ogbonnaya et al. (2007) reported that differential salary between doctors and other health workers is the main cause of IPGCs in the health system. Although the CONMES-CONHESS dichotomy was established to curb instances of IPGCs (Sani et al., 2019), this study suggests that it has rather exacerbated IPGCs thereby necessitating a new approach that is negotiated and accepted by all stakeholders. To manage IPGCs effectively, transparent job evaluation and salary review is required as recommended in this study and others (Sani et al., 2019).
Like this study, impact of austerity measures on interprofessional relationships is also reported by Kiernan (2019) who showed that austerity measures force salary adjustments thereby making retention of consultant cadres difficult in Ireland. In what was described as policy failures, government through the ministry of health experience conflicts with doctors’ unions due to failures to fulfil contractual agreement on salary and work hours (Kiernan, 2019). On the contrary, a study in Brazil report that differences in doctors and non-doctors’ salaries have no impact on local government health system efficiency (Sousa et al., 2020). In their study, the impact of wage structures between doctors and non-doctors and fiscal autonomy on the efficiency of local government was examined which is different from the focus of this thesis.

10.4 Current management strategies

This study found that protracted IPGCs in the health system is due to the dynamic nature of conflict issues (Section 7.3). Generally, the interprofessional group conflicts in Nigeria health system fulfils the characteristics of intractable conflicts (Kriesberg et al., 1989, Freedman, 2019). Perhaps, the constant changing nature of the conflicts in combination with bureaucratic procedures of public service have created delays in decisions necessary for conflict management. The implication is that government continues to miss critical deadlines to fulfil collective agreements, a situation which often results in escalated conflicts and industrial actions (Ifeyinwa et al., 2016).

Health policymakers engage the conflicting professional groups in continuous social dialogue and collective bargaining as conflicts emerge (Section 7.1.8). Social dialogue is recommended by International Labour Organisation for managing industrial relations as it gives opportunities for conflicting parties to find a common ground (Hyman, 2010). However, social dialogue may not be effective when the outcomes are not binding. Issues around remuneration, promotion/career advancement and control of departments have been decided at national industrial courts due to yearnings of the conflicting parties for a decisive and binding arbitration (Akanbi, 2020).

Reactive approach to conflicts management has some advantages such as calming disruptive conflicts and delaying strikes especially in situations where break out of violence is imminent,
however, quick fixes prolong the life span of conflicts as policymakers in this study observed that recurrence IPGCs existing for years (Section 7.3). Whereas a proactive conflict management underscores systems thinking and stakeholders’ collaboration for sustainable harmony (Huffman, 2018). Although the processes of conflict resolution and intersectoral collaboration can be identified by policymakers in this study, lack of comprehensive macro level policy for managing IPGCs limits adaptive conflict management (Arnold et al., 2012) leading to frequent unfulfilled agreements.

Results of both thematic and content analysis in chapter six highlighted lack of organisational support for interprofessional communication as one of the causes of IPGCs (Section 6.5.2.1). Although resources for communications, financial and human resources for managing IPGCs can be identified (Chapter 7), lack of digital communications infrastructure renders management unresponsive and ineffective. Whereas, leveraging modern digital technology for interprofessional communications and information sharing strengthens interprofessional relationships (Introna et al., 2019).

To overcome the lack of trust due to negative perceptions of the conflict management process, doctors in management positions need to demonstrate a high degree of transparency. The current practice where hybrid management structure places doctors in positions where they decide conflict cases against them demands accountability because other health workers perceive doctors have perpetrated their privileged positions to push NMA agenda. Currently, the Chairman of Senate Committee on Health, Chairman of House Committee on Health, Minister of Health, Minister of State for Health, Minister of Labour and Employment as well as many Directors in the Federal Ministry of Health are all doctors. Such coincidences strengthen other health workers argument about the lack of trust in the management process (Alubo and Hunduh, 2017). Future ministerial and legislative appointments for health may consider a mix of medical and non-medical candidates to avoid medicalisation of macro health system policies and functional conflict management (Section 3.3.4).

Lastly, functional conflict management require learning from conflicts through a systematic process of data collection and analysis to understand patterns and predict future conflicts
before they occur in line with complex and adaptive health system theory (Section 3.3.9). Learning from conflicts also entails strengthening system thinking to become more resilience to conflicts instead of dependence on external intervention (Huffman, 2018). The current management approach does not accommodate conflict learning hence opportunities are missed to functionally IPGCs in the health system. Whereas Complex and Adaptive Healthcare System theory suggest that functional conflict management entails some form of adaptation and evolution through conflict.

10.5 Ideation

10.5.1 Functionalising professionalisation

Nearly all healthcare workers in Nigeria belong to a professional association/body. While occupations that are still in the process of achieving the status of full profession do not have regulatory councils, core healthcare professionals such as doctors, nurses, pharmacists, physiotherapists, and medical laboratory scientists require registrations with their respective regulatory councils before they can practice. Health workers are mostly conscripted into their professional associations/unions as a matter of popular practice as against choice.

This thesis suggests that the numerical strength of professional associations/unions combined with a sense of self-enlightened loyalty is a strong factor in dysfunctional professionalisation activities. While professionalisation may not be entirely dysfunctional, there are tendencies for professionalisation activities to distract stakeholders’ focus from the purpose of the health system (Saks, 2016). Government and key stakeholders in the health system are known to support professionalisation as it leads to advancement in a particular field, better methods, strengthens the human resource for health and promote diversification of practice to the advantage of patient care. However, dysfunctional professionalisation occur when professional groups perceive themselves as rivals and pursue group interests without regulation or control.

As highlighted in this study, the aim of professionalisation is directed towards the interests of individual professional groups rather than patient’s needs (section 6.5.1). Government and other health system stakeholders have the responsibility to regulate professionalisation such as
by merging professional regulatory bodies into a single entity with different departments corresponding to each profession and having a tenured leadership rotated among the departments (Section 7.1.5). According to the policymakers, this may likely promote interprofessional harmony, and refocus the interests of the professional groups to patient needs without the threat of losing autonomy. This idea would require some level of cooperation and compromise especially on the part of the current dominant professional group – the doctors.

