



**Agents of their health? Mothers as agents of
children's oral health in the kingdom of Saudi
Arabia**

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Abstract

Background: This study is the first of its kind; it questions the legitimacy of Western conceptualisations of oral health promotion in a culture that differs vastly from the West. Although within the dental literature the term agency has been implicit but has yet be explicated in relation to children's oral health. The aim of this study was to explore mothers' agency in relation to children's oral health in Saudi Arabia.

Method: This study involved using ethnographic and narrative methods. The approach adopted involved participant observation of 25 Saudi mothers with their children and dentists within dental visits followed by in-depth interviews with the mothers. Convenience sampling was used to select the participants. Data were analysed using inductive thematic analysis and construction of vignettes as a template to both describe and analyse qualitative data.

Results: Saudi mothers are dental treatment agents who acquire services for their children more than as oral health agents according to the nature of the public dental services. It was also found that dimensions of the agency within the private daily life of Saudi homes was enhanced or impacted according to the extended family networks, religion as a power, cultural expectations and daily practices.

Conclusions and implications: Oral health promotion in Saudi Arabia appears potentially more complex, according to the relative nature of the public domains and the nature of the private home space may both enhance and restrict mothers' agency. Considering the mother's agency is vital to promote effective outcomes in Saudi Arabia. This might be achieved by a range of actions including focusing on preventive measures, mother's involvement and communication, increasing awareness of a healthy diet and sugar consumption in public policies.

Keywords: Agency, children's oral health, mothers' characteristics, health promotion, dental setting, culture, family structure, extended family, religion, commensality, ethnography, narrative, daily practices, sugar consumption.

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LIST OF ABBRIVATIONS

GA General anaesthesia

GP General practitioners

DGP General dental practitioners

HLC Health locus of control

LOC Locus of control

KSA The Kingdom of Saudi Arabia

NHS National Health Services

UK United Kingdom

US United States

WHO World Health Organization

1. Introduction

This thesis is about the central role that mothers' play in the oral health of their children. Oral health in children is important because we know that pre-school oral health behaviours affect oral health in the later stages of the life course. Oral health behaviours and attitudes learned at an early stage of the life course can also have a determinate effect on later behaviours and attitudes. It is also the case that it is considered easier to learn preventive oral behaviour as a determinant of oral health later in life (Okada et al., 2002). This appears to be one of the main ways to improve oral health in children.

1.1 The importance of oral health in children

1.2 Functional importance

Oral health is defined as “*A state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity*” (WHO, 2012b). It is the “*Optimal state of the mouth and normal functioning of the organs of the mouth without evidence of disease*” (Fox, 2010). Oral health is vital to general health and well-being it involves more than being free of oro-facial pain, cancer of oral and throat, lesions in oral tissues, defects from birth for example cleft lip and or palate and other diseases that may influence on oral or dental and craniofacial tissues (Drum et al., 1998). All of these tissues are called (craniofacial complex) that enables us to smile, touch, smell, taste, chew, swallow, talk and cry out in pain. This complex gives microbial infection defence and surrounding threats (Petersen, 2003). It can influence many features of an individual's health such as speaking, eating, quality of life, self-esteem, education, work and the degree of usual activities (Drum et al., 1998).

1.3 The social and psychosocial importance of oral health in children

Oral diseases in children create physical, social and psychosocial impacts on their day-to-day quality of life (Chen and Hunter, 1996). For example, dental caries is a common problem that affects children globally. Severe caries causes pain, eating problems, school absence, being too embarrassed to smile and restricts peer to peer interactions. Appearance related issues with teeth may also lead to bullying in school resulting in social isolation (Hawker and Boulton, 2000). We could suggest here that preventive dentistry should focus on the whole family and its oral health practices and life styles rather than the functional aspects of oral health (Mattila et al., 2000). However, focusing on life styles and practices without recognition of the impact of the socioeconomic and cultural environment may only provide a partial view of the importance of varying factors in relation to oral health.

The dental caries experiences and influences on a child's dental health status may affect their whole life since this experience is a predictor of more caries in primary teeth and later in the permanent teeth (Low et al., 1999). Children in the preschool period cannot express their pain but the pain changes their behaviours in eating and sleeping (Low et al., 1999). Caries may affect body height and weight because of the impact on the child's nutrition and general health (Jokovic et al., 2003). Furthermore, early loss of anterior teeth due to caries may cause speech problems (Von Burg et al., 1995). In addition to the negative effects on children, there are some on the parents as well, who need to provide care for the affected children which consequently means decreased work days, lost time and money (Jokovic et al., 2003, Jokovic et al., 2002).

Mothers are often seen as the supportive agents of oral health in dentistry. A literature review has revealed that good oral health behaviour is adopted by parents in the home setting; particularly the mother, who it is argued is the first model for her children's behaviour (Abiola Adeniyi et al., 2009). This may be effective in caries and periodontal prevention (Okada et al., 2002). Therefore, they are considered as central to the focus of oral health promotion. Consequently, the aim of this study was to explore mothers' agency in relation to children's oral health in Saudi Arabia.

1.4 Structure of the thesis

This thesis is structured as follows:

Chapter two presents a review of health promotion, its history, and its development. A detailed explanation of the critiques and arguments around the health promotion is provided. The mothers' role within health promotion either within health or oral health is also presented from the existing literature.

Chapter three defines the concept of agency and reveals the problem of the mothers' agency in health promotion and oral health promotion together with detailed examples of previous studies about oral health as maternal responsibility. Mothers' agency and its implications for children's oral health promotion is also outlined.

Chapter four presents the context of Saudi Arabia. In relation to mothers' agency, it is important to understand the context within which mothers are mothers in Saudi Arabia.

Chapter five presents the rationale, aim, research question and sub questions of the study.

Chapter six presents a detailed description of the research approaches. It defines the qualitative methodology that has been proposed for the study and introduces ethnography and narrative research, indicates the advantages and potential challenges of using the combination of the two approaches, and the ethical considerations. The purpose of this section is to evaluate those most relevant, and justify why a combination of approaches has been selected for this study. The data analysis method is also defined.

Chapter seven provides an overview of how this study was conducted, following on from the general ideas and principles outlined in the methodology. This study involved a combination of participant observation with mothers and their children in dental clinics followed up with in-depth interviews focussing on narrative methods and techniques. It provides a detailed overview of how the study was carried out.

Chapter eight presents and discusses the research results and reflect on the research findings. It presents the results of the study from within the public contexts of Saudi

mothers including the school in the first part, and the dental clinic in the second part. An account of Saudi public life will be provided through a description of the relationships between families and each of these public settings and how these settings can have a significant influence on mothers' agency for oral health.

Section nine presents the research results and discusses from within the private contexts of Saudi mothers. The first section in this chapter presents a definition of family, it goes on to explore the structure and organisation of the family in Saudi life this includes a discussion of the distribution of roles and responsibilities in the family before going on to explore how this impacts on the agency of mothers. The second section describes the dimensions of private Saudi life; the different family types, uncovering the degrees of tightly organized lives through their relationships. It discusses how mothers exercise agency within their positions and responsibilities in the private domain and suggested that the social relationships within the family and extended family have a considerable impact on children's oral health

Chapter ten is a deeper exploration of the private domain which exemplifies the traditions and social relationships of Saudi families. It discusses the importance of commensality in Saudi culture and how it is considered as one issue of mothers' agency in family life at Saudi home

Chapter eleven clarifies the relationship between variables that influence mothers' agency in relation to children's oral health within the private domain. It discusses how these variables interact with each other. Illustrations are provided in order to aid a more detailed understanding of how mothers' agency operates within the Saudi home. These variables include; defined and fixed roles, religion, family relationships and culture.

Chapter twelve discusses the research findings including strengths and limitations of the study. It appraises the key findings and compares with those of previous studies, presenting the implications of the study and policy recommendations. Finally, considerations for future related research is presented.

2. Literature Review

This study is concerned with mothers' agency in relation to children's oral health in Saudi Arabia. This section seeks to clarify the relationship between health promotion and the concept of agency which is related to the ability of mothers to control children's health and oral health. I will start this chapter with a brief history of health promotion as it is presented within public health. This chapter will also present several stages of the development of health promotion and some critiques and arguments around health promotion. Finally, the mothers' role in health promotion and oral health promotion will be discussed.

2.1 Health promotion

2.2 A brief history of health promotion

Health promotion is not new concept it began from 1980s to improve public health and prevent diseases (Porter et al., 1999). Health promotion has undergone several changes over time, until the development of the new public health recently (Mold et al., 2013). In this section I will go through these changes with the goal of understanding the underlying idea of health promotion and its relation to this study.

In the 19th century, after the industrial revolution in western countries such as Britain, cities became larger and the population expanded. As a result, the living environment and sanitation facilities were not good enough especially with population growth. Infectious diseases became a significant problem including cholera that affected 53,000 people in Britain (Snow, 2002). At this time there was an increasing realisation that the *industrial* environment was having a negative impact on health (Thorogood et al., 1992) and as a consequence the causes of infectious disease required action to be taken such as cleaning the water supply and eliminating dirt and pollution to improve living conditions and subsequently to improve public health (Mold et al., 2013). These actions started in cities where the working population lived in order to protect them; the military population and

even the upper and middle classes who live in the cities were also more exposed to infectious diseases. The goal of these interventions was to promote the nation's health which became an important political policy involving preventive measures such as immunization amongst other things (Durbach, 2005). These public health polices acted as a form of social control (Donajgrodzki, 1977) and practical solutions but did not clarify the causes of general problems (Hamlin, 1998).

At the end of the 19th century a new path to solving environmental issues in France and Germany developed that sought to link diseases and their causes; this approach was called "scientific medicine". At this time it was established that some microorganisms could cause specific diseases and the treatment of choice quickly became the development of specific treatments such as antibiotics (Worboys, 2000). As a result of these developments the direction of policy also shifted from the cleaning of the environment to people, diseases and how people care for themselves. Clinical medicine became focused on the psycho-social contexts of people as well as their behaviours (Arney and Bergman, 1984). As a result, health behaviours and lifestyles became central to the public health agenda (Tannahill et al., 1992). This social hygiene movement focused on 'individuals' and society to develop a new form of preventive medicine focussed on changing the behaviours of individuals. For example, mother's ignorance was considered a cause of infant mortality and morbidity (Dyhouse, 1978). As a result, services sought to encourage mothers to engage in breast feeding, and producing better food and hygiene at home. As a consequence, there was an increasing focus on mothers and children's health. Health visitors were now to see mothers at home in order to give them advice in relation to how to care for their children and how to engage in good parenting in relation to feeding and hygiene. Health visitors were especially supportive to mothers during World War II (Davies, 1988).

After the 2nd World War and in the middle of 19th century, western countries sought to develop more organized health systems to positively improve health, prevent diseases and as a consequence not only treat disease. For example, the National Health Services (NHS) in Britain focused on health education and prevention. Although the NHS started in 1944 to provide a free health service, the problem was that when it was established it focused more on treatment rather than health promotion. As a consequence, public health needed to find a

new path to influence public policy. In Britain, this started with the idea of 'social medicine' associated with Prof Ryle who started to recognize the importance of individual social contexts such as education, economy, work, nutrition and psychological aspects of individuals and communities (Ryle, 1948). Ryle emphasized a broader idea of health as not only the absence of disease but also to have a better public health. A consequence of these developments was to bring other sciences to public health such as the social sciences which linked individuals, their environments, behaviours and sickness beliefs. For example, the relationship between smoking, cancer and heart disease; where smoking was viewed as a risk factor for these illnesses. Consequently, social medicine is considered as a key factor to present the current public health.

2.3 Health promotion within public health

What is the current public health or the new public health? It is related to risk, prevention, and people's behaviours and controlling all these factors claims to improve public health. The new public health developed out of a critique of clinical medicine. This critique was famously established by Thomas McKeown in 1979 in Birmingham University who argued that improvement of mortality rates over the previous century occurred as a result of better living and nutrition conditions rather than medical interventions (McKeown, 1979). The Canadian Minister of Health (Lalonde, 1974) emphasized the same critique about the influence of better of living conditions and nutrition leading to increased levels of public health more than biomedical measures (Lalonde, 1974). Basaglia (1986) agreed with this structural critique arguing that is difficult to separate patients from their societies because they are a part of them. This resulted in an emphasis on the complexity of people's daily social lives which were constituted through culture, religion, work, family structure, social norms and values (Tuckett, 1976). Material issues such as housing may also have influenced how people behave in relation to health (Basaglia, 1986). Health promotion developed in response to all of these differences or constraints in social, cultural, political, and policy contexts (Macdonald and Bunton, 1992).

Health promotion was also recognized as a vital element within the field of public health (MacDougall et al., 2007). Health promotion is different to other public health strategies

because it is concerned with the broader contexts of the individual and the community. Between the 1970s and 1980s, the World Health Organisation (WHO) highlighted health promotion as the principal means for fighting disease. This approach sought not only changes in the environment of specific conditions but also to support the promotion of healthy behaviours and choices on the part of individuals. As a consequence, health promotion sought to go beyond simple environmental changes to drive changes in people's behaviour in order to improve their health by making them responsible for their own health. Media campaigns were also started in an attempt to improve health by changing people's fundamental behaviours in order to protect them from being sick. The concept of health therefore was expanded towards securing the health of community in order to protect other people by, for example, reducing second-hand smoking and banning smoking in public spaces (Berridge, 2007).

To sum up, the first appearance of health promotion was with public health using the preventive model of health, and was related to health education with the aim of empowering people to achieve the best health possible. People were supposed to achieve good health through applying preventive knowledge, this was because it was assumed that they could change their lifestyles, and be responsible (Green and Tones, 2010). However, there were important tensions in this approach because it had a tendency to blame people if they did not achieve optimum health. As a consequence there were examples where this approach failed to take into account different environmental circumstances (Ryan, 1976).

2.4 The development of health promotion through the WHO

There are several stages of development of health promotion through the World Health Organisation (WHO) who used a holistic definition of health at the beginning of "Health for All" (WHO, 1977). A year later, the WHO recognized the function of health primary care to meet the aim "Health for All" in the *Declaration of Alma Ata* in 1978 in order to involve all services to serve health such as health education in all levels of community (WHO, 1978) especially primary health care services (Cueto, 2004) in low income countries (Berridge, 2007). This approach became known as the primary health care

approach and remains an important element of health promotion to this day. In 1984, the WHO began a new health promotion programme and defined it as is ‘the process of enabling people to increase control over, and to improve, their health’ (WHO, 1984). The issue of control and how individuals are able to control their lives has become central to health promotion.

There have been many international conferences about health but the first international conference of health promotion was in Ottawa in Canada (WHO, 1986). The aim of this conference was to build the principles of health promotion and discuss the actions of the health promotion framework: building healthy public policy, creating supportive environments, reorienting health services, developing personal skills, and strengthening community action. Hence, health is created in the settings where the people work, play, and live, therefore to have good health we have to address the role of the environment (WHO, 1986). This meant that governments have to take some responsibility in order to provide healthy environments for people within public and community sectors. For example, the development of Healthy Cities in 1987 to improve their population’s health (Petersen and Lupton, 1996).

Table 2.1: Brief summary of the health promotion international conferences.

The 2ed was in Adelaide, Australia	On healthy public policy as supportive to health promotion, to create supportive environment to make healthy choices the easy choices and involved the community efforts (WHO, 1988).
The 3ed was Sundsvall conference in Sweden in 1991	Addressed the supportive environment and involved the physical environment and norms and culture influence on people’s behaviors.
The 4th international conference of Health Promotion into 21 st Century in Jakarta in 1997.	Discussed the health as people’s right and a tool to develop social and economic aspects of society.
The 5 th conference was in Mexico in 2000	Emphasized the idea of ‘bridging the equity gap’ that health promotion as social development is the government responsibility and accordingly all society areas have to share.
The Bangkok Charter for Health Promotion in 2005	On Globalization involved global aspect to solve the health inequality within countries in the world.

Table 2.1 provides details of international health promotion conferences. All of these international conferences’ documents stressed the main components of health promotion as being focused on empowerment and equity to achieve health as a right for individuals.

2.5 Critiques of health promotion

There have been several critiques of health promotion focussing on three key aspects of the approach, these have been referred to as the structural, practical and surveillance aspects, each of which need to be considered. Firstly, it has been argued that although health promotion is interested in the structural constraints of health this interest is still not sufficient (Marmot, 2004). Marmot (2004) has argued that frequently those involved in health promotion have, perhaps unwittingly, shifted responsibility to individuals for their health whilst at the same time blaming them if they fail to improve their situation. This approach has been called 'victim blaming'. Victim blaming happens when we ask people to take responsibility for their health without paying attention to structural factors such as when governments' fail to intervene to control tobacco. Secondly, it has been claimed that health promotion just does not work properly (Le Fanu, 1994). This is because resources are diverted towards prevention rather than treating sick people, but in practical terms general health systems work on sick people rather than taking preventive measures. Even if a change in orientation actually happens within general medical systems it will take a very long time and the consequences will not be easy to measure (Le Fanu, 1994).

Thirdly, people act according to their autonomy and agency as a result it has been claimed that health promotion is an instrument of social control (social regulation) in relation to people's health (Armstrong, 2008). Armstrong (2008) made this point about health promotion that encourages people to behave in a suggested way without considering their agency and autonomy. Arguably; there is a need to address individual agency and social structure in relation to health. Although individuals need power to control this relationship in order to exercise their health choices within existing constraints to create healthy routines and behaviours. Health promotion has previously presumed that people are enabled to make healthy choices by presenting health education and developing skills, but the discipline has so far failed to address the problem of social structure. Indeed it has further been argued by some authors that consideration of these structural problems will become important tools to increase the effectiveness of health promotion for the future (Macdonald and Bunton, 1992).

As we have seen – a central part of the debate about health promotion is that the environment where people live has an influence on people's health and health choices. This means people need to be empowered to practice these healthy choices within their environment. Therefore, the physical, socio-economic and cultural aspects of the environment need to be mutually supportive (Green and Tones, 2010). This negotiation between people and their environment to conduct health is called agency. On other hand, this negotiation and interaction between people and their environment is also influenced by people's circumstances which then impacts on peoples' capabilities to achieve their goals (Bandura, 1986). There is a more detailed discussion about agency in the next chapter.

2.6 Mothers within health promotion

As stated previously, mothers have been the focus of government efforts to promote health for a considerable amount of time. The 'good' mother has become constructed as a provider of physical protection, emotional warmth and health, especially for their children (Bell and Valentine, 1997). Indeed, mothers are usually perceived as the primary caregivers, emphasising the importance of their role. They are responsible for ensuring that their children have access to immunization services, carry out hygiene practices, and receive adequate and appropriate nutrition for growth and development (WHO, 2005). However, some authors argue that mothers need support to fulfill all these expected functions and to negotiate services (Graham, 1984). As a result the position mothers occupy in relation to health promotion can often be ambivalent. It could be argued that this is the case when it comes to breast feeding.

Breast feeding is a good example of the expectations that can be placed on mothers' as a result of health promotion campaigns. Health care professionals have continually exhorted mothers to breast feed their children in the 'breast is best' campaign. The way this campaign is worded implied that if mothers do not breast feed their children they are not giving their child the 'best' (Earle, 2003). Commentators have argued that such campaigns often frame messages in ways that fail to recognize the diversity and complexities of women's experiences. In doing so, they risk neglecting the social and cultural spaces that

many women occupy. In addition, such campaigns can result in constructing mothers not breast feeding their children as agents of risk to their children (Wolf, 2007).

2.7 Oral health promotion

As we have seen, the WHO defines health promotion as the process of enabling people to increase control over and to improve their health (WHO, 1984). Health promotion involves developing supportive environments to maximize the possibility of leading healthy lives. The same is true in oral health promotion, which, for example, involves the provision of oral health information and education to enable people to make choices that promote oral health, teaching them the skills they need in order to use the information effectively and increasing their confidence that they have a choice and can exercise control over the options available to them. Such education can be provided in a wide range of settings such as schools and places of work.

Oral health promotion involves populations not only in improving individual lifestyles and behaviours but also in addressing the social determinants of oral health and environmental circumstances (Kay and Locker, 1996). The implementation of appropriate policies and guidelines are a key focus of the oral health promotion programs.

2.7.1 Settings for oral health promotion in the West

There are many examples of oral health promotion programs in the UK in various settings. The home is one such setting and providing toothbrushes and tooth pastes to parents of young children through health visitors. This is an attempt to start tooth brushing early, and to ensure twice daily tooth brushing. Other actions to promote oral health might also involve advice for a healthy diet and preventive dental visits (Pine and Harris, 2007), including working with preschools by providing resources and materials designed to develop the oral health promotion skills and competence of child carers. Oral health can also be promoted by providing practical advice in order to improve nutrition and oral health, suggestions for involving parents, ideas and resources for playing children's activities in order to raise awareness of good oral health and support early year staff to develop policies in the preschool setting (Watt et al., 2001). Schools can also provide access and related information and prepare children with the skills and attitudes in order to

make informed decisions about their health (Pine and Harris, 2007). Health promotion might also involve encouraging the delivery of healthier food at specific times during the day (DfEE, 1999) and ensuring that only sugar free foods and drinks are offered to students (Daly et al., 2013). I will discuss the school as a supportive setting for mothers' agency in depth in chapter 8.

All these settings can help to create an environment that is supportive to health in 'making healthy choices easier choices', and raising awareness of the benefits of good oral health to overall good health. One of the main settings of children's oral health promotion is the home; it is the place for the beginning of children's oral health practices, especially with the mothers as main providers for their children.

2.7.2 Mothers and oral health promotion

The mothers' role appears to influence oral health behaviour in their children in order to prevent dental diseases earlier and transfer good oral habits to their children (Saied-Moallemi et al., 2008). Hence, the mother is the primary agent of socialization towards her children through regular tooth brushing (Adair et al., 2004), using floss, reduced sugar intake (Gibson and Williams, 1999) and regular dental visits (Okada et al., 2002). However, some authors argue that mothers who visit the dental clinic and regularly follow dental advice appear to possess greater oral health knowledge and implement practices at home such as the link between using fluoride toothpaste and decreasing caries such mothers possibly experience the conditions of social advantage (Petersen, 1992).

As a result, effective oral health behaviour is adopted and shaped by parents within the home setting, particularly the mother who, it is argued, is the first most powerful model for her children's new behaviour (Abiola Adeniyi et al., 2009). These behaviours are effective in the prevention of dental problems such as tooth brushing (Okada et al., 2002). Oral health promotion constructs mothers as supportive agents who are central to the focus of oral health promotion. Oral Health promotion also places responsibility on the mothers in relation to their children's oral health, mainly because they are viewed as the primary care provider. Sociologists have argued that Western societies have constructed a model of active care for childhood which begins in the home with mothers who must learn to be effective dental 'agents' for their children (Nettleton, 1991).

2.7.3 The dentist mother relationship

Some studies appear to suggest that positive and effective communication between mothers and dentists may be an enabling factor in oral health care (Freeman, 2008). For example, involvement of the parents during treatment prevents conflicts of treatment discussion (Adair et al., 2004). This has led the American Academy to suggest that all paediatric staff and auxiliaries should be trained to be effective in communication skills with parents (Adair et al., 2004).