Another idea on functionalising professionalisation is to reform the postgraduate colleges into a single postgraduate college of health with departments in medicine, pharmacy, nursing, physiotherapy, medical laboratory science, etc (Section 7.1.5). This would enable the different professional groups to find a common purpose despite their differences. It will also create a new class of healthcare professionals who have trained together, studied together, lived together, socialised together, and understand each other better than the current fragmented system.

Regulating professionalisation in Nigeria health system may learn from the Professional Standard Authority (PSA) in the UK which is an independent organisation accountable to the UK government that oversees the activities of professional regulators and registers such as GMC, Nursing and Midwifery Council, General Pharmacy Council, General Dental Council and General Optometry Council (PSA, 2021). The PSA in the UK also sets standard and regulate occupations within the health and social care that are not already regulated, hence, new occupations aspiring to become a full profession are guided and supported.

Whereas fragmented legislation of professions in Nigeria may be an impediment to functionalising professionalisation. The government of Canada in Ontario established Health Professions Regulatory Advisory Council (HPRAC) to strengthen interprofessional relationships among healthcare professionals and provide advice to the minister of health on how regulated professional bodies are operationalised (HPRAC, 2019). HPRAC in Ontario checks professionalisation activities of different professions with a view to protect the public as contained in the Regulated Health Professions Act. Similarly, the government of Ghana
regulates professions using a single law called Health Professions Regulatory Bodies Act 857 (2013). The law highlights the procedures for registration and practice of all professions in Ghana hence harmonising professional bodies. Nigeria may benefit from harmonising the different laws that establish professions with a view to regulate professionalisation.

Implementing a policy that regulates professionalisation activities may have some disadvantages. For instance, it may lead to “over-regulation” and deprofessionalisation – a situation where professions lose their autonomous powers to the public agency that is placed in control of such regulation or a situation where professions lose their relevance due to emergence of conditions that challenge its autonomy. The goal of functionalising professionalisation is not to eliminate professional autonomy just as PSA adopts the “right-touch” principle to ensure their regulation is balanced and appropriate for system’s order (PSA, 2021). On the contrary, unity among the interprofessional groups may precipitate an increase in professions-management conflicts due to stronger interprofessional union that presses for better working conditions and quality patient service with an amplified voice. These are factors that will further benefit the health system rather than dysfunctionalise it.

10.5.2 Complete structural and financial health system reform

Another interesting idea for managing IPGCs suggested by the policymakers is a comprehensive health system reform (Section 7.1.4). Although Nigeria health system has recorded some successes in the past decade, challenges due to *inter alia* poor infrastructure, paucity of fund, health workforce crisis and difficulty in policy implementation call for a structural change. The policymakers in this study have recommended a comprehensive reform to address the challenges and reposition the health system on a path to better performance. One policymaker suggests a reform like the privatisation of telecommunications industry leading to significant improvement in the quality of service and costs to the public.

Part or complete reforms are common in health systems globally especially in OECD countries where changes in demographics, rising cost of care and user demands necessitate changes in policies, structures, or care delivery (Ozcan and Khushalani, 2017, Oecd, 1995). One of the most
significant reforms in the UK is the introduction of Beveridge model which births the NHS. Reforming Nigeria health system with a particular focus on providing health insurance, infrastructural facilities, digitisation of the health system, better staff motivation and enabling environment for interprofessional teamworking is expected to reduce the incidence of IPGCs and improve health system performance.

10.5.3 Developing a Conflict Management System (CMS)

One of the findings of this study is the lack of comprehensive Conflict Management System (CMS) that transcends case-by-case conflict resolution strategy currently being applied in the health system. Although teamwork among the different professional cadres is recognised as essential to the delivery of quality healthcare services in relevant official documents, the mechanisms for achieving teamwork which includes proactive conflict management were not mentioned. Similarly, nearly all the participants identify that excellent performance of the health system, particularly treatment of patients, entails the contributions of all health workers in an interdependent relationship. However, they are not clear of any institutionalised strategies for maintaining harmonious working relationships between NMA and JOHESU. Few participants in this study suggest having a comprehensive conflict management desk officers who are adequately trained and equipped to identify dysfunctional conflicts as well as respond quickly before they become full-blown crisis. This idea is relevant and has been drawn in this discussion (Section 7.1.7).

A CMS integrated within an Interprofessional Teamworking Framework (ITF) will facilitate early detection, proactive management, and functionalisation of IPGCs in the health system (Yarn, 2014). Such CMS will consist of a standing committee, structures, communication tools and procedures for operationalising their key objectives as an agent that manages conflicts in the health system, including the prevention of dysfunctional conflicts and optimisation of the positive ideas that functional conflicts contribute to the health system.

Based on policymakers’ recommendations, the committee would serve as ombuds agent consisting of representatives from all stakeholder organisations including the government (Ministry of health, ministry of labour and national income and wages commission),
professionals unions (NMA and JOHESU), judiciary, legislative, multinational organisation, private and public organisations.

Beyond serving as an ombuds agent, they are to develop and maintain conflict management strategies that align health system goals and objectives at all levels, with patients in focus and having collaborative mindset for sustainability (Scott and Gerardi, 2011). To maintain objective functioning of the committee, the committee should be chaired by a neutral advisor who will coordinate all activities of the committee. The conflict committee is expected to develop structures and collect data for conflict audit at all levels of the health system; and set management strategies using one or combination of conflict management approaches that is suitable for the context and adaptable for each case.

Furthermore, the aim of the committee would not be to develop a rigid strategy for managing all conflict cases but rather have a guideline for proactively responding to every case appropriately.

Few authors have worked on CMS designs which can be adopted and contextualised in Nigeria health system. According to Lipsky et al. (2003) for a CMS to be effective and sustainable, they must adhere to 7 principles including internally equitable, externally acceptable, affordable and cost-effective, legal and defensible, understandable, appropriate for the organisation and appropriate for the conflicting professional groups.

Jennifer Lynch in her report describe the essential factors to be considered in setting up an integrated conflict management system in an organisation. They are like the principles highlighted by Lipsky et al. (2003) but with a more emphasis on the contributions of the professional unions, early detection of conflicts and a need to incentivise the performance of managers in charge of running such conflict management office (Lynch, 2001, Lynch, 2003). Furthermore, Lynch highlights 5 distinct approaches that separates integrated conflict management system from case-by-case conflict resolution including:

1. Comprehensive: This entails that the conflict management system integrates solutions that are suitable for a wide variety of interprofessional conflict scenarios from micro to meso and macro levels and from relationship conflict to task and interunion conflict.
Also, a wide range of conflict cases from job role ambiguity, payment, promotion, career progression, appointment into key positions in the health system etc can be handled by such integrated conflict management system.

2. Competent: This relates to building a culture that fosters confidence in the conflict management system by being responsive to all conflicts cases and supportive to all involved. As reported by this study, one of the causes of IPGCs is government’s failure to honour previous agreement. The proposed conflict management system will ensure agreements are fulfilled and adequately communicated to all parties when there are difficulties or changes that impact the agreements.

3. Inclusive: This means different categories of stakeholders are well represented in such a conflict management system. There must not be discrimination or bias in the selection of those operationalising the CMS and all the functional groups in the health system must support it.

4. Options and choice: Applying this to Nigeria health system means ensuring there is adequate information on the variety of options available to conflict management. For instance, the professional groups receive trainings and coaching on conflict management. This study reports that IPGCs is sometimes fuelled by activism of professional association leaders who are often elected on the promise to deliver maximum welfare and protection for their members. Training such leaders on the available conflict management options and creating an open-door policy to support their choices is important in a CMS.

5. Organisational support: It is imperative for the organisation to provide adequate support for the CMS to function effectively. While there are communications resources such as memos, communiques, reported by participants in this study, lack of policy and funding are reported to hinder conflict management. According to lynch, sincere and visible leadership is essential to designing a CMS in an organisation. The lack of political will and poor visibility of leadership to champion CMS as reported in this study will need to be reversed in an integrated CMS that will bring about sustainable solution to perennial conflicts bedevilling the health system.
While the study by Roche and Teague (2012) argued that line managers and supervisors are more effective in conflict resolution against the hype of conflict management, there are more evidence that CMS gives avenue for continuous social dialogue which according to Jorens et al. (2015), is needed for societies to perform better.

10.5.4 Strengthening accountability process for patient management (clinical audits)

This study reports poor accountability in patient management resulting from the activities of professional associations/unions as one of the organisational factors causing interprofessional group conflicts in the health system. Professional regulatory councils ensure accountability in clinical audits, setting up a disciplinary panel and sanctioning any professional involved in misconducts. However, Mora and Tasmania (2018) describe some of the challenges facing professional regulatory councils such as poor funding, lack of adequate staff, staff training and lack of office space to coordinate activities. Such challenges have limited the ability of the regulatory councils to conduct their regulatory functions optimally.

One way to strengthen the accountability process in the health system is, as suggested in the recommendations, by merging the professional bodies and place them under an umbrella regulatory body such as in PSA in the UK. Besides helping to manage interprofessional group conflicts, PSA in the UK health system monitors the activities of the regulatory councils and registers to ensure compliance with global best practices and that the interests of the patients is protected always. PSA also ensures that professionals working in the health system are duly qualified, adequately trained and do not constitute any threat to the citizens and residents of the UK (PSA, 2021).

10.5.5 Transparent job evaluation and salary review

I report remuneration as a major cause of IPGC in this study and some of the issues regarding remuneration includes parity, lack of salary harmonisation and unilateral treatment. While JOHESU argued that the gap at entry level between doctors and other professions within the health system is unacceptably wide, NMA have insisted that such parity is a global best practice that must be maintained based on the level of skills, time, and their relevance in the health
system. It appears the process by which remuneration is determined is not transparent, understood by all stakeholders or adequately communicated. To overcome this challenge, a transparent job evaluation and pay review determined by all stakeholders in the health system is necessary. Such transparent job evaluation and pay review will not only consider the years of training and skills of each profession but also the level of risks, shift patterns and time input to establish equitable remuneration among the IPGs. Also, this study reported poor job description being a part of issues that uncoordinated professionalisation and poor organisational structure contributes to IPGC in the health system. The prescribed job evaluation can help to highlight clear job boundaries, areas of overlapping boundaries and job-shifting opportunities among the professional groups. Also, advancement in technology and methods is changing the landscape of professional practice globally, job evaluation can help in identifying courses that are no longer relevant in practice or those that can be merged. For instance, medical microbiology, science laboratory technology and medical laboratory science are courses that have significant overlapping roles that can be evaluated for merging considerations. Similarly, medicine, physiology, anatomy, and biochemistry.

Another consideration is the unilateral increment of salaries and dichotomy of salary scales between NMA and JOHESU. While NMA is placed on CONMESS, JOHESU is placed on CONHESS. Participants in the study by Sani et al. (2019) believe that salary can be harmonised through job evaluation and salary review. Majority (72.9%) of health workers agree that job evaluation is a prerequisite for equal pay for work of equal value and that it is a valuable tool for collective bargaining. Arguing from the position that the current CONMESS and CONHESS pay structures is based on agreement and not on job evaluation, the authors recommend a Unified Health Salary Structure (UHSS) which adopts systematic process to structure health workers’ salary to end the disharmony in the health system.