There are several barriers to communicating effectively between dentist, parent and children in the dental clinic. For example, the dentist's failure to clarify the parental cues or hints and time limits which prohibit questions and a lack of participation from children and their parents (Clayman and Wissow, 2004). Extended appointments for dental visits can develop information exchange and facilitate improved participation between dentist, parents and children (Cox et al., 2006). Therefore, communication skills must be effective and efficient to achieve the dental treatment goals and provide constructive dental experiences for children and their parents thereby promoting positive attitudes. In chapter 8, I discuss the dental clinic as a public domain of mothers' agency in more detail.

However, lack of cooperation from the mother is considered negatively for children's oral health and reduces the success of dental health work (Arnrup et al., 2002). Effective communication and interpersonal skills on the part of dental professionals are important to help mothers exert their responsibilities as dental agents towards their children in relation to dental care (Nettleton, 1991). It would appear that it is the responsibility of the health care professional, as provider, to enable patients as consumers about their health, to make efforts to maintain health. For example, in the dental field, this relationship is vital to maintain dental health (Freeman, 2008). We shall return to this later as a key factor influence on mothers' agency when considering the results of this study in the dental clinic as a public domain in chapter 7.

2.8 Summary

Health promotion is often described as: *‘The process of enabling people to increase control over the determinants of health and thereby improve their health’* (WHO, 1986). This definition is open to interpretation. For example, Seedhouse (2004) argues that it says very little and that it masks the human values that underpin health promotion which, at present, remain unacknowledged (Seedhouse, 2004). He further asserts that for the field to advance there must be some acknowledgement of this position. What the WHO description of health promotion does not include is an appreciation of the concept of agency. Agency is the capacity of an individual to control and shape their own lives and influence that of others to being responsible through the choices and actions they may take within the opportunities and constraints of history and social circumstances (for further explanation about agency see chapter 3). The Ottawa Charter talks about people being able to control their health, and this clearly relates to agency, the problem is that the Charter does not explore to any great depth the degree and role of agency that people may have. There is a risk of presuming that all people can exert control and that this is possible for everyone. In the case of mothers, this might refer to their ability to act as agents of their children’s health and oral health. In the next chapter we will consider the problem of agency in more depth.

3. The problem of agency in health promotion and oral health promotion

There are several definitions of agency in general which range from the capacity of people to control and shape their own lives and influence that of others to being responsible through the choices and actions they may take. Many of the examples are about autonomy which suggests that people can act independently and construct their own environment. Whilst agency is a general term with respect to health promotion involves being able to take control of one's health and the health of those around us. This chapter will discuss agency as a concept alongside other concepts in the social psychological literature, and then will explain how mothers' agency is related to health and oral health of children.

3.1 Overview of agency

Agency remains a slippery and elusive concept because there appears to be no universal definition. The concept is also problematic because views of agency are often shaped by western perspectives of the actor (Holstein and Gubrium, 2000). For example, in sociology, agency is depicted as a sense of individual freedom and power; related to social interaction (Flaherty, 2003); how individuals reproduce free actions in their social structural setting (Layder, 1997); agency is also discussed in relation to the need to involve both freedom and constraints in a social structural setting (Giddens, 1984).

Agency as a concept seeks to tie actors (individuals) to their environments and temporal relations within the context of action. It seeks to highlight the habits, decisions, and thoughts people engage in as a response to historical situations and problems (Emirbayer and Mische, 1998). Personal agency is constructed from the first months of life by transactional experiences with the environment through behaviours (for example: parents may encourage skill development, to enable children to become more competent in activities, thereby needing less assistance to develop a sense of personal agency). It is through recognition of their actions that children may then regard themselves as agents (Mandler, 1992). To develop a clearer understanding of human agency, we perhaps need to

combine the concept with other concepts in the social psychological literature such as self-efficacy (Gecas, 2003), planful competence (Clausen, 1995) and “free will” or the “ability to initiate self-change” (Thoits, 2003).

3.2 Self-efficacy and agency

People have the ability not only to be agents of action but also self-examiners of their own performance through self-awareness. This reflects their self-efficacy, in that people display a capability to reflect on themselves through their thoughts and actions. This property of agency can be the most important. People as agents not only operate autonomously but their actions encompass intrapersonal, behavioral and environmental determinants. People are therefore simultaneously producers and products of their life circumstances for the past, present and future (Bandura, 2006). Individuals who develop competence, self-regulation, and have belief in their self-efficacy may generate a wider range of options that expand freedom of action, and are more successful in achieving preferred outcomes (Schunk and Zimmerman, 1994).

Self-efficacy affects people’s thinking or cognitions influencing them and it also influences people’s goals, motivations, develops resilience, and may shape expectations of particular outcomes to attain either favorable or adverse results (Bandura, 1997). Therefore, this can consequently exert a direct effect on general health to such an extent that people feel a sense of control over their environment, which can facilitate health behaviours and enable people to make changes and set goals towards more positive health within the constraints and opportunities of the society in which they live (DeVellis and DeVellis, 2000).

Self-efficacy may therefore be proposed as a factor that may improve the oral health (practices) of children. If we consider mothers as facilitators of their children’s oral health, then their values, beliefs, cultural practices and so on may pass to their children through daily interactions and oral health practices. Agency appears to be a continuous process and we can suggest that mothers as oral health agents can use their oral health knowledge, behaviors, and habits to influence their children’s daily oral health practices.

Although the term agency is used liberally in the literature, it is considered important for social scientists. For example, Ahearn (2001) describes agency as “*the socioculturally mediated capacity to act*” (Ahearn, 2001). Here, it is important to consider human nature (feeling, thoughts, identities and motives), individual interaction, constraints affecting social actions of people (Bandura, 2001). Flaherty (2003) suggests that people exert their agency through shaping their experience of linear time (Flaherty, 2003). Whereas, Mead and Blumer’s work suggest that people’s actions are directed to conduct what social life needs and a contrasting argument is that individual action does not happen in a vacuum and is the product of multiple interactions (Swanson, 1992). Agency may then be said to stem both from individuals and from the external environmental circumstances that may exert influences on the individual as an agent (Hitlin and Elder Jr, 2007). It may be said that circumstances shape individual habits and routines in the immediate and long term.

3.3 Agency and structure

It is argued that social institutions may structure people’s lives include a chain of age related occurrences around individual roles in society across the life course (Elder Jr, 1998). It is often suggested that agency is the means by which we can shape our lives. Agency is affected by society, institutions, culture and life course patterns (Crockett and Silbereisen, 2000), so although families may possess agency they are simultaneously constrained by structural forces beyond their control. The general constraints around agency may then be said to be culture, the life course, society and its expectations, and institutions. One definition of agency in the life course is: “*Individuals construct their own life course through the choices and actions they take within the opportunities and constraints of history and social circumstances*” (Elder Jr, 1998). Therefore, life course agency can help in understanding the interaction between individual life choices and social structure (Emirbayer and Goodwin, 1994). Individual life choices may be said to be dependent on agency in reproducing social structures (Alwin et al., 1991). The various approaches to agency that can be found in the literature are summarized in Figure 3.1 below.

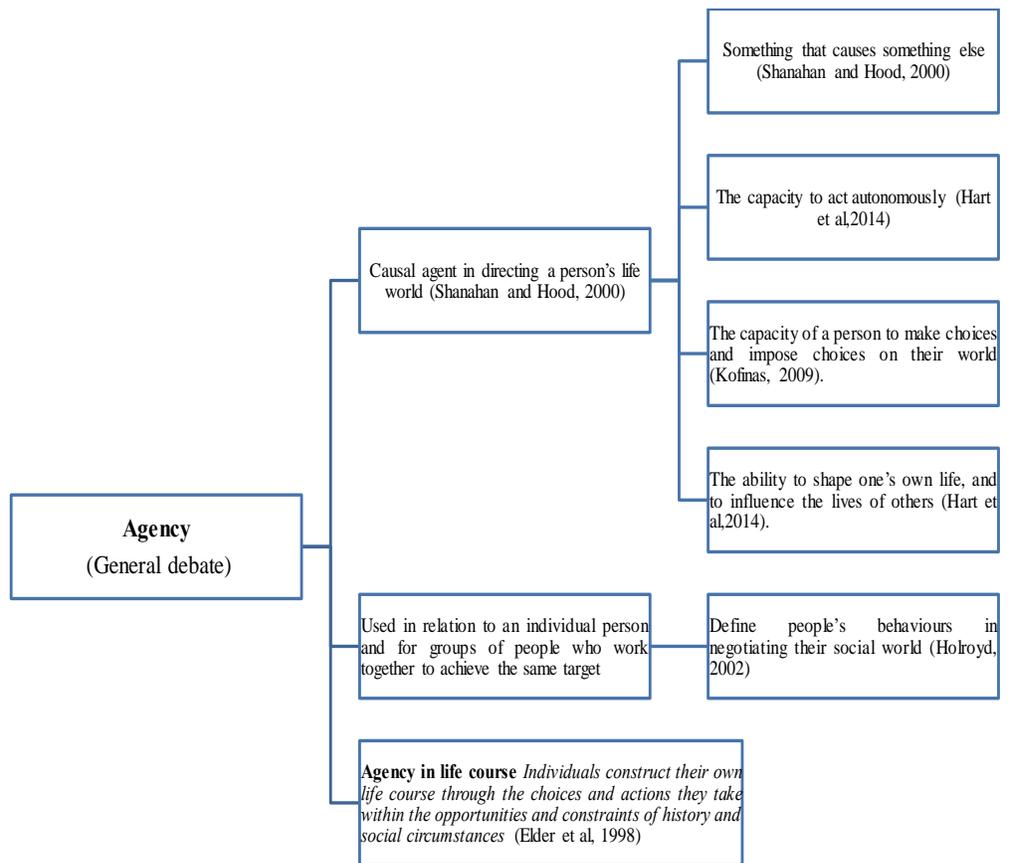


Figure 3.1 A conceptual map and summary of the definitions of agency

3.4 Agency, structure and action

There is a huge debate about the problem of agency in sociology. It is not possible to cover all of the details of this debate the thesis will instead focus on the key elements of the debate along with key theorists. Giddens (1979) work on agency suggests that structure and agency cannot be seen as separate concepts since they are irrevocably interlinked: social structures provide the means through which people act, but the form these structures take are as a result of their actions. In this sense, social life is not only reproductive, in terms of both the continuity of structures and institutions, but also potentially transformative. People

can and do have the power, through their actions, to change the very social structures and institutions through which they have to live and work (Giddens, 1979). Giddens work highlights the need to differentiate between agency, structure and people's actions. Agency remains a general dimension that is present in all human actions. Therefore there is no concert agent but only actors who engage agentially with their environments. This means actors as in individuals are considered to be much less central than agents and agency itself ought to be considered constantly tangled with social structure (Alexander, 1992). The challenge at this point is located in how to differentiate between the agentic process and particular context of action, in order to identify agentic actions from human actions. The key to this is the temporal orientation of agency appearing as agentic capacity in the structure of agency (Emirbayer and Mische, 1998).

Agentic capacity is defined as "*the temporal relational contexts constitute the pattern of response that shape agentic orientations*". According to this definition Emirbayer and Mische suggested there are sorts of cultural, socio-structural and psychological contexts that can enable different modalities of agency (Emirbayer and Mische, 1998). As a result, people can develop greater agentic capacity and therefore produce agentic activities. This means that a diversity of agentic orientations allows actors to exercise different forms of mediations/ negotiations over their contexts of actions. Agentic orientation improves people's capacity within their living contexts enabling them to exercise greater agency.

3.4.1 Individual responsibility and agency

A related issue in western societies associated with the problem of agency is the idea of individualization (Leary, 2003). For some writers, the process of individualization has resulted in health becoming the focus of individual responsibility and not simply a responsibility of governments (Denmark, the UK, so on). Health is a vital sphere within which to exercise agency. The health field may change the disease model to a health model that is influenced by lifestyles habits (Bandura, 2006). This means people are responsible and have control of their life. This reduces costs for the health services and promotes self-management to keep people healthy (Bandura, 2004).

Therefore, people who have personal control exercise greater agency and have better health (Krause and Shaw, 2003). Individuals as active agents are influenced by constraints, limits

and social structures that shape their agency, but the influence is different according to the ability of the individual to achieve successful outcomes (Hitlin and Elder, 2007). One example of this is children as the responsibility of mothers' in the West. The next section will discuss mothers' agency in relation to children in general before picking up this problem in relation to health and oral health.

3.5 The factors that impact on mothers' agency globally

There may be many factors that affect a woman's agency in relation to their children. For example, family structure, culture (Shonkoff and Phillips, 2000) or decision-making processes (DeSocio et al., 2003), and so on. The aim of this section is to explore forces on mothers' agency or external factors impact on mothers' agency globally.

3.5.1 Family structure

Responsibility for children and childcare is frequently envisaged as a maternal responsibility within some societies. In contrast the father is said to influence his children directly through interaction as well as providing economic support (Lamb, 2004); this is often seen as the traditional role for the father. Paternal sharing of parental roles can help support mothers practically and emotionally (Hook, 2010). This support may improve the quality of the mothers' role in relation to the children (Räihä et al., 2002), and can make positive adjustments easier (Parke and Sawin, 1979). As such the partnership between husband and wife is viewed as vital for creating stable family relationships (Phoenix and Woollett, 1991). In most social settings however the mother is frequently held responsible for ensuring a good home environment for example, involving good routines: bedtime, food time and physical activities (Cole et al., 1998).

Western countries have seen a change in marriage norms with a rise in divorce rates, single parent families, and children born outside marriage, or committed relationships (Kiernan et al., 1998, Uttley, 2000). The experience of divorce (and lone motherhood) has to some extent become normal and acceptable as 'alternative' family forms have become more common (Duncan and Phillips, 2008, Hughes and Waite, 2009). Family structure has a large effect on the mother's role and this may also affect her agency in relation to health for her children (Cole et al., 1998). Mothers' decision-making is affected by family structure,

and adult family members. Sometimes, when the mother is young, her needs may become secondary to the values and beliefs of other family members. For example, in an extended family the process of the mother's decision-making is difficult, not because of the size of family, but in relation to the complexity of the organization of her extended family (Cole et al., 1998). The complexity of the family structure can limit the mother's agency, which may have implications with regards to health because she needs freedom to make health related decisions and changes at home to maintain health outcomes (DeSocio et al., 2003). The organization of extended families may also differ from culture to culture and mothers may be subjected to hierarchies within families. We shall return to this later when considering the results of this study.

3.5.2 Culture

The mothers' role is constructed culturally. In some cultures mothers are expected to play the protector and expert in everything (Douglass and Michaels, 2004). However, different cultures can construct the mothers' role in different ways. Many societies expect mothers to be the primary caregiver, especially in patriarchal societies. Saudi Arabia is but one example. More liberal societies (e.g. Scandinavian in Nordic countries) construct mothers and fathers to care for children on an equal basis with the state enabling mothers or fathers to take leave from their work to provide childcare during early childhood or illness (Galtry and Callister, 2005, Lamb, 2010).

This is in contrast to Africa, where the source of caring, and therefore of agency for health, is the responsibility of several family members whose roles involve socialization of and developing the mental health of children according to the rules of African culture (Prout and James, 1997). Each child in turn develops responsibility towards their family and society; in relation to family cohesion, respect for parents and elders as in The Organization of African Unity (OAU)'s African Charter on the Rights and Welfare of the Child (Van Bueren, 1998). Nevertheless, if we look at child rearing practices in China, Japan and Korea, child rearing practices center on Confucian ideology and the importance of the father-son relationship as the center of family life. All of this research points to the impact of cultural expectations on the role of the mother and on her agency. As we can see then the agency that women in the world can express is shaped by the context that society presents.

In the next section we will explore why this is important. We will see, for example, that the concept of agency is in fact central to ideas about health promotion.

3.5.3 Mothers' agency and children's general health

Mothers' agency may be affected by several factors in relation to children's' health. Caruso et al., (2010) illustrate the problem through their discussion of the problem of diarrhea in Bolivia. Diarrhea is a significant cause of child mortality and preventable disease in Bolivia. There are many structural factors such as lack of education; health education; short period between successive children; poor health hygiene; low uptake of breastfeeding, which may influence the reoccurrence of diarrhea (Caruso et al., 2010). Other dimensions include the mother's diet; the power of the mother to make decisions and exert the freedom to obtain care (getting care, going out); high socio-economic-status (SES), and education are correlated with children's health positively but absence of these enhancing factors means a continuation of diarrhea and therefore a limitation on the ability of mothers to exert their agency (Caruso et al., 2010).

In this study, Caruso and his colleagues demonstrated the relationship between the mothers' as a dimension and children's diarrhoea. They conducted research on 4383 Latin American and Caribbean mothers of children less than 5 years old. This study illustrated how many factors influence mothers in relation to children's risk of diarrhoea such as mothers' agency, their behaviours and access to services. The findings of this study demonstrated that mothers who live with their husbands in the same house can have more support, more time to spend on child care than those whose husbands were not residents.

In addition, mothers who have a voice in decision making and the ability to negotiate their children's needs have more control in their household and provide a higher level of care than those who do not have a voice. Mothers who live within higher socioeconomic circumstances, have a greater ability to control the financial aspects of the family and therefore mitigate violence at home. Consequently children in these families have less risk of diarrhoea than those who could not resist family violence. The study concluded that mothers who have higher agency, have more ability to make choices, have more control over the constraints they are experiencing and can provide greater protection to their children. As a consequence it was argued that their children had better health (Caruso et al.,

2010). Caruso et al (2010) suggested that the level of mothers' agency was central and as a consequence needed to be considered as a possible avenue for interventions in future studies.

As we can see, then, mothers' agency in relation to children's health is shaped by the social context but it can be central to positive health related outcomes. In the next section, we will see that the agency of mothers is also central to ideas about oral health promotion.

3.5.4 Mothers' agency and children's oral health

It is suggested that parents are the primary shapers of their children's lives (Shonkoff and Phillips, 2000). This is related to general behavior, but in relation to health behaviors a mother's health skills can improve her child's health by transferring skills which the children observe and imitate (Christensen, 2004a, Padilla-Walker, 2007, Blinkhorn, 1981, Bandura, 1986). As we shall see the same is true in dentistry which has long needed mothers to act as dental agents to improve their children's dental health. It has been frequently argued that mothers are best placed to give continuous dental care and supervision to children (Wallis, 1918).

There appears to be a direct link between children and parents in relation to oral health practices (Gibson and Williams, 1999). The characteristics of mothers can affect dental health such as passing the microbiology of mouth (mutans streptococci is the main cariogenic microorganism) (Javed et al., 2012), maternal education (Niji et al., 2010) and using preventive services (Grembowski et al., 2010, Tapias-Ledesma et al., 2005, Vargas and Arevalo, 2009). Indeed, the relationship between brushing teeth and dental caries occurrence is significant according to the National Diet and Nutrition Survey (NDNS) in 1995 which demonstrated that children who brush their teeth twice daily had less caries prevalence than those who brush less and those who brush their teeth from an early age or who have parental supervision also have less caries levels (Hinds and Gregory, 1995).

Other work suggests a correlation between mothers who have periodontal disease and the accuracy and severity of caries in children of 3 years of age (Sarnat et al., 1984). In this work it was argued that children between 5-6 years have a reduced incidence of caries if their mothers have positive oral health care behaviours and access dental care regularly

(Sarnat et al., 1984). Some authors suggest that poor oral hygiene in mothers may be considered a future predictor for their children's oral health; and maternal education about oral health care may prove invaluable in improving children's oral health (Shearer et al., 2011).

We can therefore argue that the agency of mother is of central importance to children's oral health. Parents may shape the dental practices of their children, and children follow their parents by copying them; even in difficult situations (Skinner and Wellborn, 1994). Parents can affect their children both positively and negatively. For example, one Brazilian study suggests that parental fear and anxiety may negatively affect a child's oral health behaviour (Colares and Richman, 2002). This perception of transference of agency is very simplistic and depends on the relationship or interaction that a child has with its parents (Jans, 2004), and whether there are other influences that shape a child's agency away from that of its parents in the family environment (Conger and Elder, 1994).

3.6 Children's oral health as a maternal responsibility

The argument that parents' dental habits are transferred to their child, especially the mother through daily oral health practices, implies that for dentistry the child's dental care becomes part of maternal responsibility (Gibson and Williams, 1999). Most children's health services depend on the mother to care for the child and a central aim of interactions with mothers is to devolve responsibility for care to them (Lewis and Coates, 1980). As a consequence dental professionals show mothers how to care children's mouths through daily routines (Kim Seow, 2012) including following advice on diet or the care of teeth (Saied-Moallemi et al., 2008).

One argument that has been put forward is that the positive oral health attitudes of the mother may have a positive effect on children's tooth brushing and the health of their teeth through her deep interaction with them (Saied-Moallemi et al., 2008). This argument is derived from a study in 2005 for 457 mothers and their children in 9 years old in Tehran schools. The study demonstrated that there was a link between children's sound teeth and tooth brushing with the positive attitude of their mothers in relation to oral health. Mothers who had a good knowledge, had positive attitudes towards their children's oral health.

Therefore, the children of Mothers who higher level of oral health knowledge and better attitude scores had a greater likelihood to have a sound dentition. The study involved mother's providing an indication of their knowledge and attitudes alongside their children's tooth brushing behaviours through a self-administered questionnaire. The authors also acquired the dental status of children from clinical examinations (Saied-Moallemi et al., 2008). The study concluded by arguing that mothers should be considered the main focus of oral health promotion programmes in Tehran. Whilst the study failed to show a clear relationship between mothers oral health knowledge and whether or not their children had sound teeth the authors argued that the knowledge of mothers was associated with additive oral health attitudes and suggested that this resulted in a deep interaction and was therefore a factor in improving children's daily tooth brushing. All these meanings of the mothers' role in relation to children's oral health practices indicate that the concept of agency is relevant even though it is not discussed in any real depth.

In other work from Japan, the mother is seen as the main care giver for children and because of this mothers are frequently prevented from working (Sasahara et al., 1998). The social gradient is not as large in Japanese society and most members of Japanese society have similar educational levels, medical insurance and free child care up to 3 years. Sasahara et al., (1998) suggest that there is a link between good gingival health in mothers and a reduced incidence of caries in children. They argue that tooth brushing as a habit in children is affected by the mother's motivation to start brushing from an early age. Factors that seem to impact on children's cooperation and frequency of brushing appear to relate to the guidance the mother provides along with the support of dental professionals (Salako and Ghafouri, 1995, Jeboda and Ogunbodede, 1995).

Other work from Tehran in Iran involved a cross sectional study conducted in 2007 on 504 children up to 3 years of age including mothers who attended public health centres (Finlayson et al., 2007). This study investigated the association between mother related factors and children's knowledge of oral health using a questionnaire followed by an interview, and clinical examinations to assess the visible dental plaque on the children's front teeth (Mohebbi et al., 2008) . Maternal factors were measured by mothers' ability to maintain their children's dental care, and the frequency of their own daily dental practices.

The study demonstrated that there was a relationship between the frequency of mothers tooth brushing and children's tooth brushing frequency. Furthermore, there was a correlation between mother's capacity to care for children's oral health and better oral health practices in children. The study concluded by advocating for a more active maternal role in the development of oral health practices in children (Mohebbi et al., 2008). This study clearly demonstrates that there is a link between maternal oral health practices and children's oral health practices. One concept that might help explain this link is that of agency. The problem, however, is that the idea of agency and all of the complexities it involves has yet to be discussed in relation to children's oral health care practices.

These findings are supported by other work in 2007 in Detroit, Michigan, USA involving preschool children (1-5 years of age) and their mothers from 1021 African-American families (Finlayson et al., 2007). This demonstrated the relationship between the psychosocial, emotional and behavioral characteristics of mothers and children's oral health practices. Maternal factors were measured by exploring maternal self-efficacy, knowledge about children's oral health, social support, and the mothers own oral health practices. The study suggested that more interventions designed to focus on these maternal factors might well serve to improve children's oral health (Finlayson et al., 2007).

It is clear then that dentistry has for some time focused on the importance of the mother's role in improving the oral health of children. In particular it has been shown that factors such as maternal oral health, mother's knowledge about the oral health needs of their children, the frequency of their brushing and if the mother followed the professional recommendation in children's oral health. This understanding of the role of maternal factors in relation to children's oral health practices is related to the concept of agency even if this concept is not discussed directly in this literature.

Two Japanese articles by Suzuki have demonstrated the importance of the mothers' role in home dental care such as following the dentist's instructions with her children and oral hygiene supervision (Suzuki, 1990). These studies were on 1-6 year old children in Nagoya, Japan. The first study showed that the initiation of tooth brushing was 79% of children before 18 months and in the 2nd study 88% of children were aged 2 years. These

findings showed the relationship between the initiation of tooth brushing and many factors such as the eruption of teeth, child's cooperation, motivation and positive attitudes of parents to start tooth brushing (Suzuki, 1990). This means the role of mother to prevent caries in daily care is important, even if this is not a straightforward relationship. It is therefore crucial to begin practices early but the capacity of parents to implement early practices has not been explored in any depth. Suzuki (1990) discusses the mothers' role along with their motivation, cooperation and their positive attitudes. But they do not discuss the concept of agency in any real depth, despite this concept having a lot to offer in unpacking the problems and challenges mothers face.

Other cross-cultural work from Lagos, in Nigeria, involving questionnaires and interviews with 404 of mothers and their children in 2 primary health centres demonstrates a similar relationship. This work investigated the link between maternal social characteristics and preschool children's oral health. In order to see which and how the most important maternal factors can influence children's oral health and caries. The main findings revealed that maternal factors (mothers' knowledge, attitude, education, age and their location of residence) influenced children's oral health and the level of caries positively. These findings have supported the development of maternal factors as an instrument to have good oral health for the mothers themselves as well as for their children (Abiola Adeniyi et al., 2009). The relationship is not straightforward however. Mothers as the main caregiver are also influenced by their norms, culture, beliefs and social pressures which may impact on their own oral health behaviours and therefore on their children's oral health (Chan et al., 2002, Okada et al., 2002). This study showed that mothers' attitude in relation to their children's oral health is the most important maternal factor in Nigeria environment. Again this study touches on the problem of agency but the concept remains under discussed.

One example of barriers to a mothers' agency exists in a study of Latino children in the US which provided data that illustrated the high level of dental caries amongst Mexican American children compared with other school children especially in California (Hoeft et al., 2009). This study carried on Mexican American mother interviews, examines a mother's initiation and understanding of home oral hygiene for young children. This study returned to parents' characteristic such as parents have poor knowledge of effective

preventive measures (Entwistle and Swanson, 1988), low value of primary teeth (Hilton et al., 2007) and parents didn't engage their children in dental routines (Watson et al., 1999, Adair et al., 2004).

What the study failed to illustrate was that Mexican American mothers were treated unfavourably by healthcare services; many live on the margins of poverty in conditions that are high on the deprivation index. There were some barriers for Mexican American children to attain ideal oral health; low income was an obstacle to being able to attend for preventive dental check-ups. In addition, the nature of their work meant that it was difficult for them to benefit from dental care programs such as Denti-Cal (Barker and Horton, 2008). In fact, many Mexicans came to America from rural agricultural areas with low incomes and low incidence of oral diseases and less preventive dental care (Barker and Horton, 2008). Therefore the link between the child's diet and oral diseases was related to a basic misunderstanding (Nyhan et al., 1985). Mexican American mothers were unprepared for more cariogenic food related to their new US life. Preventive dental treatment, including regular dental visits is crucial to oral health. Yet Mexican American and black children receive fewer visits compared with white non-Hispanic children (Dye et al., 2007). This study, as with all the previous studies once again touch on the problem of agency, but it fails to clarify what it actually means.

The central problem of this thesis is the degree to which mothers can act to support or improve the oral health of their children. There is a constant risk when researching in this area that mother's end up being 'blamed' if their children's oral health is not 'perfect' because children's oral health is strongly correlated to the mother's oral health knowledge and practices. What is interesting is that many of these studies touch on the concept of agency without really thinking about it in any real depth. Perhaps a greater awareness of the concept of agency and its meaning may well help enable greater social support to mothers and children? In addition it could be argued that within the dental literature the term agency is 'implicit' rather than 'explicit'. This study therefore seeks to examine what could be gained by exploring mothers' agency as an explicit aspect of children' oral health.

3.7 Agency and its implications for oral health promotion

In the dental literature oral health has become synonymous with maternal responsibility alongside other maternal roles, especially in societies where the mother is the main caregiver for children. It is suggested that parents transfer health information to their children (Christensen, 2004a) and children's oral health behaviours, such as tooth brushing, may be affected by parent's oral health knowledge, attitudes, and beliefs (Adair et al., 2004). Therefore, preventive dental measures are dependent on mothers to use their agency to improve children's oral health in the home. The problem is that without an explicit consideration of the challenge of agency, researchers risk neglecting to analyse in detail the capacity of mothers to implement oral healthcare practices. Without a detailed consideration of the problem of agency we might fail to recognize wider factors such as cultural restrictions, the arrangements and setting of the family that may have implications for a mothers' agency (Abiola Adeniyi et al., 2009).

A key problem of research in relation mothers and their agency is that researchers can often place the blame on mothers as primary care givers if they do not succeed in achieving optimal oral health for her children (Watt, 2007). This problem is especially sharp when there are many factors beyond mothers' control that may affect their agency. Dentistry may be setting the mother an impossible task because taking control of children's oral health is dependent on their capacity to exert agency and additionally the agency of the child. As a consequence agency needs to be carefully considered.

An additional complication is that much of the research that has been conducted on children's oral health has been derived from a Western perspective, and applied to various cultures or contexts all over the globe. There is a question concerning the degree to which these perspectives are most appropriate for understanding the position of mothers globally. In particular there is a question concerning how applicable they are in relation to children's oral health in the context of Saudi Arabia. This thesis will now turn to the context of this research.

4. The context: Saudi Arabia

As this thesis considers the significance of mothers' agency for the promotion of oral health it is important to understand the context within which mothers are mothers in Saudi Arabia. This chapter will present the context of Saudi Arabia as a Muslim country. Saudi life will be described through the social relationships within the families and how Islam as a religion structures all aspects of daily life. The position of Saudi women in Saudi culture and society with the societal changes over the past 50 years is appraised. An overview of health and dental services will be outlined, together with the current oral health within Saudi children.

4.1 Geographical and cultural context

The Kingdom of Saudi Arabia is the largest country in the Arabian Peninsula. It occupies about 2.15 million Km², the population is around 30,777million (estimated in 2015) and the capital city is Riyadh. There has been a steady movement from rural to urban living recently which involves more than 85% of population. The Saudi geography is varied with desert, mountain ranges, forests and grasslands. It holds the largest reserves of petroleum in the world. In the last 50 years, Saudi Arabia's socioeconomic development has progressed for health, education, housing and the environment. The main source of wealth is from the industrial sector which is mostly oil and gas which has dramatically increased the average wealth of the population between 1970 and 1990. The long term plan of the Ministry of Planning is to increase jobs, household income and decrease poverty by 2020 (WHO, 2012a).

Saudi Arabia is the main center of the Muslim faith in the world. Islam started from Mecca and Saudi Arabia has the 2 main holy mosques (Al-Munajjed, 1997, Al-Farsy, 1990). Islam united the Arabian Peninsula in the early part of the 20th century with the establishment of Saudi Arabia by the House of Saud. Today, Islam still continues to play a major part in the political structure of Saudi Arabia each year millions of Muslims go on a pilgrimage to the sites of Mecca and Madinah and perform Umrah or Haj (Al-Munajjed, 1997, Al-Farsy,

1990). This differentiates Saudi Arabia from other developing Muslim countries (Khalifa, 2001).

Although, Saudi society as part of the Arab world has similarities such as language, religion, ethnicity, and historical understanding, it also has a unique culture (Bushara, 1985). Saudi Arabia is more varied than Gulf countries because it was not in the past a British protectorate nor was it colonized, but its relationships are limited and depends on the pilgrims, or trading activities in the east with Iran or India (Hasan, 2012). The center of Saudi Arabia has remained isolated (Metz, 1993) in the process of development and travel to and from the country is strictly regulated by the Ministry of the Interior.

4.2 An overview of Saudi life

As this thesis considers the significance of mothers' agency in relation to children's oral health it is important to understand the Saudi life as the context of mothers. This section provides a general description of the family life that mothers find themselves in Saudi Arabia. It begins with a brief outline of family structure, moves on to explain the importance of family relationships and goes on to outline the centrality of Islam to the organization of daily life. As we shall see each of these factors will become more important as the study progresses.

4.3 The structure of family within Saudi culture

The Saudi family is different from western families because there are higher numbers of extended family members and closer relationships with relatives (Nation, 1992). Adult children continue to stay with their families until they marry and over the past 30 years the age of marriage has increased therefore the period of time young adults remain in the family home is greater (Al-Mazrou, 1990). With the changes in the global economy, more and more children in the West also appear to be either returning home or choosing to remain at home until later in life, mirroring Saudi families (Rossi, 1997, Molgat, 2002, Seiffge-Krenke, 2009). Recently, in Saudi Arabia there have been several changes in family structure and size with a move towards families with fewer children.

Even in the case of divorce, a husband has to release the woman kindly. The divorced woman has to return to her family's house (the father or other male relative) or stays in her house with her children. This is to protect women and preserve the honour of their families (Bowen, 2014). In both cases, the husbands have all children's custody as is his duty in Islam (Bowen, 2014), and have to pay fixed maintenance allowance to the divorced women and their children regularly as their right under Shari'ah [Islamic law] (Engineer, 2008).

Although child rearing varies by culture, one argument is that the culture will lose its effect with time and the rearing will become unique (James and Prout, 1997). Culture and society may be said to exert a symbiotic relationship and there will always be a pressure to conform to the norms and expectations of a given culture. Saudi Arabia is a strongly conservative and conformist society and so exerts pressure on its members to conform to social and cultural norms. As we shall see these factors are particularly important when it comes to the forces that shape oral and dental health in the context of the family.

4.4 The importance of family relationship in Saudi society

Over the centuries, the dominant characteristic of Saudi society remains traditional, religious and patriarchal (Danish and Smith, 2012). The basic unit of the society is the traditional extended family with dominant gendered-roles (Altamimi, 2015). Saudi society constructs women's roles as housewives, responsible for child rearing at the home, while the main role for men is going out to work (Hamdan, 2005, Ahmad, 2011). Husbands have to support the wife and children financially (Walter et al., 2001).

The family is the most important social institution and is the means of identity and status in Saudi Arabia. Extended family members are more likely to live closely together; whenever possible they interact and meet each other regularly. Although, there has been a rise in nuclear families in more recent years and this has had an impact on how family life is experienced. All family members have a typical sense of collective duty; corporate identity and responsibility for the welfare of the family (see more details in chapter 8).

Long (2003) argues that Saudi people depend on the extended family, not the government to gain financial and emotional support and help (Long, 2003). Family members are

expected to respect the social ideals of integrity and dignity. For example, parents may consult the grandparents in relation to significant matters such as marriage even it is to a different family or social position (Nation, 1992) because older members are respected and valued for their wisdom within the family. Families can also build relationships with other families who have similar interests and life-styles, but they are likely to have some familial relationship (Altamimi, 2015). The centrality of the family became especially important in this study. As we shall see these relationships have an important impact on the factors that shape how mothers can act as agents for the oral health of children in chapters 8, 9, and 10.

4.5 The structure of Islam and how this moderates daily life

Islam provides guidance of individuals' lives and extends to the policies and the government's function in the Kingdom. The constitution of Saudi Arabia is the Holy Qur'an, and the legal system is Islamic law that is called 'Shari'ah' in Arabic. 'Shari'ah' is a source of law, based on the Qu'ran and the Sunnah (reports of the Prophet Muhammad's words or actions) (Campbell, 2007). The religion of Islam therefore leads the overall way of life in Saudi society. It incorporates in people, society organization, family relationships, business, hygiene, nutrition, etiquette, ways of dressing, and much more. It also covers the entire spectrum of political, economic, social, and private and public life of Saudi people. Saudis start learning Islamic rules at a very early stage in both home and school. This consequently means Islam structures and moderates the daily life of Saudis. For example, during performing prayer (Salat in Arabic for 5 times a day at dawn, noon, late afternoon, sunset and night), as one of the 5 Islamic pillars, all businesses close for thirty to forty four minutes and all male workers and customers perform prayers together (North and Tripp, 2009). Men pray with a group of men at mosques, either at work or even outdoors, and women and children pray at home (see more details in chapter 11 and Appendix X).

Islam regulates public life in Saudi Arabia. The Kingdom as the heartland of Islam measures calendar time using the Hegira (Arabic calendar) (North and Tripp, 2009) and compared to the Gregorian calendar of the Western world which is in 2016, Saudi is in 1437. The Islamic day of rest is Friday and the Saudi weekend was on Thursday and Friday, but is now Friday and Saturday in order for Saudi businesses to have four working

days overlapping with Western and regional businesses rather than three, making it easier to trade (Shahzad et al., 2014). Another example of Islam regulating public life in Saudi Arabia is the religious holidays after 2 religious occasions of the year. The holy month of Ramadan and the Hajj (pilgrimage) season, and the national holidays that follow them. The holy month of Ramadan, during which Muslims fast from dawn to dusk, ends with Eid-Al-Fitr in which it is usual to buy presents for children, wearing new clothes for all and visiting friends and relatives (Information Office of the Royal Embassy of Saudi Arabia in Washington, 2016). The other highlight is the Hajj season, during which millions of Muslim pilgrims from around the world come to Makkah. The Hajj season ends with Eid Al-Adha, in which it is traditional for families to “*kill a sheep in memory of Abraham’s willingness to sacrifice his son*” (Cartwright-Jones, 2001). The meat is distributed to relatives, friends and the poor people.

In regards to the private Saudi life, the family is extremely valued in Saudi society. A stable family is seen to offer peace and security and help spiritual growth (Trzaskowski et al., 2014). The familial social order is linked with extended family relationships in Saudi Arabia. Consequently children are precious and can sometimes stay in the family home, as mentioned earlier, even after marriage. Extended families are more common but this makes it more difficult to control children because there are grandmothers or fathers present who have greater agency than the mother in some situations (see more details in chapter 10).

Islamic obligations to parents especially the older and other relatives are strongly stressed in Saudi society (see more details in chapter 10). Therefore, older Saudi people remain with their families and there are no old peoples’ homes. This is because caring for parents as they age is respected and considered a chance to seek the blessing of God, who asks all Muslims to pray and provide unlimited compassion for older people (Trzaskowski et al., 2014). This respect is also extended to mothers who are held in high regard in Saudi Arabia, similar to other Muslim societies. Since the Prophet (pbuh) said that to a man who came to ask him: ‘*Do you have a mother? [...] Stay with her, for Paradise is beneath her feet*’ (An-Nasa’i, 3104), which means treat them kindly, and without any expression of irritation especially when they become older. It should not be surprising to find therefore

that religion plays an important role in oral health and health care within the family. We shall return to this later when considering the results of this study.

4.6 Islam and oral health

The source of dental hygiene as a practice emanates from Islamic knowledge given by the prophet Mohammed in Islamic societies. Oral health was originally reliant on dental knowledge which came from the Suras within the Quran and Hadiths (the prophet's sayings and actions). The Quran is offering advice about cleaning the mouth before prayer time 5 times a day by rinsing with water. The Prophet Mohammed also emphasised this instruction in the Hadith by using Miswak (a small traditional stick which has anti-bacterial properties) before each prayer time daily to maintain oral health (Owens and Saeed, 2008) (see figure 4.1). Muslims used Miswak before the discipline of dentistry was born (Owens and Sami, 2015). It is important that dental professionals respect such habits. For example, a high percentage of older people and a minority of younger people or children in rural areas use Miswak for cleaning their teeth with or without a tooth brush. Many older people believe it is more than enough (the Miswak), in contrast most young people use it as an additional aid with the toothbrush (Scully and Wilson, 2006).



Figure 4.1 The Miswak

A teeth cleaning twig made from the *Salvadora persica* tree. A traditional and natural alternative to the modern toothbrush, it has a long, well-documented history and is reputed for its medicinal benefits.

In modern times the tendency remains to rinse the mouth with water daily but a tooth brush is generally used instead of Miswak for cleaning the teeth, except in the case of some older

people and those who are live in rural areas. Miswak is usually considered an additional aid to cleaning with a tooth brush and is mostly used during fasting times and religious observances such as Ramadan. Although, it is crucial for Saudi people to follow Islamic rules, Islam encourages its followers to learn and adopt new sciences in order to improve general health and the oral health (see also Chapter 10).

4.7 Women in Saudi family life

The central problem of this thesis is the degree to which mothers can act to support or improve the oral health of their children. As we shall see one of the key factors that shapes their ability to do so is their legal status in Saudi life.

4.7.1 Women in the Saudi family law

In Saudi Arabian family law every female must have a male family member (*mahram in Arabic*) who exerts legal guardianship and decision-making powers over her, and may also escort her whilst travelling; the mahram can be her father, husband or son over 22 years (Almihdar, 2008). This responsibility involves protection, guardianship and is visualized as a maintainer rather than an absolute authority, but it also depends on how the law is interpreted by each individual. In Saudi law, the male and female are seen to complement each other and it is said that each is interpreted in the light of the other (Al-Nibrawi, 2006). Women may need the consent of their male guardian in order to complete the procedures of enrolment to education, employment, travel and health care (Deif and Human Rights, 2008). A Saudi woman gets support from her husband but is not permitted a boyfriend because this is against religion and culture, so single parenting before marriage does not occur. Each of these factors influences on the ability of women to participate in public life and can have a direct impact on their ability to get to health care professionals such as dentists.

4.7.2 Changes for women in Saudi Arabia

Saudi Arabia has undergone significant social and economic development since the 1930s and this has resulted in enormous changes for the roles of women. In some instances women have moved from inside the home to working outside the home (Al-Madani et al., 2010). These changes mean that women have become more noticeable in Saudi public life

especially in education and work (Kelly, 2009). Since 2009, women's rights have become more prominent and women now have more access to professions other than teaching and medicine, for example as lawyers and journalists (Kelly, 2009). 'Many scholarly sources portray women's education, since it started, as being highly valued in Saudi society' which indicates the shift in thinking about women mainly as homemakers (Zurbrigg and Zurbrigg, 1995, p. 82). The number of Saudi female graduates is greater than males with more and more women accessing higher education (Vidyasagar and Rea, 2004). Thus women are present in higher education for masters and doctoral degrees and their enrolment numbers are constantly growing (Al-Ahmadi, 2011). However, there is still formal gender segregation across higher education as part of the whole education system (Almutairi and White, 2015).

The development of quality of women's education is paralleled by the increasing numbers of women in the work place. This has encouraged women to demand more rights in other domains of life, including politics and the family (Kelly, 2009). For example, women are now asking for women's hospitals, women's malls and women's representatives in all government's levels (Al-Rasheed, 2013). Saudi culture enforces spatial gender based segregation as a public policy within the Kingdom. There are completely female public spaces such as schools, universities, charitable organizations, women's administrations, government offices and shops. Separation of males and females provides female spaces within the wide and diverse private sphere compared to male spaces. Segregation between men and women has not excluded women from work, for example they work in separate offices but in the same building. However, despite the increasing level of employment opportunities, the number of unemployed women remains high (Al-Rasheed, 2013).

The last 15 years has witnessed growing participation of women in senior management positions and in decision making processes in public and private sectors. For example, women with an academic background and from different regions in Saudi Arabia participated as consultants for the Consultative Council (*majlis al-shura in Arabic*) (Ammoun, 2006). In January 2013, King Abdullah published two royal decrees, declaring that women must always occupy at least 5th of the council's seats and allow women to have thirty seats on the council (Altamimi, 2015). This portrays Saudi women (although mostly

elite women) as a category of the population to be presented and heard (Le Renard, 2008). The increasing prominence of Saudi women provides new direction to occupy leadership roles. Recent developments point out a new path of policy makers and development plans in the direction of bigger role of women in public life and even in the top leadership positions in the public domain (Al-Ahmadi, 2011). Many of Saudis consider the active involvement of women in society, both in the home and the public domain of work as being related to recent developments in education (Al-Ahmadi, 2011). Although the increasing prominence of women has become a feature of recent Saudi society, crucial restrictions remain. For example, women are not allowed to drive. As we shall see this has a significant impact on their ability to act as agents of oral health.

4.8 Summary of changes in Saudi society

Recent changes in Saudi society are the product of the increasing economic developments within the Kingdom since the discovery of oil which has developed interactions with Western developed countries and this in turn has influenced the Saudi cultural context. This interaction appears through mass media, technology, goods daily requirements and transportation that are all vehicles in access to the west (Khalifa, 2001). As a result of rising family incomes, the lifestyle of people in the Kingdom has changed, especially for the middle and upper classes. There is more reliance on modern appliances, and consumer products at home as well as leisure activities, fashion, reading, wider knowledge by the internet and mass media, travelling and more than 1 car in the same house (Khalifa, 2001).

As previously discussed Saudi society has changed over the past 50 years even the structure of the family and the division of roles has changed (Khalifa, 2001). For example, the increase of women's roles in the public sphere and access to education; with most changes happening inside the private female domain with activism enabling women to become more recognized in the public domain (Le Renard, 2008). In relation to domestic sphere, state reforms regarding women are not compulsory but rather depend on the family's choice such as education and work. The state polices issued that women need their families' agreement to enter the public sphere. Women can practice their own activities within quite autonomous places. Meanwhile, women's ways of life have been transformed and

improved (Le Renard, 2008). They have become educated, employed and much more mobile within cities (Altamimi, 2015), obtained their identification cards, may check into hotels alone, and can register a business without proving first that they have hired a male manager (Kelly, 2009). This provides them with an opportunity to widen their margin of autonomy. Although women's rights have improved recently in Saudi Arabia, the level of autonomy attained by women compared to women in West remains comparatively minimal.

Education, employment, and participation of Saudi women in all aspects of public life is also mirrored by the increase in the nuclear family and movement from the extended family house to separate houses so they can sometimes be closer to their education or work places. This change has also influenced the presence of foreign housemaids or nannies (such as women from the Philippines or Indonesia) to do the domestic chores and child sitting, that was previously the domain different members of the extended family (Altamimi, 2015). For example, women who are now in employment will give some of their home chores to the housemaids, who are becoming more of a necessity (Vlieger, 2011) (see also chapter 8).