10.5.6 Re-orientation

Professionalisation, economic factors and human factors highlighted in chapter four has created the need for re-orientation of health workers in the country. Re-orientation is
necessary because there is currently a mindset that negatively impacts interprofessional relationships. Some as complex as how to determine remuneration in the atmosphere where interdependent professional groups have opposing views or as unnecessary as egoistic tendencies that blind professionals from seeing the impacts of their decisions on patient wellbeing and the performance of the health system. Most policymakers in this study agree there is a need for change and not just any change but a change that brings about sustainable peace and harmony in the health system. It is important for all health stakeholders to leverage such desire for the transformation of the health system and a reorientation would bring the necessary reflections to achieve this.

As reported in this study, some of the practices that cause IPGCs have historical origins dating back to colonial era. There is a need for reorientation to help foster patient safety values and culture. We cannot continue to build modern health system on old practices or ideology. In the interests of the patients and the performance of the health system, all stakeholders must be willing to make the necessary sacrifices and compromises.

10.5.7 Considerations for the appointment of Health Ministers

In the light that health system has not performed optimally under doctors, it might be worth considering the recommendation that public health administrators or neutral persons are appointed ministers of health as practiced in other countries. Challenges to implementing this may be as reported in the stakeholder analysis, the president upon his election has the prerogative to appoint his/her cabinet members including the minister of health. The role of health minister is political, but in a view to bring technical experience to solve the many challenges bedevilling the health system, most president-elect are compelled to appoint someone with technical expertise. This has not proven to benefit the health system due to the complexity of relationships and interests. It may be beneficial to orientate politicians on the impact of appointing a minister from professions in rivalry. Going by the global best practice, health ministers in high performing health systems are largely not medical doctor or other allied health professions. In cases where a president insists on appointing a minister with backgrounds in medical or allied health profession, it is important to empower the individual
with training in leadership, and management including conflict management so that they can deliver their job effectively.

10.6 System approach (Interconnectedness of themes)

Findings of the reviews, results and recommendations presented in this thesis indicate that no single theme stands alone. There are different levels of associations among the different aspects of interprofessional teamworking including conflict management, hence, it is imperative to view the themes holistically using a system approach. For instance, figure 15 shows the connectedness of themes on causes of interprofessional group conflicts in the health system. Unregulated professionalisation is strongly linked to economic, political, and organisational factors. Also, economic factors are strongly linked to agitations of the professional associations/unions and historical factors cause lack of mutual trust between NMA and JOHESU. Similarly, the policymakers’ recommendations indicate that functional management of IPGCs require a combination of approaches rather than a single stand-alone approach. This assertion underscores the recommendation that a total structural and financial reform which consider all the salient factors causing poor performance of the health system is conducted.

According to Sturmberg et al. (2012), policymakers and funders attempts to prioritise policy and economic constraints in health system reforms whereas, clinicians are concerned with patients and clinical aspects of the reform. This study brings illuminates the complex dimension of influence held by professional associations/unions through their interactions with each other and with the health system. Without a system approach, reform cannot solve the delicate balance of multiple stakeholder’s expectations in the health system (Sturmberg et al., 2012, Sturmberg, 2020).

10.7 Reflexivity

Recently, the concept of reflexivity in qualitative research has gained more attention with authors such as Braun and Clarke (2019), and Jacobson and Mustafa (2019) at the front burner of pushing a reflexive QR. Particularly, Braun and Clarke wrote about Reflexive TA which
describes a unique approach to qualitative research that appreciates the subjectivities of both the participants and researchers; and acknowledges researcher’s subjectivities as a resource in the construct of knowledge. They highlight that TA researchers are required to constantly think, reflect, learn, and evolve throughout the process of telling “the story” of their qualitative research.

This reflexivity is an exposition into my positionality as a researcher which highlight the social factors that impact my interpretations relative to the participants’ views on causes and management of IPGCs in Nigeria health system. I laid the foundation for this reflexivity in chapter one where I explored my shift in epistemological and ontological paradigms as well as my feelings, personal experiences and insider knowledge of Nigeria health system which drive my motivations for embarking on this study. This is in line with the submission of Johnson et al. (2020) who posited that reflexivity as a critical aspect of achieving rigour in qualitative research must be considered at an early stage.

First, I discuss the measures put in place to ensure the trustworthiness of this research including credibility, transferability, dependability, and confirmability. Although reflexive TA analysis accentuates flexible and recursive approach to qualitative research, reflection should cover how the qualitative research has been conducted rigorously so that findings can be applied reliably (Lincoln and Garba 1981; Tong and dew 2016; Noble and smith 2015).

Secondly, I adopt the social identity map designed by Jacobson and Mustafa 2020 to critique my positions and how my social identity influenced my approach to this research. Social identity map is a tool that enables researchers to structure their reflexivity as the main instrument of data collection and analysis. The tool comprises of three tiers of positionality mapping including social positions relating to class, citizenship, age, race, gender, sexual orientation etc. This forms the tier one of positionality mapping and serves as foundation for other reflexive analysis. The tier two involves identifying how my social positions impact my personal life as a precursor for understanding how social identities impact my research.
10.7.1 Credibility

The first approach to achieve credibility is through triangulation. This study is a mixed method research with two types of qualitative data including key-informant interview and document reviews. The data were analysed using RTA and content/documentary analysis respectively and the findings were triangulated in the discussion chapter. Policymakers are from different disciplines and organisations; hence, I adopt a flexible approach to data collection during the interview. Although an interview guide was designed \textit{ab initio}, interview questions were iterated to meet the needs of policymakers with research objectives in mind (Table 12). This enabled me to collect data from a broad perspective. Although 20 interviews were later included during analysis, they provide a nuanced, rich, and quality data representative of different categories of policymakers. Secondly, I leveraged the experience of my supervisors early into data collection by transcribing and sending my first few interviews for quality assurance. Their suggestions and advice contribute to the credibility of this research.

10.7.2 Transferability

I provide a detailed description of the context is in section 5.3. Also, I made use of theories and personal experiences extensively in interpreting policymakers views. While theories provide generalised ideas for expounding social phenomenon, context, and personal experiences differ. Although observations from the systematic mapping review conducted in preparation for this research suggests that LMICs share some similarities in interprofessional practice, the findings of this study must be cautiously applied with the understanding of contextual differences in structure, history, politics, and level of policymakers’ influence that may impact transferability.

On scope, my focus is on IPGCs between NMA and JOHESU which are the main professional groups experiencing major conflicts in the health system. However, the scope of this research transcends NMA and JOHESU. There are professional associations and unions within JOHESU itself whose interests’ conflict with each other and are locked in similar professional tussle as between NMA and JOHESU. Hence this thesis represents a macro level perspective on interprofessional conflicts among different groups of healthcare workers.
10.7.3 Dependability

To guaranty the dependability of this research project, I followed the School of Health and Related Research (ScHARR) standards for conducting a doctoral level research. I went through the confirmation review process which involves a rigorous peer review of the research proposal. Secondly, I obtained two ethical approvals from the ethics review committee at FMOH and ScHARR. I also followed the guidance of my supervisors throughout the research process.

10.7.4 Confirmability

This research is a reflective thematic analysis which means my subjective bias is a valued resource in the construct and interpretations of results. My subjectivities and the subjectivities of policymakers in this study form how results are constructed on causes and management of IPGCs. It is not expected that another researcher will use a similar approach or interpret themes as I have. However, I received my supervisor’s guidance throughout the research process which contribute to the rigour of this study. I also have an opportunity to present preliminary findings at conferences during the process of conducting and writing this thesis with feedback that help the whole process.

10.7.5 Positionality

In this section, I discuss three positions which I believe are most relevant to my experience in writing this thesis. These are based on social identity map (Jacobson and Mustafa, 2019) including class, citizenship, and ability.

10.7.5.1 Class

I was born into a lower-class family with civil servant parents. I knew early enough that we were not rich like some of my friends whose parents could afford bicycles. My parents had to supplement their salaries with farming for us to survive and I was already working to support my family at age 12. I knew my parents were hard working, but civil servants are not paid
sufficiently to meet their basic needs. This experience made me crave a society where there is justice and fairness. The gap between the rich and the poor is, in my opinion, too wide. The political class who makes laws and appropriate the country’s economic resources appear to protect themselves and many generations of their children abundantly, leaving others to work extra hard before they can earn a living. My engagement with conflict theory by Karl Marx and the theory of countervailing power described in section (3.3.3) appear to validate my preconceptions on the causes of IPGCs between NMA and JOHESU. I understood that unless I find other reasons to shape my judgement, there is an existing proclivity to interpret policymakers’ perspectives as “the oppressed versus the oppressor.” Such view would not allow me to construct the true story this thesis present as I have reported that IPGCs is a triumvirate phenomenon with government through the policymakers playing a crucial role.

10.7.5.2 Citizenship

I understood citizenship through my family, the history of our country, sports, and movies. My parents gave us the impression that hard work is central to what make us Nigerians. The national anthem is always sung on assembly throughout my primary and secondary school and the feeling when Team Nigeria scores during international match shaped my narrative of citizenship. Hence, I can say I grew up with an understanding of patriotism. During my National Youth Service (NYSC), I was able to demonstrate patriotism by implementing community development projects which earned me scholarship for my PhD. I carry myself as a patriotic citizen with responsibility to be just and fair to my fellow citizens. My experiences have rather compelled me to contribute to finding a lasting solution to IPGCs through reliable research. Hence, my feelings were set aside for a higher purpose. This position informs data collection in that I seek to obtain diverse perspectives of policymakers considering their backgrounds. It also impacts analysis, interpretations and how my interpretations are applied to the context. As a qualitative interpretivist, I understand the implication of constructing a narrative that is different from a genuine story. Knowing that will go against my value as a patriotic citizen compel me to “tell the true story” without fear or favour.
10.7.5.3 Ability

Close to the end of my MPH programme, I started experiencing serious and unexplained fatigue which I ascribed to accumulation of stress due to activities carried out in the postgraduate student association where I served as the President. I was later diagnosed with a chronic health condition in the UK. This impact my pace of writing this thesis to a certain degree.

My struggle with anxiety during data collection appeared to impact the conduct of key informant interviews. As a qualitative researcher, I am aware of the implications of appearing to be bias in a study that seeks to understand conflict between two groups. My dispositions, as the instrument of data collection were read as much as I sought to read the dispositions of my respondents during the interviews. For instance, constantly making a sound to keep myself actively listening to respondents is due to health condition but might have been perceived by policymakers as taking a side. However, qualitative studies accommodate researcher’s weaknesses and even subjectivities whether expressed or not. This is not to justify lack of accountability. Reflexivity gives opportunity to communicate such weaknesses as part of critical learning in qualitative research; the demonstration of transparency, honesty, and accountability which are traits expected of every qualitative researcher.

10.8 Limitations of the study

The sample size of policymakers selected for this study is small. There is a general criticism of qualitative studies in literature regarding having small sample sizes but qualitative studies, especially using reflexive thematic analysis prioritise quality of data over quantity. I was able to collect data that provide in-depth knowledge and experiences of policymakers on causes and management of interprofessional group conflicts even though the sample size is small.
CHAPTER ELEVEN
CONCLUSIONS

This thesis presents a story of policymakers’ perceptions and contributions on the causes and management of IPGCs in Nigeria health system following the epistemological and ontological paradigms underpinning HPSR and big Q qualitative research. Particularly, I focus on the dynamics of IPGCs between NMA and JOHESU. To answer the research questions, themes were developed and categorised after rigorous primary data collection, analysis, and interpretation while recommendations on management of IPGCs were organised using ideation.