Despite these many changes in roles, transportation remains an issue for women in Saudi Arabia since they are forbidden from driving. Saudi women depend on their close male relatives such as fathers, brothers and husbands to drive them around and to conduct almost all their private and public business (Almutairi and White, 2015). Thus, most families are increasingly applying for visas to employ male drivers from Asian or Arab countries. Saudi women select and prefer non-Arab and non-Saudi family drivers because this gives them a higher degree of freedom (Altamimi, 2015). Despite the fact that women are increasingly taking up paid employment, men continue to be responsible for shouldering the family's financial burdens, unless joint decisions are made on alternatives and the wives own businesses (Ulrichsen, 2015). Even though men are seen as key to family finances, Saudi women have their own money, independent from that of their husbands, which they can invest in business deals and possess property (Almutairi and White, 2015).

The family is highly valued in Saudi society. The Saudi state is officially supposed to be the protector of the family. According to the Ninth article of the basic law "*family is the heart of Saudi society*" aiming to protect the family and honour, stressing the family as key in Saudi society (Le Renard, 2008). Although at present there is more prominence of Saudi

working women, family policies are working to develop constant and well-organized support systems (Walby, 2005, Acker, 2005). This is to help women to be able to balance their roles between work and family responsibilities (Metcalf et al., 2008). However, a Saudi woman's role in many families centers on responsibilities within the home, and working women in the public sphere are still fewer than men (Al-Madani et al., 2010). As we shall see all of these issues have a significant influence on the mothers' ability to act as oral health agents.

4.9 A brief overview of health in Saudi Arabia

The Saudi health system depends on the Ministry of Health which works mainly on providing health care that includes prevention, treatment and rehabilitation. Other government ministries, for example the National Guard and private sector cooperate with the Ministry of Health to provide services under the health budget. Roughly 74.6% are government hospitals and 25.4% are private hospitals. In creating services, need has increased and future predictions are that the government will need to implement private sector insurance to cope with demand (Walston et al., 2008). Across the country, health services are provided free for all Saudi citizens by 1,850 primary health care units. These clinics have an 83% attendance rate, especially in the main cities which have increasing numbers exceeding 100,000 patients. Whereas, remote areas need additional health care units to deliver a more equitable distribution which is considered a common problem in care delivery.

4.10 A brief overview of dental services in Saudi Arabia

According to oral health providers, the capacity to provide accessible oral care to the population is being undermined by a declining dentist to population ratio of 4.2 to 10000 (WHO, 2011). In contrast, the ratio of dentists is increasing since 12 government and seven private colleges of dentistry were established. However, the number of dentists is less than the ideal for the oral health care needs of the whole population. Although members of Saudi society can access state hospitals or clinics and can be treated in the highest standards services concentrate on main cities rather than rural areas because of the massive geographical area of Saudi Arabia (Information Office of the Royal Embassy of Saudi

Arabia in Washington, 2016). As a result this leads to inequality and inaccessibility of services for rural people (Al-Yousuf et al., 2002). Dentists prefer working in urban areas and this does not differ from global reports of professional working (McCarthy and MacDonald, 1996) such as in the US (Wall and Brown, 2007). There are over 150 mobile dental clinics serving the residents of remote Saudi villages (Information Office of the Royal Embassy of Saudi Arabia in Washington, 2016).

4.11 Oral health in Saudi Arabia

Despite improvements in health and greater provision of health services in recent years, oral diseases have had a significant impact on adults and children lives (Petersen, 2003). In Saudi Arabia the pattern of oral diseases has increased and become more and more severe for most of the population but the current lack of accessible data limits the ability to explore oral health problems in depth and obstruct the development of new health programs to meet the needs of the community. In order to reduce this inequality, the government must understand the causes of inequality by increasing access to services and focus more on rural areas especially because the shortage of dentists (Ghanim et al., 1998).

In Saudi Arabia, age, sex, income, education, (parent's attitude and knowledge) limitation of life style, oral hygiene are important determinants of children's oral health status. For example, people who are living outside of the main cities (Bedouins) have more caries than urban dwellers (Al-Shammery, 1999). One suggestion is that females take better care of their oral health and experienced greater oral health related quality of life than males, but this correlation appears dependent on age and level of education (Al-Hazmi et al., 2008). Maternal education appears to be directly related to oral health habits in children (Al-Sadhan, 2003). Consumption of confectionary is really high among children and is inversely related to the education of the mother (Al-Sadhan, 2003). Poor oral health habits, lack of appropriate oral health knowledge, high exposure to confectionary and a lack of parental supervision are major factors in the high caries rates in Saudi Arabia.

There are some daily practices that may have relevance to early childhood caries such as the practice of 'prolonged' breast feeding/nocturnal bottle feeding, and bottle feeding with

sweetened milk which have already proven as major risk factors for early childhood caries in preschool children (Ghanim et al, 1998, Al-Malik et al, 2001, Al Malik 2003 and Almushayt et al, 2009). Dental caries in this population is also influenced by socioeconomic risk factors (Al Kateeb et al, 1991) that may negatively influence the oral health status of children by indirectly lowering, preventing or postponing their use of appropriate self-care or professional dental service (Baghdadi, 2011) and therefore increasing their caries level (Al-Mohammedy et al, 1997).

There is also a lack of professional and public health guidance in relation to oral hygiene practices such as the use of fluoridated toothpastes (Amin and Al-Abad, 2006). Toothpastes with different fluoride concentrations and non-fluoridated (paediatric) toothpastes are readily available for a large section of the population in Saudi Arabia (Baghdadi, 2011) and the majority of Saudi mothers use fluoridated toothpaste to prevent children's tooth decay (Al-Zahrani et al, 2014). In relation to the fluoridated toothpastes usage, the ppm is 1000/1440/ 1450 for commonly used toothpastes for children under 3 years/ 4-6 years /above of 6 years.

National data collated by the WHO shows a major increase of caries prevalence in children 3 to 6 years in Riyadh and Jeddah (WHO, 2012a) but these trends reduce by 12 years of age. The dmft (teeth decayed, missing or filled teeth) is 6.1 in 3-5 year old children in Saudi Arabia (AlDosari et al., 2010); this is considered high, and compared to European countries as an example the mean DMFT index was 2.3. It is observed that 20% of children had higher values than the target recommended by WHO in 2000 (DMFT = 3). The most recent study in Saudi Arabia was conducted by Wyne (2008) on children aged 3-5 years in 10 public and private schools report an overall dmft score of 6.1 with decay as the major contributing component (Wyne, 2008). Although, the caries experience was 65.3 % (private schools) and 86% (public schools). The caries index may be lower in this study than the previous study (Wynne 2002) which reported a dmft index of 6.3. Alwazan (2004) and Al Sadhan (2006) claimed this decline is a result of the equal range of children between the public and private schools. Another earlier study in 2003 assessed children of 5 years of age and below in preschool nurseries, finding the prevalence of caries to be 83.5 % with a dmft of 7.12 (Paul, 2003, Paul and Maktabi, 1997). However, these figures are estimated rather than scientific

calculations and subject to challenge according to the present available data that include highly variable populations (Al Agili, 2013).

In summary the agency that women in Saudi Arabia can express is shaped by the very particular historical, cultural, political, legal and religious context that Saudi Arabia presents. In the next chapters of this thesis we will explore how important this is. We will see, for example, that the concept of agency is in fact central to ideas about children's oral health promotion in the Kingdom.

5. Rationale, Aims and objectives

5.1 Rationale

The dental literature on oral health in children frequently constructs the mother as one of the most important if not central agents of oral health. Little, however, is known, about the processes that might promote oral health behaviors in the home. More information is required about the process of how children learn from their mothers. Since, there is little or no data to support these moral claims. This lack of focus and precision on the link between children, parents and oral health practices leads us to question whether there may be an unknown body of knowledge that could be of importance for oral health promotion. Chapter 4 discussed mothers' agency in the home in Saudi Arabia in terms of the private domain.

Major improvements in oral health cannot be achieved without considering the agency of mothers. The lack of research in this area indicates that more needs to be done in order to fully understand the ways in which the mothers' agency may promote or inhibit children's oral health practices. Research on mothers' agency to promote children's oral health is urgently needed in Saudi Arabia, especially with high dmft of 6.1 in 5 year old children and such a low availability of preventive measures within dental services.

Within the Kingdom of Saudi Arabia, very little is known about the ways in which mothers' agency impacts on their children's oral health, and whether the existing literature fits this distinct cultural group. We have little indication as to whether there are similarities and differences, or how the agency of Saudi mothers and children impacts on oral health. Then the problem is that all the literature that forms the knowledge base has been written entirely from a Western perspective and we know very little about Saudi culture. Therefore the aim of this study is to explore mothers' agency in relation to children's oral health in Saudi Arabia.

5.2 Aim and research questions

Aim:

To explore mothers' agency in relation to children's oral health in Saudi Arabia.

Research question:

In what ways can Saudi mothers be considered as agents for children's oral health?

Sub questions:

- What examples of agency do Saudi mothers exhibit?
- In what ways does the agency of mothers relate to oral health practices in Saudi Arabia?
- What enablers and constraints impact on mothers' agency for the oral health of children in Saudi Arabia?

6. Methodology

This chapter defines the qualitative methodology that has been proposed for the study and introduces ethnography and narrative, indicates the advantages and potential challenges of using the combination of the two approaches, and the ethical considerations. There are several approaches in qualitative research which could be used in this study, for example; narrative methods, phenomenology, grounded theory, ethnography and case study approaches. The purpose of this section is to evaluate those most relevant, and justify why a combination of approaches has been selected for this study.

Narrative explores lives through the medium of stories. Barthes (1977) argues that the narratives of the world are numerous and gives examples from stained glass windows, text, pictures, photographs, plays, films; the list is endless but what it does highlight is that we live in a storied world and interpretation of the stories is as important as the stories themselves. Narrative belongs firmly in the realms of the postmodern; it argues that no one story or condition accurately explains knowledge and communication as modernism suggests (Lyotard, 1984, p. xxiv). Narrative moves away from the acceptance of grand narratives in modernism and instead authors almost encourage their readers to ‘write’ the text that they engage in, what is also important here is the role of the researcher in enabling readers to engage with the stories of others in order to gain clarity and insight into diverse worlds and experiences (Sarnat et al., 1984, Plummer, 2001).

In contrast to narrative phenomenology seeks to understand the essence of the experiences by describing the essential aspects of lived phenomena (Creswell and Clark, 2007). It seeks out the core experiences of participants with respect to a specific problem or issue with the goal of distilling out the key features of the phenomenon from the participant. Phenomenology is therefore a highly descriptive method and is used less in instances where theory or hypotheses are to be used.

Grounded theory, on the other hand seeks to develop a theory from the field that is based on the views of participants in order to study the social psychological process involved in a particular setting (Creswell and Clark, 2007). In this approach interviews take place over

several visits, there may also be observations, and documents are analysed by open, axial and selective coding. Although grounded theory draws on ethnographic techniques such as participant observation it is distinctive from ethnography because of its emphasis on building theory from data. In contrast to grounded theory ethnography's main goal is to describe and interpret the shared patterns of a culture-sharing group (Harris, 1968). It is derived from the field of anthropology, and interprets people's worlds with the researcher becoming part of that world in order to understand and interpret it. Finally, case study approaches seek to develop in-depth description of a case or several cases in order to explore key aspects of each case. Case studies seek to analyse not only individuals but also activities, programmes and events by several sources of data. It typically involves no more than 5 cases (Creswell and Clark, 2007).

There are similarities between all of these approaches such as; the common process of research (problem, proceeds to the questions, the data, analysis and research report); in relation to data collection that includes interviews, observations, documents and audio visual materials. The unit of analysis is similar in narrative, ethnography and case study; the individual, although it may also sometimes be a group of individuals. However, the type of data varies between them. Narrative; is about people's stories, it assumes that we live in a storied world and because of the influence of postmodernism then all stories are relevant with no one individual claim to truth. In ethnography, the setting of the individual stories is within the context of culture. Whereas case studies are typically used to illustrate the issue in a detailed setting (Creswell and Clark, 2007).

Grounded theory and ethnography appear to be equally valid approaches for this study. However, this project will use ethnography not grounded theory because it examines or explores people in their setting who are in similar place (Saudi Arabia). This is also related to the proposition that beliefs, values, and language, as we have seen in the literature review, have an important impact on agency. Although grounded theory is good for generating theory that is based on the perspective of participants this is not the aim of this research. As stated previously the goal of this research is to explore agency as a factor of mothers' life worlds and how mothers display this in relation to children's oral health. In

what follows I will outline the core aspects of the ethnographic approach whilst discussing how it has been deployed in this study.

6.1 Ethnography

Ethnography has its roots in the beginning of comparative cultural anthropology in the early 20th century with researchers such as Boas, Malinowski and Mead, who worked in the natural sciences initially. The natural sciences approach is different from a social scientific approach which collects data concerning existing cultures. Ethnography may also exhibit different theoretical orientations and goals including feminism and critical theory amongst other things (Atkinson and Hammersley, 1994). Ethnography was developed in Chicago through the influence of Park, Dewey and Mead in the 1920s and 1930s who adapted the method to study sub-cultural groups in the US, these groups differed from the mainstream by being for example disabled, in gangs, and being black Americans (Bogdan and Biklen, 1992). More recently ethnography has been defined as exploring the life worlds of people who share a similar culture/ ethnicity. The researcher becomes a part of this world in the process and uses different methods to collect data and triangulate sources. Field notes, interviews and documentary analysis are triangulated against stories and the researcher's interpretation of the context/situation (Atkinson and Hammersley, 1994)

An ethnographic study can also focus on the entire cultural group or it may focus on small groups such as a few teachers or large groups involving many people interacting over time. This study is concerned with Saudi mothers as a cultural group who have children still living at home. It will follow the format of ethnographic qualitative design by seeking to describe and interpret the shared values, behaviours, beliefs and language of this group (Harris, 1968). The study will also seek to explore the shared perspectives of the members of this group and the organisations and institutions they encounter as a group (Rosen, 1991). All these factors apply to the research question that I intend to explore, since, the task of the ethnographer is to describe (explain) the social world from the perspective of the involved participants (Taylor, 1975). As a process, the ethnographer studies the group of participants by observations and in-depth interviews about their daily lives, in order to study the meaning of behaviours, languages and interactions. The task of the ethnographer

to be accepted as a member of the group within their practices and cultural lives (Robson, 2002).

The main feature of this type of study is staying with people in their own environment for as long as possible (Creswell, 2007). This involves listening to what they say and watching what they do, asking questions in formal and informal interviews and gathering data during the inquiry. Ethnographic study focuses on small scale settings such as a few cases or single group of people to insure in depth cases generally (Hammersley and Atkinson, 2007). This is achieved by using any technique that is possible and there is no specific method to collect data, so for example the ethnographer will often draw on documents, interviews, pictures and field notes for different purposes (Robson, 2002). Analysis of data might involve human actions, the specific practices of institutions, interpretation of meaning, including how these appear in the wider context (Atkinson and Hammersley, 1994).

Creswell (2007) describes the goal of ethnography to produce thick description freely without external ideas or concepts to allow the reader to understand what is going on in the culture from the inside. It is useful for exploring cultures or groups for which there is little knowledge or very different from our own (Geertz, 1973, Creswell, 2007). Geertz's view depends on the context of individuals to construct a reading about what happens such as their behaviours, institutions, what they do and what is done to them (Geertz, 1973). There is a debate between van Maanen and Geertz concerning how ethnography should be carried out and what it actually means. For Geertz thick description involves a statement of observations of social groups depending on their actions and the meaning before and after such action. It therefore blends behaviours with the meanings of the action in the interpretation (recording and analysis of similar actions with consideration to the differences, more deeply in the same thing). In contrast, Van Maanen (1985) argued that this thick description involved telling differences that created hierarchies 'of meaningful structure'. What this means is that 'nothing is anything without contexts' (Van Maanen, 1987, p.119). In this perspective, ethnography involves exposing and explaining how specific work settings can be understandable, accountable, and managed. The interpreter acts as a reporter of actions through the voice of participants and the researcher is expected to take a background position in the reporting of the data. For van Mannen (1987) the

position of the researcher adopts a realist, confessional and impressionist perspective (Van Maanen, 1987). What this means is as follows:

- **Realist:** the researcher is absent from the analysis in order to present realistically the observations in the field.
- **Confessional:** the ethnographer often infiltrates the text personally as though standing alone in the culture. She can express herself through her emotional reactions and experience of unexpected events.
- **Impressionist:** the researcher also acts as a participant since she transforms into ‘a teller of tales’. In these stories can be reconstructed in a dramatic way by the author in order to be notable and then reportable (Van Maanen, 1987).

These approaches utilize devices to represent the results of fieldwork since the form of the researcher’s explanation depends on how she becomes visible in the written report. To produce sharp, persuasive, exciting and ultimate ethnographic research the emphasis is on the ‘objective’ reporting of the researcher (Maanen, 1995, Maanen, 2001).

6.1.1 Types of ethnographies

There are many types of ethnography such as a life history, ethnographic novels; visual in photograph and electronic media (LeCompte et al., 1992), but the realist and critical appear to be the most popular.

6.1.1.1 *The realist approach to ethnography*

This approach is described as a traditional approach applied by cultural anthropologists. Van Maanen (1988) characterized it as a reflection to a particular stand toward the studied individuals. This type of ethnography accounts for the situation as an object, from a third person point of view and reports the information from participants through their voice as this has been observed by the researcher. At the same time the ethnographer exists in the background as a reporter of the facts (Maanen, 1988). This would appear to be in opposition to postmodernist views of research because the researcher is seen as a co-producer of the research alongside the participant.

The realist ethnographer attempts to report accurately the daily setting of the individuals through categories of cultural description such as family life, social and communication networks and the status system. The research also provides the participant's view through quotations and gives the final word about the culture interpretation and presentation. This project seeks to explore the Saudi population as participants in relation to mothers' agency and children's health. This will involve examining Saudi social networks and communication references to respect the nature of the male-female relationship.

6.1.1.2 Critical ethnography

In this approach the ethnographer seeks to advocate a particular standpoint whilst seeking to reveal how power and authority marginalises people who are from a different race, class and gender (Madison, 2005). In this type of ethnography the critical researcher advocates on behalf of a marginalized group in society (Thomas, 1993). Accordingly, the researcher adopts a political standpoint seeking to act against domination and inequality (Bashir et al., 2008). The main goal of this approach is to provide marginalised groups with power, more authority and control to challenge their status. Whilst this approach might seem ideal to study the position of women in Saudi Arabia it is impossible to do so because of the politics within Saudi society and my position as a female and a student funded by the Saudi Arabian government.

Qualitative research also stresses the importance of reflexivity where the social identity or background of the researcher and participants may impact on the process of the study. This can be confusing and difficult since it is not easy to isolate the researcher from what she knows (Ahern, 1999). It is for this reason that I aim to be as transparent as possible being a Saudi female who is also a qualified dental professional. As such it should be quite clear that I hold a particular position in Saudi society. I also have a belief system that has been developed in the field of dentistry and I am a part of Saudi culture as a female. I have already experienced the tensions of each of these different approaches to ethnography through the review of the literature and I was certain that more problems would arise as I enter the field to collect data.

6.1.2 The challenges of ethnography

The main challenges with ethnography involve the extensive collection of data and the risk that the researcher may go ‘native’ and exhibit a partisan attitude towards the group that they are researching, especially if they are unfamiliar with the culture. Thus the ethnographer becomes an advocate rather than a researcher (Robson, 2002). In this situation, the researcher treads a fine line because sensitivity to participants is necessary to carry out the study and evaluate how the researcher may impact on the individuals to be studied (Creswell, 2007).

One issue with the researcher becoming over involved with the studied individuals is that this may disturb or change the natural setting and then compromise data quality. Sometimes this is not a bad thing because it depends on representation and the quality of the reflexivity exhibited (Halcomb and Davidson, 2006). Hence, there is a need for triangulation of data as a skill to produce good qualitative research which is a multiple method of social research (Blaikie, 1991). Since, as Cain and Finch (1981) argued that multiple methods (different sources: documents, observations, interviews) help to understand the issue as deeply as possible (Flick, 1992), in order to improve coherence and fruitfulness to enhance the quality of research politically (Seale, 1999).

6.1.3 Reliability and validity in qualitative research

Within qualitative research, ethnographers base their interpretation on their understandings of participant’s actions (Hammersley, 1992). Hammersley (1992) argues that this constructivist approach can be compatible with realism. Since there is no standard instrument to measure reliability as in fixed designs in quantitative method (Bloor, 1997). This thinking causes a problem for supporters of quantitative paradigms (Mason, 1996). The scientific criteria to evaluate quantitative data are different from that used in qualitative research such as ethnography in relation to an experiment (Beck, 1993, LeCompte and Goetz, 1982). Guba and Lincoln (1986) suggested some factors to evaluate the reliability and validity of qualitative research such as credibility, fittingness, audibility and conformability (Guba and Lincoln, 1981).

- **Credibility or internal validity** (replaces the criterion of truth value in quantitative research) involves how vivid or faithful the description is to the setting being explored in order to recognize the researcher's experience as reader (Guba and Lincoln, 1981).
- **Fittingness** (transferability) or external validity involves the degree to which the results might be extended to the public in order that working hypothesis might be seen to fit the context of the work (Guba and Lincoln, 1981).
- **Audibility or dependability** (it is a consistency or reliability in quantitative research) involves assessing how another investigator can follow the decision or audit trail that involved all researcher's decisions in data analysis stages (Guba and Lincoln, 1981).
- **Trustworthiness** refers to the problem that ultimately there is no final proof of qualitative research since it is negotiable and open ended and the reader must ultimately accept the account as trustworthy. This is linked to authenticity, or how the researcher shows or represents a range of realities in order to help the reader to understand the phenomenon.

6.1.4 Observation as a component of ethnography

Observation enhances our understanding about the participants or researched people (Bailey, 1996). Observation techniques can develop the researcher's observation skills and in the same time enhance authenticity. In ethnography, observation is used to uncover norms, values and the shared meaning of observed people. Whilst these are important as factors that may impact or shape the mothers' agency in Saudi Arabia, there are elements of ethnography that I cannot use or that will be restricted because of problems of access. Elements of in-depth observation in particular will be restricted because of how Saudi culture operates and because of privacy in Saudi families. To account for this issue in not being able to use all the elements of ethnography, this study will then seek alternative sources of data to compliment observations that can be attained from dental visits. The narrative approach will be discussed in a separate part of this chapter. For now it is important to understand that elements of ethnography can be used even though the use of the method will not extend into the private domain of the family.

Using observation in ethnography enables us to uncover the richness of meanings that are associated with participant's lives (Geertz, 1973). Hammersley and Atkinson (1989) suggest that understanding people's behaviours involves using approaches that permit access the meaning of behaviour when we observe people in doing so "we learn the culture and subculture and then we can interpret in the same way that they do"(Hammersley and Atkinson, 1989, p. 6-7). This involves the researcher attending to what happens in the setting directly rather than depending entirely on interviews.

Generally, observation as a component of ethnography is a valuable technique to use in a natural setting (Clifford and Marcus, 1986). In this project I am interested in exploring the agency of Saudi Arabian mothers in relation to oral health. Although I would not be able to explore the home as a natural (actual) setting for participants I would be able to observe their interactions with dental health care professionals. Doing so would enable me to at least grasp their perspectives, attitudes, and values in this setting.

6.1.4.1 Observing in the field

Doing ethnography starts with data collection in the field and the basic problem is how to find a role for the researcher and does not impact on observations. The best solution in this regard is for the researcher to be a full participant as a part of the research (Blomberg et al., 1993). For example, Mars and Nicod's (1984) study in which one of the authors took a waiter job to study the restaurant trade (Mars and Nicod, 1984). The advantage of this was not to affect the setting whereas the disadvantage was that the role of the researcher risks becoming blurred between researcher and participant. This is where the importance of reflexivity becomes an invaluable tool for the researcher as they reflect on their interactions with the context and participant.