Management of interprofessional conflicts is located as one of the crucial elements of interprofessional teamwork which is necessary for safe and quality care but also performance of the health system. As described in chapter one, conflicts are inevitable and frequent in health system due to the intrinsic complexities and changes necessary to organise a functioning health system. While not all conflicts constitute threat to the health system, as a matter of fact, some conflicts are beneficial, however, dysfunctional conflicts such as frequently experienced between NMA and JOHESU in Nigeria health system is a great concern for policymakers. Previous studies focus on micro level perspectives, whereas policymakers play an active role in the causes and management of the conflicts. Hence, this study is relevant in contemporary literature as it demystifies macro level perspectives and contributions to IPGCs.

As reported in this thesis, causes of IPGCs in Nigeria health system is intrinsically complex, multidimensional, and interconnected. Results of the reflexive thematic analysis showed that IPGCs are caused by unregulated professionalisation, organisational factors, economic factors, historical factors, political factors, and human factors while class struggles, poor implementation of relevant rules and lack of mutual trusts are reported from content/documentary analysis. This thesis extended interpretations of the causes of IPGC beyond remuneration, career advancement, lack of job roles and leadership factors which are commonly reported in literature, to the perspective of unregulated professionalisation. Professionalisation underscores the interests of different professions and all activities to
promote such interests irrespective of their impacts on other professions and the performance of health system. Generally, this study painstakingly delineates the causes of IPGCs by synthesising meanings based on in-depth analysis of policymakers’ views from macro level perspectives.

While previous similar studies do not attempt to understand availability of resources for managing IPGCs as a critical necessity for managing IPGCs, the current study reports that human, financial, and technological resources that are critical to effective management of IPGCs are insufficient in Nigeria health system. Although other priorities in the health system constraint resource availability for conflict management, this study highlights that managing dysfunctional conflicts is cost-effective compared to its negative impacts on patient safety and the performance of health system.

This thesis also reported that policymakers tend to use reactive case-by-case and unilateral approach to managing IPGCs with poor conflict learning and readiness which are necessary for functional conflict management. Through policymakers’ analysis, policymakers’ contributions to the IPGCs were identified and the need to ensure inclusive participation of all stakeholders was emphasised. This inclusive approach to conflict management provides a broader and more in-depth perspective to understanding IPGCs as well as promote accountability regarding policymakers’ responsibilities and contributions.

Most IPGC issues are linked to economic factors. Generally, health workers are not adequately paid to meet their basic needs due to economic recession and rising inflation. Then, high margin of relativity in remuneration scales between doctors and other healthcare professionals is strongly contested by policymakers associated with JOHESU, whereas policymakers associated with NMA believe it is a global best practice necessary for doctors’ motivation. The differences in views have been reported in other studies so it was expected in this study.

While appointment of health minister is the prerogative of the President based on people in his political networks, exclusively appointing doctors as minister of health is perceived to create preferential treatments that favour doctors. This is another original contribution to literature as most current studies do not attempt to consider this aspect. Also, there is a strong perception
among policymakers affiliated with JOHESU that policies favour doctors hence strengthening their belief that doctor’s exclusive claims to some key leadership and management positions is dysfunctional. Whereas poor communication between the minister and policymakers affiliated with JOHESU might be responsible for such perceptions. Hence organisational support for interprofessional communication is strongly recommended.

On management of IPGCs, there were diverse and sometimes opposing recommendations by policymakers which reflects policymaker’s interests and backgrounds. Functionalising professionalisation include merging regulatory councils under the support of an overarching legislative framework is also an original contribution to literature. Policymakers perceive that will help to refocus the interests of healthcare workers on the needs of patients and the performance of health system. Furthermore, developing and sustaining a conflict management system, institutionalising interprofessional education/training, strengthening accountability for patient management, developing transparent job evaluation and salary reviews, re-orientation, and a complete reform of the health system accompanied, with a comprehensive health insurance are ideas suggested would help to functionalise IPGCs in Nigeria health system.

Although policymakers have opposing and sometimes controversial recommendations on managing IPGCs, important common grounds such as the common believe that patients are the most important component of the health system and the believe that all health workers, irrespective of professions or cadre are important, are *sine qua non* to effective management of IPGCs. Also, the understanding that conflict is inevitable and continuous necessitates a conflict management system organised adaptively for flexible but effective response to conflicts as they emerge. Perhaps, conflict management can be situated within a broader interprofessional relationship management system to make it more functional including proactive response and conflict learning.

This study is not just providing practical recommendations on IPGCs from a broad perspective, it also proposes opportunities for further research into the different areas highlighted throughout the thesis. For instance, understanding how professionalisation impacts interprofessional relationship and whether NPM can lead to improved health system
performance in the health system would be a new focus researchers can explore in future efforts.

No conflict of interest declared.
REFERENCES


AFOLAYAN, J. A., ONASOGA, O. A. & ABUBAKAR, F. Nurses’ Perception of Antecedents to Interprofessional Conflicts Among Health Professionals in a Nigerian Teaching Hospital.


AGHAMOLAEI, T., TAVAFIAN, S. S., HASANI, L. & MOEINI, B. 2012. NURSES’PERCEPTION OF NURSE-PHYSICIAN COMMUNICATION: A QUESTIONNAIRE-BASED STUDY IN IRAN.


BRAUN, V. & CLARKE, V. 2020. One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative research in psychology, 1*-25.


Carr, D. 2014. Professionalism, profession and professional conduct: Towards a basic logical and ethical geography. *International handbook of research in professional and practice-based learning*. Springer.


EKWUEME, O. C. 2018. Nigerian Hospital-Based Interprofessional Collaborative Patterns and Organizational Implications.


GAZLEY, B. & DIGNAM, M. 2010. The decision to give: What motivates individuals to support professional associations, ASAE & The Center for Association Leadership.


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HUTCHINSON, E., BALABANOVA, D. & MCKEE, M. We Need to Talk About Corruption in Health Systems.