6.1.4.2 Field notes

It is essential in real life observation to be selective, the selectively the researcher develops is frequently guided by the research question. Note taking involves recording what happens in the setting. Mostly, it depends on hand writing at the same time or afterwards, by using audio or video which subsequently needs to be transcribed or summarized. Subsequently the researcher needs to add information to situate the recorded data. It appears quite

daunting because the setting is rich and using a checklist may be recorded in field notes (Spradley, 1980). The notes may also involve interview data, documents and researcher reflection.

6.2 Interviewing as part of the research process

Interviews may be formal or, more often than not in ethnographic research they may just involve quick conversations or snapshots of interchanges by, for example, asking someone to clarify something (Hammersley and Atkinson, 1989). Interviewing varies from structured to more in-depth approaches which are common in qualitative research. I will focus here on in-depth interviews since I will carry out my research to give a rich picture of what is happening in the everyday lives of Saudi mothers, and then use this as a template within which to explore oral health.

6.2.1 Advantages of in-depth interviews

In-depth interviews allow extensive data collection from participants, who will be Saudi mothers in this research. They enable probing of features of the participants' experience, in ways that a more structured interview may not. They can explore the experiences of different subjects, who may be selected to reflect a range of experiences. For example, young and old, educated and less educated. In this study, the sample will be from different educational levels and different age groups - albeit with similar factors between them i.e. the experience of motherhood. Finally in-depth interviews embedded within an ethnographic research strategy may enable subjects to 'speak for themselves', therefore improving validity of observations. Although it is important to be cautious here a lot is dependent on the interpretations of the researcher (Seidman, 1998).

6.2.2 Disadvantages of in-depth interviews

In-depth interviews can be costly in time for both the participants and ethnographer, and as a consequence there is usually a limit to how many can be conducted. They can be inefficient since participants may not restrict themselves to the area that is of interest to the researcher. They may not be generalizable and are not amenable to statistical analysis to test hypotheses. In addition, they may be subject to biases because participants may hide aspects of their experiences and because the interviewer may unintentionally influence the

process of the interview. They also only provide a brief snapshot of a particular time, because 12 months later people's experiences may have changed through varying influences. This means that a repeat interview may yield very different data. This has implications because if you were doing a quantitative study the data would potentially have the capacity to be replicated exactly using the same methods and this is classed as reliability or stability/consistency (Seidman, 1998).

It is therefore important to understand the balance as a researcher between the advantages and disadvantages of in-depth interviews. In-depth interviews are an appropriate strategy to use alongside elements of ethnography and as Taylor and Bogdan (1984) suggest, they are useful when:

- There is a clear and well-defined research interest;
- Observation of participants is not possible in the setting;
- There are time restrictions on the research;
- The research is based on a wide range of people or settings;
- The focus of the research is subjective (personal) human experience.

The aim of using in-depth interviews is to gain insight into other people's experiences, and to try and understand the meaning that the participants give to their experiences. In this sense, the interviewer needs to be attuned to other people's stories and may involve a capacity to resist placing one's own interpretation on what is said. As we have seen in the Mexican American mother's study (Chapter 3 pp. 28-29), in-depth interviews can provide access to the values, beliefs, and practices in relation to children's oral health. Interviews will therefore be useful because this research seeks to present the context surrounding Saudi mothers that in turn has an impact on their agency in relation to their children's oral health. In depth interviews provide us with a window to understand the complexity of people's stories and their social context. It is an important component of ethnographic research where behaviour is observed in the field. But interviews can be a very useful tool where it is not possible to undertake observations in settings where access is a problem, as it is in Saudi Arabia (Jones, 1985).

In-depth interviewing relies on the capacity of interviewer to make the point of access productive. Researcher's interpersonal skills and those of interpretation are also essential to be able to extract the nuanced data (Seidman, 1998). There are 2 types of interviews such as individual in-depth interviews and group in-depth interviews, which yield different types of data and are useful in different situations.

6.3 Sampling and data collection

Sampling in qualitative research can change according to how the research progresses. The decision depends on where, when, who and what time is best. A good interviewing strategy often begins by being unstructured whilst becoming increasingly structured towards the end of the fieldwork (Hammersley and Atkinson, 2007). Morse (1994) suggested that any ethnographic study may result in up to 30 interviews (Morse, 1994). She admitted that the exact number was not as important as the ability to define what you have got in the proposal. Since the quality of data is more important than the number of the individuals. In-depth interviews provide richer data and this may mean we require fewer in number, so depending on the quality of the interviews it may be reasonable to suggest a minimum of fifteen participants. Using narrative interviewing enhances the quality of the emergent data.

6.4 Narrative approach

Given that accessing the private worlds of Saudi women for ethnographic observations is not going to be possible it is important to explore alternative methods for securing additionally relevant data. In this section I will discuss the benefits and usefulness of drawing on narrative methods. Writing about social life has been likened to blending a variety of writing genres by using a scenic method to illustrate the whole picture rather than tell a story; to write about people in real life and create characters; using multiple points of view, including the third person is the same thing as deploying multiple narrative strategies such as flashbacks, foreshadowing, and parallel plots (Plummer, 2001). It has been argued that the reasons for this approach are to build dramatic tension and in some circumstances for writers to position themselves as moral witnesses. One example of this occurs in journalism where journalists are not reporting reality objectively but rather are acting as moral witnesses to events (Denzin, 1997a). Whether, in journalism or research, the writer

may be invisible in the text or present as both narrator and participant to produce an in depth account of everyday life. This method can help us gain insight to the lives of others whilst simultaneously attempting to represent and portray people in order for others to gain insight (Harrington, 1997).

6.4.1 Definition and background

Narrative research can take several forms; biographical: where the researcher writes and records experiences from another person; autobiographical: written by the same individual (Ellis, 2004); life history which is about individual's entire life, private situations or communal folklore (Denzin, 1989), oral history: gathers personal reflections of events and their causes and effects from one or several individuals, and uses many practices to analyse according to diverse social and humanities disciplines (Plummer, 1983, Spindler, 2006). "Narrative (stories) in the human sciences should be defined provisionally as discourses with a clear sequential order that connects events in a meaningful way for a definite audience and thus offers insights about the world and/or people's experiences of it" (Hinchman and Hinchman, 1997, p. xvi).

Narrative has a particular contextual focus such as children or teacher experiences within classrooms (Ollerenshaw and Creswell, 2002), or organization's stories (Czarniawska-Joerges, 2004). Narrative may utilize a specific lens or perspective such as feminist lens to report women's stories. The term narrative can be used in any text or discourse in qualitative research, the researcher may use paradigmatic reasons for narrative study such as how people are enabled or constrained according to social resources, social situations in interactive performance, and the ways in which narrative builds and is informed or altered by interpretation (Chase, 2005). In particular, narrative usually, although not exclusively, refers to a form of writing where the stories told by individuals are arranged into a temporal unity drawing on a thematic plot line (Polkinghorne, 1995). Qualitative researchers collect data usually by interviews and observations, but for narrative research the process of interpretation starts before transcription through reading and immersion in the field, alongside interactions with participants. From this intensive form of interaction comes inductive analysis which in qualitative research helps researchers develop concepts from the data (Hammersley, 1992).

Narrative can also involve seeking out individual's experiences from lived and told stories and then finding a way to analyse and understand these stories. Czarniawska-Joerges, (2004) defined narrative in terms of how it was "understood as a spoken or written text giving an account of an event/action or series of event/actions, chronologically connected" (Czarniawska-Joerges, 2004, p.17). Implementing narrative procedure for Czarniawska focuses on studying one or two individuals, data collection from their stories, experience reporting, and ordering the meaning of those experiences chronologically (Czarniawska-Joerges, 2004). This is one way of organizing narrative.

In another sense narrative has been described as an essential system that enables the linking of human action to events (Polkinghorne, 1995). Narrative structure enables people to speak, fragment multiple experiences in sense of order and to give experience a coherent pattern. In sociology, narrative can broaden the social context; maintain a fuller picture to tell specific interaction moments and their social impact (Plummer, 1995). The difference between narrative and other approaches is the sequencing of events that select, organize, connect and are then evaluated to create meaning for a specific audience (Riessman and Speedy, 2007).

If we define stories as a form of narrative, then we can obtain stories through structured and in-depth interviews, through free association methods, and through collectively produced autobiographies. Methodologically speaking participant's will frequently use narratives within in-depth interviews often referring to critical life events that have subsequently been given meaning within various narrative schemes. It is in these schemes that the narratives become sites where agency is played out (Sartre, 1963). Indeed it could be argued that subjects inhabit narrative and the self, in its private, public and gendered versions is constituted through the use of narratives.

All of this is very relevant to this study. As we have seen in the literature review I have mentioned many factors that impact on mothers' agency in general and specifically in Saudi Arabia such as religion, culture, family relationships, the family's responsibility and distribution of duties etc. Of course, narrative, does not establish the truth of events or reflect the truth of experience, rather it creates the very events it reflects on. In this sense, narratives are reflections on not of, the world as it is known. As William Kittredge 1996

said that “we live immersed in narrative, stories we tell to wrestle with chaos in the world around us and help us to make sense of our lives when things go wrong” (Kittredge, 1996, p.157).

6.4.2 Interpretation and narrative

Interpretation in narrative research consists of two levels of meaning: surface and deep. Deeper equates to a more symbolic level. An event that is captured by language is symbolic thus interpretation is always symbolic. Events may be interpreted in several ways, if the interpretation is symbolic the researcher group and understand the multiple meanings of that convey the words, phrases and gesture. This means interpretation always contextualized since words have different meanings (Turner and Bruner, 1986). Learning how subjects define themselves means that the researcher must collect and study these symbolic expressions of meaning (Rosaldo, 2004).

Dollard (1935) initially suggested some guidelines to develop narrative analysis (Dollard, 1935). Firstly, the researcher has to involve the cultural context in which the stories take place such as values, the network’s culture languages, a system of meaning and social rules. The meanings surrounding action/events provide cultural tradition and may shape what is or is not acceptable. They may also provide expectations of how a person positions and represents themselves according to their social environment. These contextual features help the researcher to ascribe meaning to a story plot in order for it to be understood (Bourdieu, 1990). Secondly, it is important to focus on other people who may exert an effect on the main character such as parents, friends, siblings, children and what others may expect of that person. Here according to oral health agency, the family members, dentistry and wider society expect the mother to be responsible about their children’s wellbeing (Carr, 1986).

The researcher should present the reader with enough details of the participants as unique persons confronting specific situations at the beginning, middle and end of their stories (Gigerenzer et al., 1990). This is to enable adequate interpretation of the narratives in order for the reader to gain insight into the social worlds of the participants. An adequate explanation of participant’s actions and connections to elements of data may help the reader to interpret the story (Bruner, 1986). Since the aim of narrative analysis is to create coherent dynamic (conceptual) framework of language rather than taking observations in

interesting and explanatory way (Du Preez, 1991), one thorny issue with this type of representation is that of voice and whose voice is being heard in the research; the participant or that of the researcher (Carr et al., 1991). This takes us back to Geertz (1973) and the presentation of stories, the researcher in this instance must be transparently clear as to their aims for presenting a story in a particular way and this is why it is important to include reflexivity as part of the research (Geertz, 1973).

7. Materials and Methods

The aim of this study is to explore mothers' agency in relation to children's oral health in Saudi Arabia. In what follows, I will provide an overview of how this study was conducted following on from the general ideas and principles outlined in the methodology. This study involved a combination of ethnographic observation with mothers and their children in dental clinics followed up with in-depth interviews focussing on narrative methods and techniques. I aim to provide a detailed overview of how the study was carried out. Before doing so however it is important to point out that the research questions this study was designed to address are as follows:

1. In what ways can Saudi mothers be considered as agents for children's oral health?
2. What examples of agency do Saudi mothers exhibit?
3. In what ways does the agency of mothers relate to oral health practices in Saudi Arabia?
4. What enablers and constraints impact on mothers' agency for the oral health of children in Saudi Arabia?

The strategy developed to address these questions involved recruiting mothers and children as they attended dental clinics in Saudi Arabia. The first stages involved getting access to the clinics and subsequently recruiting a suitable sample of mothers. Subsequently mothers were followed up and interviewed about the challenges they were confronted with in looking after their children's oral health.

7.1 Establishing contact

In the early stages of any piece of research, it is important to establish contact with informants as quickly as possible (Stringer, 1999). Permission was given for me to attend King Saud University to collect my data at the Dental School clinics (Appendix I). I contacted the dental staff in the college again in Riyadh to gain permission to enter their paediatric dental clinics in order to recruit mothers and to observe them during some

treatment sessions. Initially, permission was granted by the Dean of the Dental School and Vice-Dean for Academics who expressed their full co-operation and support for my study.

The most important thing to remember is that there is gender segregation in Saudi Arabia and as a result Dentistry in Saudi Arabia has two separate schools (female and male). In Riyadh, my first approach was to contact the two separate heads of Dentistry School the Head of School for Males in Darriyah University Campus (DUC) who received me cooperatively and asked me to write a letter to him again to begin work and enter clinics in Riyadh. On the first day of my fieldwork, I spent two hours at the school waiting for him to sign an official letter of permission, and also to inform the female school in Malaz, and the Director of clinics in the female dental school in Malaz University Campus (MUC), Riyadh. I also contacted the secretary in the female college to arrange a room to conduct face-to-face interviews with mothers who agreed to participate. The secretary supported, and directed me, ensuring I would be comfortable undertaking my data collection, and gave me the Paedodontic Clinic timetable for Malaz and Darriyah which are suburbs of Riyadh. They left a room empty at the clinic that was quiet, private, and ideal to use for interviewing.

7.1.1 Context of the schools in Malaz and Darriyah (DUC)

The study was conducted in the paediatric dental clinic at the Dentistry College in King Saud University, Riyadh, Saudi Arabia, in both branches:

- Female dental school in Malaz at University Campus (MUC), this is the Female dental school which provides dental services for children, (in 48 clinics of 127 clinics), who come with their mothers or family members. According to Saudi culture, adult males are not allowed therefore, therefore, the fathers wait outside the building.
- Male dental school in Darriyah at University Campus (DUC), this is the male dental school which provides dental services for children who come with their family members (49 clinics) and there are other paediatric female clinics for the Saudi board program (14 clinics).

7.2 The research process

The research process, aims and questions were explained to the relevant dental staff. They agreed to support and were cooperative, either by introducing me to the patient's mother at their clinic or asking me to introduce myself in each session. I tended to visit clinics for two days on a weekly basis in the female school only. On the advice of one staff member who was the head of paedodontic board for students, I needed to add one day in Darraiayah with the board female paedodontists. This woman very kindly arranged an empty clinic for interviewing and recording.

All the staff in both clinics were friendly and supportive, except for one dentist who did not appear to understand the purpose of my study and thought I wanted to evaluate her work personally. I realised I should have been more careful and communicated my intent before I entered her clinic to check her patient's lists. There was another dentist who also thought I wanted to observe her and asked me to take the mother and go out in order for her to continue the treatment, her supervisor heard her and came to take me to a separate clinic to ask me about the situation because the mother was not happy about the dentist's behaviour. The supervisor apologized and wanted the dentist to, apologize to me. I refused because I felt that it was enough that the supervisor as her superior had apologized on her behalf and I did not want to cause any further problems.

The total 25 mothers were approached while their children having dental treatment in the clinic and were happy to take part. One mother withdraw "who came with her son as a patient and had a little daughter with her in the clinic, she started to take part and withdrew at the beginning of the interview since she tried to leave the daughter with her dad in the waiting room and he refused, and then asked her to stop this interview when she told him about the recording machine, even with my trying to write everything manually and stopping the recorder, she was really sad and embarrassed that she couldn't continue and would to cry" (excerpt from field notes). To respect the mother and her husband I left the clinic. I reflected on the agency of mothers in this situation and identified how it may be constrained by cultural rules such as respecting a husband's wishes.

At all stages, I informed mothers about the study verbally and also supplied them with information sheets. I subsequently took oral consent from the mothers. The reasons for this are because the formality of a piece of paper can cause significant upset for some Saudi mothers. I gave the mothers the information sheet which I had translated in to Arabic in order for them to have a chance to read it in advance (see Appendix II), and recorded the interviews in a separate room. After each field observation and interview, I made notes about the context of the dental environment and the mother's interaction with it. After the interview I discussed what I had understood to make sure I had mother's story correctly, and added more notes where necessary.

7.2.1 Establishing a role

As stated previously the heads of departments eased my entry to the clinics by informing the staff about my research, and I was treated as one of the dental staff with the white lab coat, who moved between the clinics and recruited participants. Some dental students thought I was a new supervisor, and I initially found it amusing when I entered the clinic and they started to tell me the history of the patients and their treatment plans. I felt that I was one of the dental team and they in turn appeared to regard me as one of them. This environment helped me in doing ethnography and suggestions for research methods are that the researcher becomes a full participant in the research environment (Blomberg et al., 1993). Finding a role for myself did not appear to affect the setting for the observations, which was an important consideration given the methodological review (Bailey, 1996).

All dentists allowed me to enter the clinics and presented me or asked me to present myself to the mother who came with the child; allowing me to sit in the clinic, observe the mothers, and follow up with the interviews. There was a high response rate achieved with 25 mothers in this study and most were willing to take part, only one mother withdrew. There are number of reasons for the high response rate achieved in this study. Firstly, the data was gained through approaching the participants face-to-face and Saudi culture operates on being polite, helpful and welcoming, this means that it was difficult for mothers to say 'No'. Having said this, it could also be that this study was representing the often hidden voices of Saudi mothers and for this reason they may have been keen to participate by telling their stories.

As an ethnographer, I attempted to blend in with other staff members in the clinic; I fitted the dental school environment: my appearance in the white coat, although I used similar language to that of the mothers and was not identifiable between the team members who treated me as one of them. Many factors enabled me to carry out this field work especially the interviewing. I was a dental student from this university, had a dental background, my appearance was acceptable for the mothers because I was dressed as a Saudi female. I am also a Saudi mother, and from this perspective I share a lot of experience with the women who were taking part in the study. I can speak Arabic and because I come from the same culture I was very well positioned to understand many of the meanings behind the mothers' talk (Rosaldo, 2004). All of these factors enabled me to create an identity within this social group and influenced data collection and analysis. It also contributes to the validity of the data and subsequent interpretations (Denzin, 1997a).

7.3 Sample

The data in this study were collected from a convenience sample of 25 mothers in Saudi Arabia who have children still living at home. In convenience sampling, the researcher selects the individuals who are easy to access, available and allowed to be included in the study (Saudi mothers who attended with their children, from paediatric dental clinic at the Dentistry College in King Saud University). The sample was chosen in the most convenient way for the researcher because there is a difficulty to access female participants in Saudi culture (Bryman, 2015). Although, this sample was with a range of Saudi Arabian mothers to explore their lives in relation to their children's oral healthcare experiences, it was not intended to be representative of the wider population in Saudi Arabia. It does however constitute a sample that is fit for the purpose of this study. Conduct of the observations and interviews. I excluded non-Saudi mothers who attended the dental clinics with their children.

During the interviews I used an aide memoire to help me stay focused on the key themes for the research (Appendix III) (Kvale, 1996, Jones, 1985). The aim of this study was to explore agency as a factor in mothers' life worlds in relation to her children's oral health.

The aide memoire was designed to cover each of the four research questions with prompts and questions designed to explore the degree to which mothers were able to influence and shape their children's oral health practices. It was used to stimulate open-ended responses when needed.

The interview also sought, where possible, to draw out narratives about daily strategies and experiences in relation to oral health practices. In-depth interviews seek to give participants more chance to talk, describe and give rich and deeper data. In this study it also allowed the mothers to talk about the areas that were of importance to them and allowed them to control what they choose. Saudi culture is by nature conservative and using the narrative approach allowed respect for cultural values; for example, using a private interview rather than answering a questionnaire in the dental clinic because participants may be unwilling to speak about some aspects of their daily lives in front of others.

I spent time with each participant in the clinic for observation with the dentists and the child/children during treatment sessions. With some mothers I stayed in the clinic for 15 minutes, some to 20 or 30 minutes, some were observed once and others twice before and after the interviews (an example of field notes in appendix X). I took detailed notes of each interaction and wrote these field notes up after each session. In the field notes I sought to write about how agency manifested in the encounters between the mother and dental health care professionals.

In relation to the interviews, I spent time with mothers listening to their stories about their children's oral health; most interviews lasted for one hour. I wanted to gain insight around mothers' experiences and my field notes gave some examples of agency and the associated constraints, the interviews allowed me to collect more extensive data from participants, enabled probing of what participants say in order to get fuller picture of their experiences with the aim of increasing the validity of data (Seidman, 1998).

After I had transcribed the tape, or written a narrative, I repeated to each participant what she had said and gave her verbal summary. Most participants agreed with what I had inferred from the interview; others asked me to add to my interpretations, because clarifying meanings and checking stories with participants partially addresses reliability and

is termed 'member checking' (Hammersley and Atkinson, 1989). On some occasions I needed to return to the dentist to ask about the children's oral health and the mothers' cooperation just to support the earlier participant's talk in the interviews. It was in this way that I sought to triangulate data from multiple sources such as observations, interviews and field notes.

7.4 Reliability, validity, credibility and trustworthiness

As stated in the methodology the criteria to assess the quality of quantitative data are different from that used in qualitative research (Beck, 1993, LeCompte and Goetz, 1982). Guba and Lincoln (1986) have suggested some factors to evaluate the reliability and validity of qualitative research. These include credibility, dependability and trustworthiness (Guba and Lincoln, 1981).

As stated previously in the methodology (pp.52-53) credibility or internal validity involves assessing the degree to which the findings are believable (Lincoln and Guba, 1985). This involves 'member checks'. I checked the data with participants and modified it after further clarification (Lincoln and Guba, 1985). In addition, I brought my data to my supervisors who also read the data with me and checked my interpretations. In addition, to these exercises I also reflected either by asking the dental professionals about the mother or child's oral health. Thick detailed description of the contexts in which the work was undertaken surrounded the participant's settings was also important to promote credibility. At the end of each interview, I repeated the main components of the mothers' narratives back to them to check my understanding of what they had said was correct. Clarifying meanings and checking stories with participants partially addresses reliability; this is called member checking (Hammersley and Atkinson, 1989).

Dependability involves establishing the stability of the results over time (Bashir et al., 2008). This will be achieved in some degree by providing this detailed description of the conduct of the study to allow it to be repeated in future. The key question here is that if the work was repeated in the same context with the same method and similar participants would similar results be obtained. It is likely that whilst individual stories would vary

different if this study was repeated but because the analysis focused on the major themes enhancing and undermining the mothers' agency it is likely that these themes would re-emerge as important in further work.

Trustworthiness: ultimately there is no final proof of the study findings the point is that the reader is free to accept an account. This is linked to authenticity or how the researcher shows or represents a range of realities in order to help the reader to understand the phenomenon by triangulation of data. This study also used data from multiple sources such as observations, interviews and field notes which were taken from my initial impressions and of any occurrences during the interviews. A description of the dental setting and context of the interview was a necessary and vital tool in building joint meaning with the participants.

7.5 Tape recording and interviews

The tape recorder is a practical device because it allows the researcher to record accurate, detailed, verbal information (Kvale, 1996). However, there were some exceptions in this study when cultural rules and practices meant it was extremely difficult to use the tape recorder. So, for example, one participant refused to use the recording machine because her husband asked her not to. Again taking notes could also cause problems. One participant refused to continue when I took notes, so I continued with the interview and wrote as much as I could remember after she had left (Halcomb and Davidson, 2006).

These detailed notes are supportive material and combined with the interview data; since the context of the interview determines the content and style of the interview data in the analysis stage later (Keat, 2000). Therefore, this way will provide accurate reflection and then help in manage, and analyze data effectively (Halcomb and Davidson, 2006). Where possible I used a tape recorder with participants who consented; transcribed the tape verbatim where possible after the interview (on the same day or within 2 days). This helped me revisit the interview. Beside the tape, and after every visit, was a separate precise transcription of field notes to reflect on the interview and these reflections were an adjunct to the interview data and it also reflected on the interview's style and refined this (Taylor and Bogdan, 1984), describing where the interview took place, the feelings involved, and

what my impressions were throughout the interview. Tapes were destroyed immediately after transcription. Participants did not wish their voices to be kept on tape.

7.6 Translation of the interviews

The Challenges of translation are discussed from the perspective that the interpretation of meaning is core to qualitative research. As translation is also an interpretive act, meaning may get lost in the translation process (Van Nes et al, 2010). Translation between languages involves interpretation as well to be interpreted by the translator (often the researcher him or herself). To avoid the challenge and potential limitations in the analysis I tried to stay as faithful to the original meaning as possible (Polkinghorne, 2007).

However, translation was important even though it was a very time consuming part of the analysis process. It involved listening to the tapes many times, with one issue being that the interviews were in Arabic and although they were subsequently translated into English. In some cases it is possible that I may have altered the meaning of what was being said. This stage was quite complex because I had to be interpreter, translator and writer in order to keep the data as true to its original form as possible. Although this process was laborious and time consuming it nonetheless meant I was very familiar with my data because I had revisited it lots of times and of course this also enabled my analysis.

7.7 Participant observation

As stated previously, observation is an important component of ethnography and involves observations in a natural setting (Clifford and Marcus, 1986). Observations were crucial because the concept of agency is a latent construct and can often only be seen during interactions between mothers and those around them. I therefore attended and observed what happened in the dental clinics rather depending entirely on interviews (Hammersley and Atkinson, 1989). My goal was to explore in detail what is going on with Saudi mothers' agency in relation to children's oral health. As soon as possible, note taking recorded what happened in each setting. This depended on handwriting the notes at the

same time or afterwards and these were added to situate the recorded data. The description notes involved recording the following:

- **Time:** when the mother, dentist responses and child were observed, what day of the week, time of day.
- **Place:** the dental clinic, interview room, the location of any activity of mother in the dental school such as in the reception or the waiting area.
- **People:** individuals that may effect on the main participant (the mother) according to their role or position (mothers as participants, dental staff, children or any family members that involved in the setting such sisters or the father)
- **Objects:** arrangement of the dental unit or some furniture in the clinic or interview's room.
- **Acts:** each single action during the treatment sessions or the mothers' interview, or from the staff around mother or child either from the dentistry school or family members. Such as mother, dentist and child relationship/communication.
- **Purposes:** what people (dental staff, mothers) were trying to complete on that day, at that time or what the mother expected from the dental staff
- **Feelings:** the feelings emerged as a result of my interactions with others in the setting.

I spent time with each participant in the clinic observing and making notes with the dentists and the child/children during treatment sessions. As an observer, I spent time observing the mothers closely whilst jotting down notes at the same time on the side of the clinic. I was of course not involved in the treatment session and made sure I respected the privacy of patients and the treatment environment.

The task of the ethnographer is to be accepted as a member of the group within the setting in which they are observing (Robson, 2002). Rarely did I need to ask the dentist about the mother's cooperation in relation to child's oral health. All mothers appeared to accept my presence in the clinic without any real concerns.

7.8 Data Analysis

An inductive narrative thematic analysis took place throughout the whole of the research procedure. In reality it had already begun with reading around the existing literature and considering my culture in relation to what I have read. I followed closely the accounts that people gave me and included the important parts of their story in my analysis. This involved examining the salience of their stories for agency and the oral health of their children whilst taking note of any disruptions, contradictions and similarities. The final product of the analysis was a combination of my interpretations and the participant's views which was developed jointly in the space between us as we interacted. The resulting analysis made a coherent story for the reader, and was written as simply as possible so the reader could gain insight into the lives and worlds of Saudi mothers. By building the interviews into a narrative structure this involved decreasing the text of the interview but at the same time increasing those aspects of the interview that focused on agency.

My way of exploring mothers' agency in Saudi Arabia involved carrying out a blend of ethnographic methods of participant observation and in-depth interviewing, alongside narrative analysis. I started the analysis after the translation stage to transfer interviews data in a big table for all participants this involved a rewriting process. Eventually it became apparent that this was not going to be possible because the table was a huge and I couldn't compare/contrast between all participants. I then, organized each participant's data into separate sheets, read and reread them in order to compare and contrast the stories. This approach enabled me to create the main themes with heading and subheadings. The deconstruction of stories is advantageous because the researcher can add/develop more detailed themes that arise from them (Czarniawska-Joerges, 2004, Huber and Whelan, 1999). This helped in finishing the short (coherent) stories for each participant and enabled me to link the interviews with the field notes. I was also interested in the context of the stories (who the mother was talking to, what the situation was and where) as part of the interpretive approach. This is important because language does not always give access to what has really happened (Peres et al., 2005).

I then considered the ways in which different contexts could shape the situations mothers found themselves in, for example:

The Macro level: dental school policy, school policy with sweets in Saudi Arabia, public availability of sweets in Saudi Arabia, the social environment/relationships surrounding the mother, how the mother negotiates her role within the father's support or lack of, family context and arrangement of power, hospitals/dental services and how to get there, and so on.

The micro level of talk: At this level I had to reflect on the ways in which Saudi mothers presented themselves in interviews. For example, how they wanted to portray themselves as acceptable and doing the 'right thing' as a mother in front of me as both a dental care professional and a Saudi.

I interpreted the meaning of the data through my reflecting on my own experiences as a Saudi mother, a member of the culture and a dental professional (Creswell, 2012). The final product of the analysis was a combination of my interpretations and the participant's views which were built jointly in the space between us as we interacted. The resulting analysis made a coherent story for the reader, and was written as simply as possible so the reader could gain insight into the lives and worlds of Saudi mothers. Narrative structuring decreased the text of the interview but at the same time increased it through developing the meaning.

When the researcher has a clear aim of the study at the interview themes emerge naturally illustrating specific experiences in each theme (Bold, 2011). I arrived at my themes by viewing the narratives through/involving many surrounding broader contexts (Denzin, 1989) in a Saudi mothers' life in relation to children's oral health. For example, the main themes are the importance of the mothers' role as facilitators of oral health, and the importance of extended family relationships and their impact on the agency of mothers in relation to oral health practices. Of even greater importance were the cultural influences on a Saudi Arabian mother; for example, commensality as daily routine in Saudi houses, and the issue of deference to husbands and older family members (I discussed this in more depth and more examples in constructing the vignettes as a part of data analysis part later in this chapter).

Narrative stories are more than the listing of events, and have various sources such as documents, oral statements, and interviews (Berman and Thomas, 1989). The problem of this approach is that there is no sole method to analyse the data rather; the researcher engages it with many ways to produce a story (Elliott, 2005). The researcher then combines different kinds of sources to explore how people construct stories and teases out what the stories tell us about them (Holloway and Freshwater, 2007) and assists researchers in making writing more reflective (Holstein and Gubrium, 2008). Generally, within narrative, the interviewer conceives of his or her investigation as storytelling from beginning to end, encourages the participant to tell stories, and during the analysis works out the narrative structures of the interview stories and possibly composes the stories to be told in the final report. So narrative provides a powerful access to the temporal dimension of human existence (Richardson, 1990). The next section will discuss how I constructed the stories (Vignettes) to reach the final report.

7.8.1 Vignettes as a methodological tool for the analysis of narratives

“Vignette is a short story about a fictional character or fictional scenario appropriate to a particular study. The story places behaviours of the character in a concrete context and allow the researcher to explore participant’s views on issues arising from the situation” (O’Dell et al., 2012, p.1).

A vignette is a selective tool which offers a focused perspective on the research, it often comprises of clear information based on the particular requirement of the research, written as a short story or scenario (Hughes, 1998, Braspenning and Sergeant, 1994, Renold, 2002). There is increasing use of vignettes within qualitative research as a way of both describing and analysing data (Jenkins et al., 2010). Hughes defines vignettes “as stories about individuals, situations and structures which can make reference to important points in the study of perceptions, beliefs and attitudes” (Hughes, 1998, p 381) especially in health care for sensitive issues (Hughes and Huby, 2002), children and young people studies (Barter and Renold, 2000), people’s norms attitudes behaviours around a specific issue (Finch, 1987) and to investigate participants’ insights and experiences (Dawson and Tylee, 2001). In qualitative methods, a vignette may be used as an isolated data collection method or in conjunction with others such as interviews and or observations (Barter and Renold, 2003,

O'Dell et al., 2012). They are useful because they can highlight given social issues or problems needing further consideration. Vignettes are therefore increasingly considered to be a useful methodological tool (Finch, 1987, Renold, 2002).

In this work on mothers' agency in relation to children's oral health in Saudi Arabia, vignettes were integrated with the observations of participants that were developed within the in-depth interviews. I used vignettes as a tool of analysis. The vignettes allowed me, the researcher, to systematically compare the responses of participants in relation to diverse behaviours (see Renold, 2002 for further discussion around exploring diverse behaviours). In this report I provide the vignettes of four women. Constructing these vignettes enabled me to systematically compare and contrast the lives of different mothers in relation to children's oral health practices and daily behaviours with the other participants. One of the key dimensions that emerged in this analysis was the degree of complexity and challenges mothers were facing alongside the resources that they had. Some mothers had a lot of resources to enable their agency whereas others were confronted with low resources and at the same time some quite daunting challenges. The vignettes were constructed around the daily lives of the women in the study and built from how they represented their life conditions.

7.8.2 Advantages of using vignettes

Vignettes can often offer a more useful focus compared to individual interview (Hughes, 1998), they may also define and standardize information (Braspenning and Sergeant, 1994) and enable the emergence of more uniform data (Gould, 1996). Vignettes can provide a useful framework for presenting data with different focus groups and enable their development through a series of stages (Hughes and Huby, 2002). As stated previously I used vignettes as a tool to be able to compare and contrast participants stories around the problem and challenges associated with agency. I was guided by existing research which suggests that vignettes should be constructed on real life events (Rahman, 1996) in a way to present the nuances and the insider knowledge of participants (Sumrall and West, 1998). In this work, vignettes were used to tease out the many factors which influenced mothers' agency in the Saudi home. They were also used to restructure the complexity of daily Saudi

life into a more coherent account thereby giving clarity and enabling me to focus on recurring similarities and differences in the lives of Saudi mothers.

During the data analysis I constructed four vignettes from four different mothers' lives around their actual experiences. The structuring of the four vignettes was planned to stimulate data analysis and provide a template through which to analyse the rest of the narratives. I proceeded in this way because initially most women experienced a similar context. I chose each of the four mothers based on their background and their different responsibilities and roles at home and with their children and as wives or daughters-in-law within the extended family house. The idea behind this choice was to promote comparisons between each case in relation to agency (see Appendix IX).

Take the example of Jawaher, a Saudi mother who has four children in addition to her societally ascribed responsibilities (food preparation, studying progress, health and oral health) and extra responsibility for one child with multiple physical impairments who is dependent on her. Most of Jawaher's time is consumed by the impact of having a disabled child because she is busy with his hospital appointments, attending disability management morning lectures, at home carrying him, providing personal care, dressing and ensuring he has an education by monitoring his studying and progression. By comparison, Huda is in paid employment and is a mother of four children; two of them are at university. She has a supportive husband and extensive family resources; a maid and perhaps more than one driver who are involved in the household chores and this subsequently gives her more time for her work and the supervision of her children and home. This undoubtedly has an impact on her agency which increases. She faces very different challenges to Jawaher yet despite the advantages that she might enjoy she still struggles to monitor the food intake of her older children who bring sweets into the home behind her back. The rest of this analysis is presented in the findings section.

After constructing these vignettes I reflected on the mothers' stories and then introduced extra factors from my research notes into consideration. These factors also had an impact on their agency, for example, having a high number of children and the presence of other agents such as older siblings who can undermine the mothers' agency by smuggling sweets into the home. It also involved exploring the role of the extend family such as the mother-

in-law. Adding these extra factors enabled me to elicit multiple interpretations around mothers' agency and their children's oral health behaviours and practices at home. After building the vignettes I then engaged in more in-depth analysis and enlisted the help of my supervisors to act as sounding boards where we discussed the narratives and teased out further themes. This more detailed analysis resulted in the development of a typology of the key dimensions in the women's lives which I have reproduced in tabular form for ease of reading (see Appendix IX).

Using this process of analysis enabled me to achieve insight into the structure of Saudi life in the form of time, place and the social relationships of the mothers' everyday lives. Building the vignettes in this way also helped me to tease out the forms of agency that were present for the mothers and how these related to the oral health of their children. There is more detail on this in Appendix X. I divided the two areas into structure and agency and produced condensed tables, one in Chapter 9 (see Table 9.1) and two in Appendix IX and X.

7.9 Reflexivity

In qualitative research (Crotty, 1998) also stress the importance of reflexivity in which the researcher has the shared social identity or background of participants and may affect the process of the study. Since it is not easy to isolate the researcher from what they know (Ahern, 1999). Therefore, it is important in narrative analysis to examine my role as the researcher and interpreter of these data (Mauthner and Doucet, 2003). The interactions between me and the mothers, as the focus of this work, was to 'make sense' of their experiences related to their children's oral health. I had to be reflective as a Saudi mother and from my own experience of motherhood in relation to children's oral health. I had to be careful to not align my experiences too much with theirs because I was mindful that our situations and circumstances differed greatly. I deduced that we had a similar standpoint this involved issues such as responsibility, feeling guilty and blaming ourselves. I was also aware that my education and social circumstances differed from some of the mothers. The participants and I are part of Saudi culture, but I am effectively living between two worlds; my dental and social background as a Saudi and my academic life here in the UK both as a

student and mother. A Saudi female who is also a qualified dental professional holds a particular position within Saudi society; I had more status and power than some mothers. I also have a belief system that has been built in the field of dentistry and I am a part of Saudi culture. I have experienced the tensions of the different approaches through reviewing the literature and felt certain more would be raised as I entered the field to collect data. This combination produced insights and simultaneously influenced the data analysis process. It also increased my ability to be reflective as a Saudi, a female, and a mother. I had to be transparent as to the ways in which I represented the mothers' experiences because if I wasn't it might undermine the validity of data (Denzin, 1997a).

7.10 Ethics

The ethical aspects of this research are very important, especially before I entered the field (Lincoln, 1995). The researcher who engages in face to face contact with researched in the field work needs to consider the ethical dimension of qualitative research such as fully informed consent, deception, privacy, avoidance of harm, identification and confidentiality (Punch, 1994). These aspects of the research were considered as follows:

Ethical permission: formal ethical approval was obtained from Sheffield University Research Ethics Committee and expedited approval from the Dental Ethics Research Board at King Saud Dentistry, Riyadh, Kingdom of Saudi Arabia. (See Appendices I and II)

Consent: it is important to take the consent from all participants in research studies (Ryen, 2004). Informed consent was taken before observations from the dentist who was with the mother in the dental clinic and from the mothers before the interviews. Informed consent forms part of an ethical code in qualitative field work (Wax, 1980). After the observation time and before the interview time, the mother was given a chance to read the information sheet again. Participants were free to take part in the study and were given the option to withdraw at any time, without giving a reason.

Location and safety: the research took place in the dental school at King Saud University. There were no safety concerns for the mothers as patients and the research took place in a clinic for observations and a spare room for interviews. Travelling in Riyadh is not easy for women because they are not permitted to drive, and I was reliant on drivers. It is for this

reason, that I carried a mobile phone with me all times and informed my family where I was going and the approximate time of return (Saks and Melton, 1996).

Anonymity and Confidentiality: All data was anonymized and I changed the names of all participants to mask their identity and ensure confidentiality with some of the data (Morse, 1994). The full content of the mothers' stories were screened to remove data that may identify them or may be sensitive to improve the anonymity, these are confidential and not for public use.

Privacy: Privacy is an important concern in Saudi society. At all times I respected the privacy of participants and ensured that they were protected from psychological harm (Denzin, 2000). This was a benefit of using narrative because participants only disclosed what they felt comfortable with rather than being questioned relentlessly.

Data protection: All transcribed data were kept on a password protected computer. Tapes were destroyed immediately after transcription in agreement with participants. The transcriptions were fed back orally to participants to check their veracity to clarify if I had misinterpreted anything.

7.11 Obstacles to data collection

Geographic distance: the distance between my residence and the dental school with the crowded streets was a long drive; 45 minutes and sometimes 1 hour. The female and male schools are not in the same area. On other hand, I used the journey time after the interview to continue with my field notes or add more information about the whole setting. I depended on a male driver who was familiar with Riyadh city to take the shorter way to get dental school in the rush hour and had to wait after the interviews in the dental school, if he was busy or held up in traffic.

Timing issue: I tried to balance the time between each part of the interview and gave the mother time at the end for additional information and in the same time I did not want to affect the routine of the treatment session (the interviews were mostly one hour in length). For example, once, the dentist rang the mother to attend the clinic with her child and she continued the interview after treatment was completed.

7.11.1.1 Power relationships

Although the participants showed their interest in taking part, they respected the standpoint between me as a researcher from dental team but they still disclosed a lot of information during the interviews about their experiences with their children's oral health. Crucially, my appreciation of their role as an oral health agent or facilitator appeared to enable the interview encounter and the relationship between us. I used the words "we are as mothers" which worked as a position of commonality between me and the mothers. All participants were willing to allow me to explore their experiences especially because I returned to Saudi Arabia only to hear them and involved them in my study. This was possibly the first time someone had been interested in hearing their voices and wishing to represent them in text.

7.11.1.2 Family members

Some mothers were keen to participate but they had other children with them and it was difficult to leave them in the waiting area or allow them to enter in the interview room because this may have impacted on the recording and distracted the mothers. Some families came with the father who was waiting outside the school and mothers had to rush to finish treatment and leave. The heat was an issue for waiting fathers and they were not permitted to enter the female school because there were no male waiting rooms separate from females and Saudi custom decrees that if a man is not married to a woman or related as a father or brother then he cannot be in contact with her.

7.11.1.3 Research timing

I gained my material from spending time with the mothers who visited dentists with their children at the paediatric dental clinic in King Saud University, Riyadh, Saudi Arabia between August and December 2012. I had to stop the research twice for Eid in Saudi Arabia and the dental school was closed (Eid al-Fitr and Eid al-Adha).

8. Results and discussion: The public domain and mothers' agency

As this thesis considers the significance of mothers' agency in relation to children's oral health it is important to understand the context within which mothers are mothers in Saudi Arabia. This chapter will present the results of the study from within the public contexts of Saudi mothers including the school in the first part, and the dental clinic in the second part. An account of Saudi public life will be provided through a description of the relationships between families and each of these public settings and how these settings can have a significant influence on mothers' agency for oral health. Each section begins with an outline of each context before going on to provide an account of how this context related to mothers' agency in these data.

8.1 The public domain and mothers' agency: The School

The data in the study suggested that there are supportive factors within the school environment that empower mothers in relation to their children's oral health. These are as follows:

- 1- **Extension.** This highlights the mechanisms that operate between the school and home, for example through the engagement of the child and teacher and through peer learning.
- 2- **Sustainability.** In relation to the oral health programmes, this focuses on the mothers' agency in relation to her child's oral health
- 3- **Obligation.** This illustrates the ways in which children and parents are pulled into oral health activities in order to develop children's oral health behaviours and practices.
- 4- **Authority.** This compares the mother and teacher roles and the role of school advice on children's daily oral health behaviours/practices.

Before getting into a discussion of these factors it is important to briefly review some of the work that has been conducted in relation to Schools as a setting for health promotion. Although we have already identified in the literature review that parents are the most important facilitators in supporting school-aged children, especially in their oral health attitudes, knowledge and behaviours, the interaction between the school and home can promote a supportive community environment to improve children's oral health and health behaviours (Pine et al., 2000). The school may be both a facilitator and inhibitor of mothers' agency because it acts as a mediator of agency for both the mother and child. Hence, schools' policy can provide information and skills about health for the students through school health interventions (Petersen, 2003). This aims to develop students' control on their health in school. Firstly, this involves the students, for example, it can influence on pupils' beliefs and attitudes (Kwan et al., 2005) especially about health to develop healthy behaviours (Petersen, 2003) within vital periods in their lives to have the greater effect on health (Currie et al., 2004). Secondly, it extends to their parents at home, to develop a sustainable impact on the students' health, and to increase the home and parents' collaboration (Jürgensen and Petersen, 2013).

Therefore, in relation to health and oral health, school is not merely a setting in terms of its physical boundary, but extends its influence into the community sphere. It enters into the privacy of family life mediated through parents and through the children's independent access to these spheres with their peer relations (Christensen, 2004b), under the guidance of teacher and the school system (Acheson, 1998). These socialization practices within the home and school have important implications for children in relation to controlling their self-care practices (Mayall, 1996) as different contexts of their daily life (Corsaro, 1997).

Empowerment is another concept which is the goal of many health programmes at schools (Bellow, 1992) (Kalnins et al., 1992), and this includes oral health programmes. Empowerment is defined as "*a process by which individuals gain mastery or control over their own lives and democratic participation in the life of their community*" (Zimmerman and Rappaport, 1988, p.726). This definition suggests that people, either as individuals or collectively, increase their control on their lives through changing their social and political

environment and through the process of participation (Zimmerman and Rappaport, 1988). This means the school environment can develop children's empowerment through the context of teacher in the role of facilitator, through peer learning, and through children's active participation.

Examples of UK-based programmes to create supportive environments includes providing free fruit in school schemes for 4-6 year old children in state schools to address inequalities in health, and improving access to fruit and vegetables (Lowe and Horne, 2009). The provision of fruit in a positive and fun way may mean using the teacher and older children as models and involving children in activities that promote fruit consumption. If food may be used in this way, then children's oral health and behaviours may in fact be improved through oral health programmes in schools (Vanobbergen et al., 2004).

The literature based on a Western model of health promotion suggests that the interaction between school and home promotes a supportive community environment to improve children's oral health and health behaviours (Pine et al., 2000). I will now explore the home and school environments in Saudi Arabia. I will do this by using data collected from mothers' describing their experiences but also through documentary analysis of the environment of schools in Saudi Arabia. This section proposes the ways in which the school operates as a healthy setting to extend the mothers' agency in relation to children's oral health. I will discuss the ways in which home may differ from school and argue that in this way the school is more than a physical setting.