HYMAN, R. 2010. *Social dialogue and industrial relations during the economic crisis: Innovative practices or business as usual?*, Citeseer.


ILO 2019. Equality and Discrimination


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MASLOW, A. 1943. Maslow’s hierarchy of needs. *Index of DOCS/Teacing (sp) Collection/Honolulu.*


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THYLEFORS, I. 2012. All professionals are equal but some professionals are more equal than others? Dominance, status and efficiency in Swedish interprofessional teams. *Scand J Caring Sci*, 26, 505-512.


Appendix 1: Ethics Approval from the School of Health and Related Research

Dear Charles,

**PROJECT TITLE:** PERCEPTIONS AND CONTRIBUTIONS OF HEALTH POLICY MAKERS ON THE MANAGEMENT OF INTER-PROFESSIONAL GROUP CONFLICTS IN NIGERIA: GENERATING IDEAS FOR POLICY IMPROVEMENTS

**APPLICATION:** Reference Number 023537

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 26/07/2019 the above-named project was approved on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 023537 (dated 25/07/2019).
- Participant information sheet 1063815 version 3 (23/07/2019).
- Participant information sheet 1060640 version 2 (12/06/2019).
- Participant information sheet 1056471 version 4 (29/04/2019).
- Participant consent form 1060641 version 3 (20/06/2019).
- Participant consent form 1056408 version 3 (29/04/2019).

If during the course of the project you need to deviate significantly from the above-approved documentation please inform me since written approval will be required.

Yours sincerely,

Jennifer Burr
Ethics Administrator
School of Health and Related Research
Appendix 2: Ethics Approval from National Health Research Ethics Committee of Nigeria

National Health Research Ethics Committee of Nigeria (NHREC)

Re: Perceptions and Contributions of Health Policy Makers on the Management of Inter-Professional Group Conflict in Nigeria: Generating Ideas for Policy Improvements

Health Research Committee assigned number: NHREC/01/01/2007
Name of Student Investigator: Charles Bello
Address of Student Investigator: School of Health and Related Research
The University of Sheffield
United Kingdom
Email: charlesbelloa@gmail.com
Tel: +447714208008

Date of receipt of valid application: 30/07/2019
Date when final determination of research was made: 06-08-2019

Notice of Expedited Committee Review and Approval

This is to inform you that the research described in the submitted protocol, the consent forms, advertisements and other participant information materials have been reviewed and given expedited committee approval by the National Health Research Ethics Committee.

This approval dates from 06/08/2019 to 05/08/2020. If there is delay in starting the research, please inform the HREC so that the dates of approval can be adjusted accordingly. Note that no participant accrual or activity related to this research may be conducted outside of these dates. All informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study. In multiyear research, endeavour to submit your annual report to the HREC early in order to obtain renewal of your approval and avoid disruption of your research.

The National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations and with the tenets of the Code including ensuring that all adverse events are reported promptly to the HREC. No changes are permitted in the research without prior approval by the HREC except in circumstances outlined in the Code.

The HREC reserves the right to conduct compliance visit to your research site without previous notification.

Signed

Professor Zubafru Iliyasu MBBS (UniMaid), MPH (Glasg.), PhD (Shef.), FWACP, FMCPH
Chairman, National Health Research Ethics Committee of Nigeria (NHREC)
## Appendix 3: Interview Guide

<table>
<thead>
<tr>
<th>Question Category</th>
<th>Questions</th>
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<tbody>
<tr>
<td>Primary</td>
<td>What factors do you perceive as responsible for conflicts between NMA and JOHESU?</td>
</tr>
<tr>
<td>Primary</td>
<td>How can your office contribute to ways in which conflicts between NMA and JOHESU are managed?</td>
</tr>
<tr>
<td>Primary</td>
<td>What powers or authority do your organisation/office have to influence the interprofessional group conflicts between NMA and JOHESU?</td>
</tr>
<tr>
<td>Primary</td>
<td>What previous efforts or strategies have been used to manage interprofessional group conflicts?</td>
</tr>
<tr>
<td>Follow up</td>
<td>What impacts do you think those strategies have on how interprofessional group conflicts are managed?</td>
</tr>
<tr>
<td>Follow up</td>
<td>What roles could your office play in the management of interprofessional group conflicts in Nigeria health system using NMA and JOHESU as a case.</td>
</tr>
<tr>
<td>Follow up</td>
<td>How would you describe the interests of your office in the ongoing interprofessional group conflicts between NMA and JOHESU?</td>
</tr>
<tr>
<td>Probing</td>
<td>How would proper management of interprofessional conflicts benefit your organisation?</td>
</tr>
<tr>
<td></td>
<td>How would you describe the roles of NMA and JOHESU in the ongoing interprofessional group conflicts between them</td>
</tr>
<tr>
<td>Primary</td>
<td>How do you think interprofessional conflicts can be properly managed?</td>
</tr>
<tr>
<td>Probing</td>
<td>Why do you think those strategies will be effective?</td>
</tr>
<tr>
<td>Primary</td>
<td>How can your organisation facilitate the planning, development and implementation of such strategy?</td>
</tr>
<tr>
<td>Follow up</td>
<td>What factors do you think will limit the effectiveness of your suggested strategies?</td>
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<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Closing</td>
<td>What else can you suggest on the causes and management of interprofessional group conflicts</td>
</tr>
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<table>
<thead>
<tr>
<th>Organisation</th>
<th>Position of the Key Informant</th>
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<tr>
<td>Federal Ministry of Health</td>
<td>Honourable Minister of Health/ Honourable Minister of State for Health (PH)</td>
</tr>
<tr>
<td></td>
<td>Director of Health Planning Research and Statistics (CS)</td>
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<tr>
<td></td>
<td>Head, Human Resource for Health (CS)</td>
</tr>
<tr>
<td></td>
<td>Director of Hospital Services (CS)</td>
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<td>Director of Human Resource Management (CS)</td>
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<td>Heads of Statutory Professional Council E.g. Nursing Council of Nigeria, Nigeria Medical and Dental Council of Nigeria</td>
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<tr>
<td>Federal Ministry of Labour and Employment</td>
<td>Minister of Labour and Employment (PH)</td>
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<tr>
<td>Representative of Professional Associations</td>
<td>Executives of Nigeria Medical Association</td>
</tr>
<tr>
<td></td>
<td>Executives of Joint Health Workers Union</td>
</tr>
<tr>
<td></td>
<td>Executives of Association of Public Health Nigeria</td>
</tr>
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</table>
| **Private Employers** | MD, Hi-Fi Hospital, Gwaripa, Abuja  
| | MD, Nisa Premier Hospital, Abuja |
| **International Stakeholders** | Representatives of WHO  
| | Representatives of Global Health |
| **Civil Society/Patient Association** | Director, Wellbeing foundation |
| **Other Key Informants** | Health policy and management Researchers  
| | As suggested by key informants |
Appendix 4: Manual Transcription in Process
Appendix 5: Consent Form

PERCEPTIONS AND CONTRIBUTIONS OF HEALTH POLICYMAKERS ON THE MANAGEMENT OF INTERPROFESSIONAL GROUP CONFLICTS IN NIGERIA: GENERATING IDEAS FOR POLICY IMPROVEMENTS

Consent Form

<table>
<thead>
<tr>
<th>Please tick the appropriate boxes</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>Taking part in the project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have read and understood the project information sheet dated 23/04/2019 or the project has been fully explained to me. (If you will answer No to this question please do not proceed with this consent form until you are fully aware of what your participation in the project will mean.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have been given the opportunity to ask questions about the project.</td>
<td></td>
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</tr>
<tr>
<td>I agree to take part in the project. I understand that taking part in the project will include being interviewed including audio recording of the interview.</td>
<td></td>
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</tr>
<tr>
<td>I understand that my taking part is voluntary and that I can withdraw from the study before 31/05/2019; I do not have to give any reasons for why I no longer want to take part and there will be no adverse consequences if I choose to withdraw.</td>
<td></td>
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<tr>
<td>How my information will be used during and after the project</td>
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</tr>
<tr>
<td>I understand my personal details such as name, phone number, address and email address etc. will not be revealed to people outside the project.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand and agree that my words may be quoted in publications, reports, website pages, and other research outputs. I understand that I will not be named in these outputs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand and agree that my Supervisors and authorised persons from The University of Sheffield will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.</td>
<td></td>
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</tr>
<tr>
<td>So that the information you provide can be used legally by the researchers</td>
<td></td>
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</tr>
<tr>
<td>I agree to assign the copyright I hold in any materials generated as part of this project to The University of Sheffield.</td>
<td></td>
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</table>

Name of participant [printed] | Signature | Date

Name of Researcher [printed] | Signature | Date

Project contact details for further information:
For any information, please contact any of the following: Charles Azubuike Bello: +2349031399930, +447714280008; caazubuike@sheffield.ac.uk or Dr Julie Baland: j.baland@sheffield.ac.uk or Dr Andrew Booth a.booth@sheffield.ac.uk or Mr Olaniboun Aisulu falodumichael@gmail.com, +234809049689
Appendix 6: Coding in progress

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<td>Funds</td>
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And other union workers also raise these personal issues to the union's attention. Many of these issues are related to the union's objectives and the union's ability to achieve its objectives. If doctors can join the union, maybe we will be able to neutralize the whole problem. But then the doctors are not ready to join the union because the union was formed to attack doctors and, until now, it has not been clear to doctors if they are happy with what is happening in the health sector, the union's rivalry... because they can see it as a tool to keep everybody apart. Nobody would talk. And have been able to do that because we are no longer talking about quality of health care. We are no longer talking about what should be done to improve healthcare. We are now talking about what we should get that we're not getting and they also will not give you what you should get because they know and they will tell you if we give you this other person will ask for his own. In the health sector is going down, so they are using that tool to keep the health sector the way it is and even things are getting worse.
REFERENCES

17. Xyrichis A, Reeves S, Zwarenstein M. Examining the nature of interprofessional practice: An initial framework validation and creation of the InterProfessional Activity...


103. Afolayan JA, Onasoga OA, Abubakar F. Nurses’ Perception of Antecedents to Interprofessional Conflicts Among Health Professionals in a Nigerian Teaching Hospital. 2014;


110. Ekwueme OC. Nigerian Hospital-Based Interprofessional Collaborative Patterns and Organizational Implications. 2018.


112. Amsalu E, Boru B, Getahun F, Tulu B. Attitudes of nurses and physicians towards nurse-physician collaboration in northwest Ethiopia: a hospital based cross-sectional study. (1472-6955 (Print)).

113. Aghamohammadi D, Dadkhah B, Aghamohammadi M. Nurse-Physician Collaboration and the Professional Autonomy of Intensive Care Units Nurses. (0972-5229 (Print)).

114. Georgiou E, Papathanassoglou E, Pavlakis A. Nurse-physician collaboration and associations with perceived autonomy in Cypriot critical care nurses. (1478-5153 (Electronic)).


### Study Eligibility Form

#### General Information

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#### Study Eligibility Form

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- **Types of study**: All primary research. Reviews not considered.

- **Participants**: Health workforce.

- **Types of intervention/exposure**: 

- **Type of outcome measures**: 

Page 323
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OKORONKWO, I. L., ANIECHE, J. E., CHINWEUBA, A. U. & NDU, A. C. 2013. Enhancers and hindrances to doctor-


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REEVES, S., PERRIER, L., GOLDMAN, J., FREETH, D. & ZWARENSTEIN, M. 2013. Interprofessional education: effects on professional practice and healthcare outcomes. *Cochrane Database of systematic reviews*.


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