8.1.1 Oral health programmes in Saudi Arabia

The Ministry of Health and Ministry of Education and Products Companies as sponsored collaborated in 2005 to run oral health programmes in Saudi Arabia. The programmes work on the 1st grade primary school children (aged 6 years) through trained dentists and teachers focussing on oral hygiene practices. This programme based on the relationship between teachers and students to facilitate oral health education messages. This happens through many activities within the schools such as group brushing activities, model making, painting, and drawing by the students. This programme extends to involve more than education target such as cariogenic and non-cariogenic food items, identification within the public places for example shopping malls and even spread more awareness within dental

clinics (Ministry of Health, 2007). The schools programs also aimed at parents through the distribution of printed products to emphasise regular tooth brushing under supervision to improve children’s daily oral health practices. All these activities are conducted to make oral health part of the daily teaching activity and spread oral health awareness among the children (Ministry of Health, 2007). Tooth brushes and tooth pastes have provided in all programmes activities.



Figure 8.1 A leaflet of oral health practices as a part of the oral health programmes in the schools.



Figure 8.2 Examples of schools’ oral health programmes activities for children to be taken home.

Within Saudi Arabia, oral health programmes are implemented regularly within both the state and private schools. One example of this is the provision of posters for children to colour in at home, the provision of toothpaste and tooth brushes which may in turn positively affect the child’s daily practices. Anecdotally, mothers had these types of

programmes when they were in the school before the advent of state schools. Some private schools also have a resident doctor who checks children's' oral health regularly and then informs the mother if the child requires treatment.

8.2 The influence of School on mothers agency

As stated previously these programmes have a fourfold effect on mother's agency through extension, sustainability, obligation and authority.

1. Extension

The school was identified as extending into the home through the teacher providing oral health information, or activities to be taken home and through peer learning at school.

Reem:

“School has fun for children involve oral health program and brings external visitors to give oral health information to the children and brushes and toothpaste[...] depends on the school which has a clinic or not that has a doctor checks children's oral health regularly. Children are encouraged, put a poster on the wall at home, and are interested in brushing after these activities [...] child is affected by teacher talk[...]every word is important and acceptable directly[...]children also copy their friends at school[...] accept from school more than mum in everything even the teeth care” (Interview with Reem, 16-10-2012)

Mona:

“School has enormous role on child [...] School is good environment for awareness [...] especially because child excites more with other children in the same place” (Interview with Mona, 3-11-2012)

These mums both identify that oral health programmes within schools include oral health education, provide brushes and toothpaste for children and engage them in fun activities. This highlights the socialization process, because we can see here that the child is influenced by the teacher and peers in the school setting more than the mother in the home environment. In this way, the teacher plays a role in social development of children because

the power of the teacher is more circumscribed than that of the parent and children learn behaviours more easily through interaction and feedback with their peers (Akos, 2000).

So although the mother is the primary modeller of health for children, this is extended to other significant adults such as the teachers through their engagement and care because they are designated as active, responsible agents and facilitators of children's relationships with their peers (Christensen, 2004a). Moreover, children's agency provides important insight into the dynamics of family based health and health care (Christensen, 1998). This leads to children actively contributing towards health-promoting activities in the family and then at school (O'Connell and Brannen, 2013). Within Saudi Arabia, the school clearly can act as a facilitator of mothers' agency. Interestingly this illustrates the similarity between oral health programmes in Saudi Arabia and those of the west.

2- Sustainability

Mothers criticised the sustainability of oral health programmes in schools and felt that although their agency was supported, it was short-lived.

Dalal:

“Awareness is high in school [...] yes, kids come from school happy and excited about brushing [...] if they eat sweets they go right away and brush [...] We benefit from that awareness program at school but for a short period [...] they are affected by the awareness at school and the dentist much more than me. [...] Saudis do care [...] they send doctors and supervisors to schools to spread awareness about teeth and how to brush [...] need to continued awareness all the time” (Interview with Dalal, 2-10-2012)

Noura:

“School plays a big role with children [...] For example, in my kids' school an awareness program was presented by college students. They checked their teeth and taught the kids how to care for them [...] kids enjoyed it and were encouraged to care for their teeth [...] I wish more of those awareness program are available [...] They can encourage healthy diet by serve milk and dates throughout the first year of school that also need to be concentrated on and be continuous” (Interview with Noura, 19-11-2012)

Mothers appreciate the awareness programmes in relation to their children' oral health and relate how children are enthusiastic to care for themselves as an outcome of the programme by brushing especially after eating sweets. However, the mothers were not satisfied with the sustainability of the programme because it only provided a short term benefit and wasn't therefore continuous.

The Ministry of Education has banned cariogenic items and sugary beverages in canteens in all public schools (Musaiger et al., 2014, Humaidan, 2011) to be more supportive of developing healthy lifestyles of school age children. These actions reflect guidance in the West for strengthening the capacity of schools to function as health promoting settings involving living, learning and working, requiring collaborative action between staff, students, parents and educational authorities and health professionals (Sheiham and Watt, 2000).

This is further extended to the provision of healthy food choices.

Abeer:

“Asking us to bring healthy food in our school which is good [...] sometimes we are asked to bring tooth brushes and paste and I hope this is continuous” (Interview with Abeer, 13-11-2012).

This challenged the view of what the national healthy school can provide for a healthy food environment, in involving/asking parents to bring the fruit; the parents are willing and happy to support the school by bringing fruit and/or brushes and toothpaste in short-term programs. The mothers however, are not satisfied with the sustainability of the intervention as the children are only involved during specific short periods while the rest of the year lacks healthy activities. Whereas, in national healthy schools in England for example, fruit is provided for all children 4-6 years old for free and there are opportunities for older children to buy healthy food from the school (Lowe and Horne, 2009). Thus, the fruit is available on a daily basis for all children. Although, Saudi mothers are not satisfied with the sustainability of the program but this happens even in Western schools.

This is exactly what the Ottawa Charter (WHO, 1986) for health promotion activities intended regarding creating supportive environments to maximize healthy lifestyles and an example of dental health promotion in schools is to ensure only sugar free food and drinks are available to students (Locker et al., 2007). Another similar strategy of health promotion is to develop personal skills in various settings and the school is the convenient place to improve dental health and enable children's ability to make choices and promote health on a daily basis. Aubrey Sheiham (1995) argued that building healthy policy is essential to improving the oral health of the population in order to reduce sugar consumption, especially at the level of organization such as schools.

3-Obligation:

Obligation denotes how the schools could draw in parents and children into the healthy activity of the schools and therefore enable the development of healthy behaviours. In the previous section we have the example of healthy food. In this section we have further evidence of the school providing information to pull parents into activities to promote healthy oral health behaviours.

Haya:

“School can distribute flyers for child who will take it to mum at home and making mothers gathering to improve oral health awareness by dentists for mothers as well[...]It is useful for child and mum because child accept from doctors and teachers more than mum and in the same time mum learn Oral Health information and will apply on her children[...]child will be with friends and mum so the promotion will be better[...] school oral health program explain better in school especially with good show[...]will encourage mum to be careful more[...]It can provide healthy food and decide brushing time after eating[...]school is the second mother for child spend longer time[...] so child will learn brushing after eat then mum will not be tired with him to remind him to brush[...] it will be a habit without reminder” (Interview with Haya, 11-11-2012)

In relation to mothers' agency and children's oral health I found all mothers enjoyed the oral health activities in schools with their children and were willing to participate in the

school activities. In terms of the public domain these activities might be considered a kind of psychological empowerment where this was seen as “a sense of personal competence, a desire for and a willingness to take action in the public domain” (Zimmerman and Rappaport, 1988, p.726). Mothers in this study confirmed/expressed that a need for participation in community activities as in their children’s school in relation to oral health.

Hind:

“Mother gathering at school for oral health lectures[...]dentist explain to mums how to care child’s teeth in plenty of time(longer time) not as in clinic in treatment session [...]School is guarantee place to reach all mothers. If there is a dentist in school and high awareness, caries will decrease and less pressure in dental clinics and most important point is children’s oral health” (Interview with Hind, 18-11-2012)

Dalal:

“I wish calling for mother meeting encourage us to care child’s teeth and concentrate on mother’s awareness” (Interview with Dalal, 2-10-2012)

Mothers appear to be interested in developing awareness around their child’s oral health and even used dental terminology such as dental caries (Sosa in Arabic), linking them with established dental discourses around the mouth.

4- Authority:

Mothers identified that the school carried a great deal of authority and could direct children’s behaviour more effectively than themselves.

Eman:

“School advice is acceptable and applied faster more than mum for children [...] teacher influence is big[...]child learn from the school[...]influenced by school more than mum and apply if it is coming from the teacher” (Interview with Eman, 5-11-2012)

This mother highlights the influence of school and the impact of the authority of the teacher on her children more so than her own authority. This illustrates that children’s agency may

change depending on the context. They can challenge their mothers but in this example we can see that they could also more than likely be compliant with an authority figure such as the teacher (Akos, 2000). Consequently, the teachers' agency is a facilitator of children's agency in relation to oral health and as such can increase the efficiency of the mothers' agency at home.

A participatory learning approach that involves the child-parent relationship has been suggested in western countries as a way to improve children's oral health (Kasila et al., 2006) by asking parents to encourage their children tooth brushing and to keep a diary (Saied-Moallemi et al., 2008). Such programmes can also employ frequent parent-teacher meetings in school because parents seem to value the information received from school (Denman, 1998). In Saudi Arabia, this type of meeting does not exist in the school system except for educational purposes. Oral health activity rests on school programmes that involve sending leaflets home to parents with the child. This may be why all the mothers in my sample suggested a school meeting for health issues should be encouraged. Since, mothers recognize their need for participation "as a component of their agency" in these school public activities to empower themselves in relation to child's oral health. In some respects then whilst the school can help expand their agency the situation could be much more active than it is currently.

The school was discussed by some mothers more as a setting for developing healthy behaviours, with the suggestion that mothers would adopt what the schools promoted.

Nawal:

"Each school need to have a clinic, a system that enforces healthy snacks, a basket of fruits [...] we are a rich country we can provide this. Kids spend a lot of time in schools, need to eat healthy snacks. Children learn that from school and bring it home with him, mother will be encouraged to follow up" (Interview with Nawal, 7-10-2012)

Nawal clearly identifies the school role in improving child and mother oral health knowledge and habits. She states that her children spend most of their time in school and need to learn eat healthy from there. This suggests that the child will adopt healthy habits

such as eating fruit, but does not identify why the home would be willing to change its existing habits to match those of the school.

The heart of the process of the Health-Promoting School is to find new ways to improve health and address health problems because the strength and needs are different within countries, and even within the regions of the same country (King, 1996). For example, oral health promotion programmes designed in deprived areas in Scotland with the highest caries levels in Western Europe to increase tooth brushing behaviours in 5 year old children has been shown to be effective in preventing caries and reducing inequality (Pine et al., 2000, Macpherson et al., 2010). Although the school is considered a healthy setting there is another opinion/argument to focus more on evaluating the effectiveness of the settings based approach to achieve sustained benefits and estimate the challenges not what works, but how and under what conditions (St Leger, 2001, Mūkoma and Flisher, 2004).

In this section, we have identified that there are many similarities between Saudi Arabia and other countries in the world. Oral health programmes in Schools can clearly be seen to attempt to support, and in some cases extend the mothers' agency in relation to children's oral health. We would caution that there is a need to address the challenges of the effectiveness of oral health programmes such as the limitations of mothers to access the school easily during the programmes. This may further improve the effectiveness of the programmes and effectiveness of mothers' agency in relation to children's oral health. In this way, health promotion in Saudi Arabia may need to consider the willingness of mothers to participate, and the practicalities of integrating pupils, parents and teachers into oral health promotion within the school and wider community.

To sum up, the school can develop empowerment and support mothers' agency in relation to children's oral health. In school programmes for example, transforming oral health information through leaflets to mothers or transmitting the information through children. However, it may require more than this to help mothers to make informed decisions that allow them to gain greater control over their lives, especially their daily lives to take into account children's oral health practices, one suggestion is more effective communication (Nutbeam, 2008, Laverack, 2007). In some respects the private sphere and public domain of mothers' agency are not independent from each other. Neatly expressed by *Dana*:

“Mother is the basic not the school [...] school is the complement for mum role [...] Mum alone can’t work”. So schools complement the agency of mothers through various mechanisms and enable their participation in oral health promotion.

8.3 The public domain and mothers’ agency: The dental clinic

8.3.1 The context of dental setting

The study was conducted in the paediatric dental clinics at the Dental College in King Saud University, Riyadh, Saudi Arabia, in both branches:

- The female dental school in Malaz at University Campus (MUC) provides dental services for children in 48 of 127 clinics. Mothers come with their family members. According to Saudi culture, adult males are not allowed into the building therefore, the fathers wait outside the building.
- The male dental school in Darriyah at University Campus (DUC) provides dental services for children who come with their family members (49 clinics) and there are other paediatric female clinics for the Saudi board program (14 clinics).

8.3.2 The nature of dental public services in Saudi Arabia

The research participants in this study are all mothers who attend the dental clinic in the King Saud University with their children. The system in the KSU dental clinics is as follows; it starts with the emergency room (ER) dentist who is responsible for the initial assessment. The ER dental clinic then refers the child to the dentist for treatment and then to the hygienist who provides preventive services. Many children continue with prophylaxis regularly. We can infer that at this stage and with this arrangement there might be a potential problem because most children start preventive measures after experiencing pain or a dental problem. It would be more beneficial if the dentist provided preventive advice at the appointment before referral.

There are special clinics for prevention with hygienists, and others for paedodontists. Like all schools of clinical dentistry, the dental school needs patients for restorative treatment and the dental curriculum for their students. Some dentists transfer the patients to the

hygienist for preventative advice alone and the dentist's role is viewed in terms of treatment of disease alone. If the patient reaches the hygienist clinic they then have a six month follow up visit. In Saudi Arabia, hygienists work in the National Guard hospitals, military hospitals and big hospitals, but not in the general dental practitioner clinics which have only one dentist for urgent treatment and are in short supply. It is for this reason that most mothers in this study began the dental visit with an expectation of treatment that would be provided by the dentist and not the hygienist. The majority of mothers visit the dentist who provides treatment and refers to prevention services. The policy in Saudi hospitals is that patients can be seen initially, only if they require urgent treatment and this is directly related to the shortage of dentists and hygienists.

It is compulsory for Saudi mothers to sign up for GP services. This ensures that their child starts vaccination courses and that they have the specific personal documents. This means seeking health services early for general health, but omits dental services. We can infer here that Saudi mothers appear to have a lack of guidance in the importance of access to dental services. There are some mothers who seek dental care in private clinics which provide preventive services alongside hygienists and dentists. They may have dental and medical insurance but this does not apply to the majority of mothers. In contrast to Saudi Arabia, some Western countries have a health visitor service that provides oral health advice to mothers about their child's daily care after birth, including when she should start brushing her child's teeth and register with dental services. This early exposure ensures that the child is familiar with the dental clinic when the first tooth erupts. Subsequently there are regular follow ups for prevention with either the dentist or therapist and treatment if needed. The dental therapist's duty is helping their patients to develop health promoting behaviors, by providing essential information about general health, and oral health in particular. The aim of this is to promote effective individual behaviors (Hollister and Anema, 2004).

Dental services policy appears clearer for mothers to follow in the west. Indeed the oral health advice given to Saudi mothers occurs only when she is pregnant, advising her to care for the child's first teeth and asking her to visit the dentist every six months. There is no follow up. Within Saudi Arabia it is not clear to mothers where to start with preventive

dental visits because there is no clear policy to register with dental services or get prevention. The GDP dental services provide urgent treatment when the child is in pain then refers to the big hospitals to continue. Saudi dental policy therefore directs the mother to be dental agent only for dental treatment, but it does not appear that her agency is considered for prevention measures. Within the public sphere it would appear that the mother is not being utilized as an effective oral health agent because she is only supported to engage with emergency services when her child is in pain.

8.4 The mother as a dental agent

As I discussed in chapter (2, page 25), the argument that mothers have been co-opted as dental agents at home and so have become central to the focus for the promotion of oral health has been formed largely from a Western perspective. Within this perspective good communication is essential between professionals and mothers in order for the latter to develop the position and practices to become an effective dental agent (Nettleton, 1991). In the west, this makes the mother responsible for her children's health. At the same however it risks blaming her if the child's health is not good, one example of this is that of dental caries where a mother may be accused of dental neglect if her child's oral health is poor (Harris et al., 2004, Harris et al., 2009). Thankfully the policy on dental neglect in children in the UK is now changing. Researchers have argued that the dental team should have effective oral health interventions to decrease the level of dental pain and prevent further disease (Harris et al., 2009). This shifts the emphasis away blaming to provide additional support to children (Sarri and Marcenes, 2012) and collaboration with families in responding to appropriate treatment (Harris et al., 2004). In contrast, within Saudi Arabia the mother is responsible for her children's health but no one blames her or even considers bringing up dental neglect. In this study, some mothers blamed themselves when seeing their children with carious teeth or in pain, and inferred that this was due to a lack of guidance. Indeed, many mothers asked for support to enable their role in facilitating their children's oral health practices, and recognized their need for additional support from the dental team for early intervention, treatment and prevention. So even though the mother has not yet been fully recognized as a dental agent they are nonetheless agents who require services for their children.

Dental public policy in Saudi Arabia is still working on the high risk strategy to treat existing problems and then prevent them because there is a high dmft of 6.1 (Wyne et al., 2008). We can imply here that the environment is not supportive and therefore the mother cannot be blamed if there is lack of early preventive intervention for children. Therefore, increasing emphasis on the prevention of disease and the reduction in levels of dental decay in the west have made dental care for children much more manageable in recent years whereas in Saudi Arabia this area is still developing.

In the earlier dental literature, Nettleton discusses how for dentistry if the mother lacked the skills and ability she was considered an ineffective dental agent who would require support in order to develop her skills (Nettleton, 1991), (see further discussion around the dentist-mother relationship in chapter 2). This is in marked contrast to the more recent policy on dental neglect which firmly blames the mother for her child's oral health if it is judged to be somehow lacking. All of this implies that for dentistry the child's dental care becomes part of maternal responsibility. Most children's health services depend on the mother to care for the child and the apparent aim is to devolve responsibility for care to the mother (Lewis and Coates, 1980).

Again, this approach fails to recognize wider factors that may have implications for a mothers' agency when dentistry presumes that she is automatically responsible for her child's oral health care, (see more in-depth discussion on mothers' agency and its implications for oral health promotion as last section in chapter 3). Although Saudi children have high caries levels, the public services depend on emergency care rather than prevention, because of these structural factors it becomes impossible to blame mothers for their daily practices in relation to their children's oral health.

In this study mothers' cooperation was essential to improve oral health, because without it their children may fail to develop positive oral health behaviours, and access dental services. Yet in the context of Saudi Arabia, mothers might not be held responsible alone since there are external factors beyond their control that restrict their ability to become effective dental agents. Dental care needs more time from parents, and because of the gendered nature of parenting in Saudi Arabia, the mother is seen as the main agent of care.

Her dental agency may be apparent by decreasing or controlling her children's daily sugar consumption, and engaging in oral hygiene practices such as tooth brushing, in order to prevent dental problems. Through these actions, the mother may become a dental agent but, as we shall see in the following analysis. Mothers may also need support to develop these skills, and we need to account for the external factors that may affect a mothers' agency in order to take care of her child's oral health.

8.5 Mothers' agency within the dental setting

Within the data, there appeared to be three stages in which the mothers exert their agency in relation to their children's oral health in the dental setting.

8.6 Accessing services

In terms of accessing services the mother was found to be involved in preparing her child before going to the dental clinic and convincing the child to attend. Further evidence of the mothers' agency was going early to the dental clinic with their child for check-up to prevent serious problems.

Jawaher:

"I am worried about serious problem in teeth that's why go dental clinic early"
(Interview with Jawaher, 15-10-2012)

Amani:

"Always check them to notice stains or changes to go to dentist without pain to prevent serious problem" (Interview with Amani, 5-11-2012)

Huda:

"The boy is a regular in dental school here now [...] and serious sign is pain but we go before this stage" (Interview with Huda, 16-10-2012)

Nuha:

“Preparing and convince child before appointment by giving promises or a present like for the daughter who had bad experience in the private” (Interview with Nuha, 30-9-2012)

These mothers all exhibited a proactive approach to dental services, but also externalized their responsibility by going to dental services to check their children’s teeth. In the dental clinic the relationship that operated between the child, the dentist and the mother also acted as a setting for the agency of mothers in this study. Their agency appears within this context in the ways described in the following field notes which expand on the dental encounter and the mothers’ interaction with the dentist:

Saudi mothers in this study are careful to answer the dentist, be clear, and know the importance of their information to dentist and children’s treatment plan during taking medical and dental history especially in the first visits. As we have seen the mother’s cooperation has been suggested as a principal mechanism for the operation of dentistry to improve oral health. The communication and interpersonal skills of the dentist are also important in helping develop mothers’ agency in order for them to become effective dental agents. In this next section I will discuss to what extent the Saudi mothers can be said to exert agency in the dental setting; Haya and her child Sara clearly illustrate the mother’s position in the dental clinic.

Haya identified her cooperation in improving her child’s oral health when she was giving details about her child’s oral health.

Here is an interpretation of my field notes on Haya’s responses:

Haya is a mother of 6 children, has a degree in social work, and lives with her husband in their own home. Her husband Naif is responsible for the household expenses and takes the family members to the hospital. Haya finds it difficult to look after her children’s dental health. She asks her eldest daughter Rana, who is 14 years of age, to supervise the others sometimes and Haya feels guilty about relying on her daughter to help. Haya visits the dental clinic with her child Sara mostly

because Sara is in pain. Haya and Sara tend to go alone because it is difficult for Naif to have a lot of time off work. If her children have dental pain they tend to go to Haya not Naif. Haya will then tell Naif about the child's pain and arrange to attend the dental clinic. She goes to the dental school's clinic which has a high quality of dental services, and because the neighborhood center has limited availability for dental treatment. She attends the dental school with her children, even though it is a long drive. Naif needs to be excused from his work, and Haya has to gain permission from the children's schools for their absence if she wants to see the dentist for an emergency visit in the morning. Haya's children are cooperative and ready to visit the dental clinic. On the day of the interview, it was Haya's first visit with Sara, after having been transferred from the ER dental clinic. Haya reported that the dentist took x-rays and history on that day.

I observed Haya and Sara just arriving from the ER clinic downstairs to the paedodontic clinic, what follows is a vignette of their encounter.

Dentist (Amal): *what are you doing with the smiling face Sara??*

Sara sat on the dental chair and smiled. Haya appeared concerned to answer all dentists' questions about Sara's medical and dental history. She discussed the treatment plan with Amal and I observed that she was worried, and kept asking if there were carious teeth.

The dentist (Amal): *yes there are some carious teeth.*

Haya: *really, were they affecting the sound teeth?? Is the caries deep?? Do need endo treatment??*

The dentist (Amal): *they are not deep and need the usual fillings within several appointments*

Haya: *we will come inshallah.* (Inshallah in Arabic means if (Alla) the God wills it)

Haya: *are you going to start the treatment today??*

The dentist (Amal): *no, today is treatment plan only, treatment will be next visits*

Haya exhibits her efforts to co-operate with Amal and displays concern over the degree of dental treatment that Sara will receive. Haya obviously has some dental knowledge because she discusses endodontic work without being prompted by Amal. She also appears to be taking part in decisions about Sara's dental treatment when discussing the treatment plan with Amal. Amal gives Haya reassurance and describes the process of the treatment, but interestingly does not discuss preventive care.

The mothers in this sample demonstrated that they were responsible for protecting their children's teeth from caries by visiting dentists early, in order to prevent pain of dental problems and to help with caries control. In this respect the mothers in this study knew that it was their responsibility to prevent dental disease by visiting the dental clinic for regular check-ups before disease took hold. As we can see previously, Huda described how she visited the dentist regularly with her child and stressed the importance of regular visits. In this respect mothers were trying to seek dental care for prevention before the treatment stage.

From the foregoing excerpt we can see that the concept of locus of control is related to agency because mothers who appear to have a higher of locus of control, have more control and greater ability to influence their children's health and develop positive behaviors. Locus of control (LOC) in general is to which extent person believe have control/power over event in own life (Rotter, 1966). Health locus of control (HLC) is defined as the perception an individual holds of what controls personal health. There is internal and external locus of control in health. The internal is a belief of health status is a result of our own behaviors and action, whereas the external is a belief of our health status depends on powerful others as professionals or outside forces (Wallston et al., 1999). In the dental field, LOC has been found to be predictive for children's dental health. Researchers found children whose mothers had more external LOC were at higher risk for developing dental caries (Reisine and Litt, 1993). In contrast, other research has found little association between mothers LOC, children's health status, and use of preventive health services (Amen and Clarke, 2001).

Likewise the form of discipline in this study was also of interest. Some mothers described the dental visit as not being optional and therefore the child should be told to go and not rewarded for attending the dentist. It was therefore an expectation rather than an act of volition. Mothers were trying to enhance their children's agency through strong discipline in relation to regular dental visits. The mothers' agency appears here to either be involved in limiting or controlling their children's agency and the freedom to choose in relation to when to have a dental visit. Concurrently mothers sought to have an increased level of oral health for their children. In this respect the mother's beliefs about her child's oral health were both controllable and uncontrollable because her child's oral health was something she felt responsible for, but simultaneously believed that the dental profession was also responsible for supporting her in her daily dental effort with her child. In this respect it might be argued that this mother is expressing decreased control over her child's oral health with increasing control being attributed to the dentist. In this study Saudi mothers felt they were responsible for their child's oral health but at the same time also felt they needed support from the dentist to check for disease. Abeer's perceptions of the dental visit reinforce this stance:

Abeer:

“Dental visit must be without promises and child has to visit dentist when we say this to them and if they refuse we have to punish them instead of presenting gifts to go because it is necessary for them” (Interview with Abeer, 13-11-2012)

One reason for this might be that this was because there are no dental services for prevention for children in Saudi Arabia. Abeer also demonstrates that she is concerned about the dental visit because it was essential for her child's oral health, but that she faced some resistance from her child to visit the dentist. This was because the child was not familiar with the dental clinic. The reason for her discipline was because if he became used to attending the clinic the situation would improve.

Mothers also demonstrated that they were concerned about their children's oral health, but many appeared under confident about their daily dental care and practices. In Saudi

Arabia, oral health promotion programs are mainly schools based. So the mother may only start receiving knowledge about the child's oral health practices when the child is of school age through written leaflets, and not before eruption of the first teeth.

8.7 The dental clinic as a source of oral health information

All mothers identified that the advice of the dentist in the clinic was a considerable source of support with their children's oral health. This included instruction with cleaning the children's teeth, understanding the correct method of brushing and flossing. Mothers appeared to be interested in developing awareness around their children's oral health through the dental clinic as a setting that runs oral health lectures, provides flyers, and information in waiting room screens.

It is important to note that even though the interviews were translated from Arabic to English some Arabic words have the same meaning as English medical terms, for example 'sosa' in Arabic means caries and it also means worm, although it depends on the context as to how the word is translated.

Mona:

"I always check their teeth to prevent caries, careful to bring them to dentist if they need, I asked the dentist how to care the little baby which is with wet cotton piece I clean her [...] from three years old I checked if there is brown stain and come to dentist [...] My children do not have serious problem even dentist said this to me" (Interview with Mona, 3-11-2012)

Mona believed that her responsibility was asking the dentist's advice with Hala about early stage cleaning when she was in the clinic with Hala's brother Bader. Mona reported checking her children's teeth regularly by herself during brushing time. She visited the dentist for her children from when they were 3 years old for dental check-ups. She also made appointments if she found stains and needed to make sure these stains were not caries. Mona was considered a cooperative mother and so her agency with respect to oral prevention was obvious. She indicated that the dentist was very positive about her efforts

with her children's oral health, because they didn't have serious dental problems. She was also very happy to have this appreciation from the dentist about her efforts.

Saudi dentists understand that the majority of patients visit solely for treatment and do not access preventive services even though these are provided by the dentist in the dental school. In Mona's case she appears to understand the importance of taking her child to visit the dentist. She knows the importance of early prevention and is keen to access the dentist for preventive services as early as the time when her child's first teeth erupt. However, it is her lack of knowledge in accessing preventive services rather than the importance of preventive services, which prevents her from visiting the dentist at an earlier stage. There is a lack of guidance for mothers that explains the nature of public dental services in the dental school.

For Mona, the diagnosis and treatment provided by dental professionals appears to conform to external guidance and control, in order to have increased her sense of personal empowerment with respect to her child's oral health. The manner in which she perceives the dentist's support affects her caregiver role of her child's oral health and illustrates her locus of control. Mona believes that only with the support of the dentist can she manage events that would affect her child's oral health. Therefore, the support of the dentist is vital for some mothers. Mothers with a low internal locus of control may feel overwhelmed by what they see as an uncontrollable event (Seligman and Darling, 1997). The findings of this study certainly suggest that the effects of the dental setting, including the role of the dentist, should be investigated as possible mediators in assisting mothers to develop agency in order to be effective agents for their children's oral health in Saudi Arabia.

8.8 Mothers' agency as a facilitator for children's oral health

In the next section I will discuss mothers' agency as a facilitator for their child's oral health, I will begin with a vignette of Dana.

Dana

Dana is a mother of 7 children. She lives with her husband Majed in their own home away from their extended family. Majed is responsible for the household expenses. Dana said “*mother is the main responsible and she can raise children to be the best so. I am looking the best for my kids. Sometimes mum is busy but my responsibility to direct them and later they are responsible about themselves*”. Dana visits the dentist with her children every six months for a check-up and she supervises and checks their teeth during brushing time, Dana has a good dentist in her neighborhood and goes to the private clinic only for emergencies to prevent waiting. She can contact her dentist in the dental school if she wants something for her children. She mentioned that attending the dental clinic is not difficult and the major difficulty was arranging her time and transportation in order to visit. She said that her time was sometimes limited because she had to give Yaras’ lunch after school and come to dentist quickly. Dana leaves the youngest children with her elder daughters at home during the appointment so she can concentrate on Yara’s treatment. On the day of the interview, she told me that it was not the first visit for Yara, and that she can normally stay with the dentist without me, but today may be different she told me “*my children are cooperative in dental clinic but may be today is different because there is extraction*” (Interview with Dana, 12-11-2012).

Here is a short vignette of the interactions that took place between Dana, the dentist, and Yara. I built the vignette from my observations and field notes.

The dentist asked Yara to sit on the dental chair and saying I like your dress, it is nice. Yara smiled in response to the dentist and the dentist then turned towards Dana and gave her a chair to sit near to Yara.

It was obvious from their interactions that Dana and dentist knew what this visit would be about; Yara’s tooth extraction and space maintainer because Yara had already started the treatment and this had been discussed in the previous visits. I observed Dana and the dentist discussing and recapping on the treatment plan and agreeing to today’s treatment.

Whilst they were talking, the clinic supervisor came and asked the dentist about the x-ray for few minutes and what treatment was taking place this visit. The dentist briefly explained to the supervisor, who left appearing satisfied. The dentist then started the extraction procedure with Yara.

Dana stood near the dental chair looking/ asking the child during and after the extraction.

Dana: *How are you? Ok sweetie now?*

Yara: *I'm ok but feel gagging*

Dana: *"be patient sweetie will finish [in an encouraging voice, promoting her to be patient], you are ok you are a good girl"*

Dana and Yara with her dentist were waiting the bleeding to stop after the extraction. The supervisor returned to them, checked the socket, and helped place the space maintainer. The supervisor then asked Dana to start the interview with me after he had made sure everything was alright with Yara.

I observed that Dana used positive reinforcement for the child's behavior and gently encouraged Yara. I could see that she facilitated Yara's treatment to enable the dentist. A mother's agency in these situations can be seen in terms of a facilitative role, but from my observations Dana did not appear to be asked and she instinctively took on this role. Dana's agency as a mother here involved treatment decision-making and discussion with the dentist about Yara's treatment, whilst providing support to Yara as a facilitative agent within the treatment session. Saudi mothers such as Dana may choose to accept the treatment options, and not be forced to accept specific types of dental treatment as the Mexican mothers have to in the USA (Horton and Barker, 2010, Horton and Barker, 2009).

The reasons why mothers sometimes became facilitators became apparent in Nuha's story.

Nuha

Nuha is a mother of 5 children who lives with her husband Khalid in their own home, and not in an extended family. Khalid is responsible for the household

expenses, and if he is not busy can take Nuha and the children to the hospital appointments. Nuha arranges and visits the dentist with her children when she notices caries visually and when the children complain of pain. She took care to explain how responsible she was as a mother; *“I am careful of oral health, ask doctor about the suitable toothpaste for children, and apply the correct tooth brushing method from doctor directly”*. On the day of the interview, Nuha came with two of her children; Jood and Abdulla, each had an appointment with different dentists. I observed that she spent her time between the two clinics, encouraging the children with supportive words such as “good boy, hero, and good girl”; she excused herself as she moved between the clinics. I observed that Nuha had a chat with the dentist about the x-ray findings, and was concerned that the caries level in her children’s teeth did not reach the pulp. She seemed more relaxed with Abdulla who was quieter and happy to stay with the dentist during the treatment, and chatted about the I-pod games. Whereas with Jood, she was more conscientious, especially at the beginning with the local anesthesia, and wouldn’t leave Jood until this step was finished.

I observed the dentist who said *“your tooth will sleep now. Do you feel this?”* Jood replied “yes” then, dentist continued the treatment. Satisfied that Jood was coping Nuha then went to other clinic to check Abdulla whilst he was having his local anesthetic. Jood appeared to needed Nuha with her during the treatment, and I observed that Nuha stayed with her more than Abdulla. When Jood finished the treatment she started crying and Nuha hugged her. She stayed in the clinic to support her children and helped the dentist by calming the child using encouraging words. Nuha helped the dentist to encourage Jood to open her mouth during the treatment, held the big suction for the dentist with one hand and placed other hand comfortingly on Jood’s head. She was acting as both a dental assistant and a mother to relieve Jood’s anxiety and assist the dentist. After treatment, she helped Jood to rinse and clean her mouth and instructed her to bite on the cotton roll saying *“we are finished why you are crying now?”* In her interview, she mentioned she had a poor dental experience that affected how she managed her children’s oral health and tried to prevent them from having dental pain.

Nuha:

“I had bad experience and mother does not want children suffer from same pain[...]I’m anxious and staying with child during treatment visit[...] worried about high percentage of anesthesia as I heard horrible stories[...]worried about child’s pain” (Interview with Nuha, 30-9-2012)

Nuha highlights the influence of her previous dental experience and this encourages her to visit the clinic early with her children for a dental check-up. She illustrates why her agency has been affected because of her previous personal experiences of dental care, and clearly identified her worries about her child’s pain. Nuha’s previous negative experiences could potentially have led to avoidance of the dental clinic. Nonetheless, it is encouraging to see her belief that future negative occurrences can be avoided and that she was more likely to stay with her children during treatment sessions. This example was in contrast with what Freeman (2008) suggests about mother’s attendance with her child during dental treatment as a facilitator. In some ways, Nuha was a facilitator for the process of treatment, but she also attended with her child in order to decrease her own anxiety, not the child’s anxiety about dental treatment. There are some mothers in addition to Nuha in this study who were frightened of treatments such as extraction and who seemed to display more anxiety than their children.

8.9 Choice and decision making; implications for mothers’ agency

All mothers identified the importance of being active in the clinic with their children and for the dentist. Since, the mothers’ agency in the clinical setting is illustrated by their participation in and sharing of treatment decisions such as the placing of space maintainers or by providing support for the dentist and facilitating treatment, using suction and gently restraining their child. The mothers can also express their agency by asking about the treatment plan such as through discussion of the x-ray findings, and choice of treatment options; if it is restorative or endodontic therapy and so on, or asking about fluoride

application. Mothers could direct their children's behavior by giving suggestions to the dentist in order to encourage the child to open their mouth and continue treatment, and they also exert moral agency when they ask the child to thank doctor before leaving the dental clinic.

Jawaher gave me this example in her discussions with me about Faisal's treatment:

Jawaher:

“You can see him alone with the dentist very happy no need to stay with him he is cooperative in the clinic. Accordingly, I just stay in the clinic to discuss the treatment plan at the beginning of visit then go to the waiting area and leave the child with dentist who is relaxed and may sleep during treatment” Also, from her observation she expressed that there was *“no need to stay in the clinic with Doc “—“[...] I trust her I will return when he finished if others need”* (Interview with Jawaher, 15-10-2012)

Jawaher demonstrated how she was comfortable with this dentist in treating her child. She was participating in the choices and decisions about her child's oral health in relation to the treatment plan at the first few visits. She was very much an equal partner in agreeing with each stage of treatment at the beginning of each session. However, because the dental school was set up to ensure the education of dental students, the session was quite long; taking 2 ½ hours. Jawaher left Faisal with the dentist in the clinic and returned to the waiting room exhibiting a high level of trust in the dentist.

8.10 Different forms of knowledge and mothers' agency

This section illustrates the different forms of knowledge in the dental clinic and the implications that these may have for the mothers' agency. Within the nursing literature, forms of knowledge have already been identified as important for the medical encounter and the dental encounter appears to be no different. For example, the knowledge of the medical practitioner or dentist orientated from “scientific knowledge” and also we have the “experiential and social knowledge” of the mother about her child's cooperation and behaviors (Liaschenko and Fisher, 1999). Liaschenko and Fisher conceptualized these different types of knowledge in the practice such as “scientific knowledge” things that can

be learnt from books, journals, guidelines or protocols of care, “person knowledge” to knowing a person as an individual, understanding personal experience of illness and care delivery and based on information provided to the doctor by family members to develop in specific situations or with particular people, “experimental knowledge” things that can be done based on experience. The personal knowledge is provided with person who does not like being in pain and becomes very frightened and anxious and based on information from the family (Liaschenko and Fisher, 1999, Rolfe, 1998, Freshwater and Rolfe, 2001). We can suggest here that all types of knowledge need to be considered when using clinical judgement and decision-making in the dental practice setting.

Nouf

Nouf is a mother of 3 children. She lives with her husband Turki in their own home away from their extended family. Turki is responsible for the expenses, and his employer excuses him from work to take them to the dentist. Nouf’s motivation to go to the dental clinic is to have healthy teeth for her children and she is facilitated by the flexibility of Turki’s work. Nouf started to visit the dentist when Rasha was four years old. She arranges the dental clinic visit by calling the dental school’s clinic and come with her all children because she did not have anyone to stay with them at home. She visits the dental clinic in the King Saud University even with the long drive which is approximately one hour. On the day of the interview Nouf came to dental clinic for her daughter Rasha who had an appointment. It was not the first visit for Rasha and she was familiar with the same dentist. Nouf left Rasha with the dentist in the clinic because Rasha cried when she was present. The dentist asked Nouf to stay in the waiting area to continue the treatment with her assistant. Nouf stayed in the waiting with her other daughter Reef who was eight years old, and baby Hisham who was seven months old, until the dentist had finished. I observed that sometimes Nouf left Reef with Rasha in the clinic during the treatment. Before going to the waiting room, Nouf was careful to provide the dentist with her personal and experiential knowledge about Rasha (things she responded to and how to deal with her) in order to help in Rasha’s treatment process.

Nouf:

“Eldest daughter takes the younger to the clinic and I stayed in the waiting with the little one because the dentist is so kind with my child, too patient with my child such as once spend all the appointment’s time without work and did not complain to me just tried, then I chatted with dentist and gave her suggestion to help my daughter to open such as mention my child’s cousin names and how they open their mouth in clinic and it was successful and open her mouth. After this chat, dentist told me a lot of my child’s stories with her cousins because they are very close friends [...] and I can leave my child with dentist in the clinic” (Interview with Nouf, 19-11-2012)

This example about Nouf and Rasha, illustrate show different forms of knowledge may be required for improving the process of dental care. In my observations, Nouf used her personal and experiential knowledge to help the dentist to improve the treatment process that related to her child (Rasha).It appears that Nouf suggestions and experience with the dentist enable Rasha to be more cooperative during dental treatment.

Another example of variety of knowledge in the dental setting with Sara who appears to be more comfortable with medical knowledge but whom also provided her mother’s personal and experimental knowledge to the dentist during Fahd’s dental visits:

Sara

Sara is a mother of two children and she is educated up to high school level. She confided that she would have loved to continue her studying but not at the expenses of her children because as she said *“education can’t guarantee good oral health for children because it depends on the mother’s character.”* She visits the dental school with her children on her husband’s family recommendation. Sara goes to the dental clinic with her husband who is busy with his work until late, he leaves, and her family’s driver takes them back. Sara’s family supports her by providing a driver to enable her to travel to and from the dental clinic. I also observed that she asked the dentist to book her children’s appointment in the afternoon time after the school. I inferred from this request that Sara valued her children’s education. On the day of the interview, it was the last visit and only for follow up for her son Fahad. Sara

considered the dentist's advice based on the scientific information as a source of her oral health knowledge to care her children's teeth.

Sara:

“Normally [...] the most important thing is reading [...] but after visiting the dentist. She explained that it should be done brushing vertically [...] and she showed the movement on herself [...] before we used to not use the dental floss, I did not know it's that important for children but doctor said it's really important[...] we should use it. I obtained oral health information from Dentist advice in the dental clinic about teeth cleaning in early stage and correct brushing and flossing method [...] Doc should advice mum from early age for her child because oral health behavior is hard to change later and have to educate mother about harmful thing and practices to avoid”(Interview with Sara, 24-9-2013)

Sara also provided her “personal experience” as a mother for Fahad in telling the dentist how to deal with him and things that she thinks help dentist during the treatment session such as how to communicate with him to ensure he is more comfortable during the treatment.

Sara:

“I told the doctor don't be tough with Fahad because he is scared, sensitive and need more encouragement to stay on the chair for dental treatment” (Interview with Sara, 24-9-2013)

Another example of knowledge in the dental clinic encounter is “scientific knowledge” that is based mainly on the dentist background to provide the dental education and information to the mother in relation to daily oral health practices. All mothers in this study identified the dentist as a source of their dental care knowledge.

Fatima

Fatima is a mother of 3 children and she visits the dental clinic with them, because she does not want see them in pain, and be frightened of the dentist. She arranges

the appointments, and does not face any difficulties getting to the dental clinic. On the day of the interview, her daughter Najd, who is four and half years old, attended for screening and fissure sealants. Fatima obtained oral health information from the dentist, which is medical or scientific dental knowledge. She presented her personal knowledge in the medical and dental history questions to the dentist in order to give more information about Najd's oral health practices.

Fatima:

“Well [...] I know that they need to brush before bed and after meals. It's common knowledge when we visited the dentist she said few things about sugar and how it makes the caries worse. This information I took from the dentist[...]Using the dental floss I learned from the dentist as well[...]I use to think that using the toothpaste and tooth brush will do the job but I discovered the importance of using the dental floss[...] explains to you[...] This is good for your teeth [...]this is what your teeth needs [...] She encourages you; the doctor way of encouraging the child is very important for the treatment process” (Interview with Fatima, 1-10-2012)

Here she adds another form of knowledge; common knowledge which she did not identify as originating from the dentist. What she also identifies is that being encouraged by the dentist was important for enabling the whole treatment process.

Examples of more personal knowledge come from Mona.

Mona

Mona is a mother of three children. She comes to dental clinic with her children in long journey from Kahrj (75 kilometers). Mona's husband Nasser plays a vital role in getting them to the dental clinic. Nasser encouraged her to come with the children, and appears more involved and motivated to attend than her. For example, Nasser re-arranged his work with his manager on the day of the appointment, and does so for every appointment. Mona arranges with the school to excuse her child at the end of the school day. She considers that they are were lucky that the appointment is always in the afternoon time, and arranges with her sister to child sit

for the other children. On the day of the appointment, Mona came to clinic with her daughter Hana for her first visit. As usual, the first visit is only for assessment and taking patient history. Mona seemed to be interested and involved answering the dentist's questions about Hana's health and dental history. At this stage, she presented more details about her personal knowledge especially Hana's oral health behaviours to encourage the dentist to enforce her to be more careful about brushing routines "*Hana needs me to remind her to brush daily*". Also Mona was concerned about the oral health of Hana asked about the dark color small spot that noticed recently on Hana's gum which was "*only pigmentation no worries*" as the dentist replied.

Mona is an example of a Saudi mother who presented her "personal knowledge" to the dentist in order to help Hana to improve her oral health behavior. In this way Mona enlists the help of the dentist to ask Hana to be more competent to her mother's request for daily brushing. In this way the mum tried to improve Hana's responsibility about her oral health. The "personal knowledge" is known as "*lay knowledge*" in sociology and is used to understand health and illness. It is "*both social and personal knowledge in the sense that shared knowledge informed the private understanding of illness*" (Williams and Popay, 1994). It attempts to make sense of causes of diseases in relation to the experience of its impact. Mona was interested to share her knowledge with the dentist's scientific knowledge through her narrative. Therefore, the dental setting is considered as an important public setting that shape how mothers can act as agents for the oral health of children. I will now present a summary for both of public domains discussed in this study in relation to mothers' agency.

8.11 Summary of the public domain and mothers' agency

In this chapter I have presented examples of the different settings discussed in this study (the school and the dental clinic) as public domains of mothers' agency. In the school section, I started with a brief introduction about oral health programs in schools in general, and how it is useful to improve children's health and oral health as a public domain. The school environment also develops children's empowerment to control their health and oral

health. Hence, the school context provides children's active participation, through the teacher's role as a facilitator and through peer learning. Thus the school is considered as a supportive environment for parents at home according to the western studies. I then displayed brief information about oral health programs in Saudi Arabia. Subsequently, I explored the home and school environment in Saudi Arabia using data collected around from mothers' describing their experiences. I displayed the key school findings, and compared these with previous studies on schools and children's oral health. This chapter also involved the setting of the dental clinic as another public setting that can influence mothers' agency. It describes the nature of dental public services in Saudi Arabia, presented the mother as a dental agent in previous western studies, and then compared with Saudi mothers in this study. Since, health improvement may be said to be as a result of people's efforts and lifestyles rather than the treatment of patients as isolated units (Cormier et al., 1981).

The data in the study within the school environment suggests four supportive factors which empower mothers in relation to their children's oral health in a variety of ways; **Extension** involving the mechanisms that operate between the school and home, **Sustainability** of the oral health programs, **Obligation** involving the ways in which children and parents are pulled into oral health activities, and **Authority** involving the comparison between the mother and teacher's roles in relation to children's daily oral health practices (see Figure 7.2). The participation of mothers in oral health promotion would appear to be reliant on the communication process between the mother, her children and other community organizations. Therefore it would appear to be vital to consider the agency of mothers in Saudi Arabia when it comes to the effectiveness of oral health promotion. Improving the mothers' agency may well lead to improvements the prevention of oral diseases.

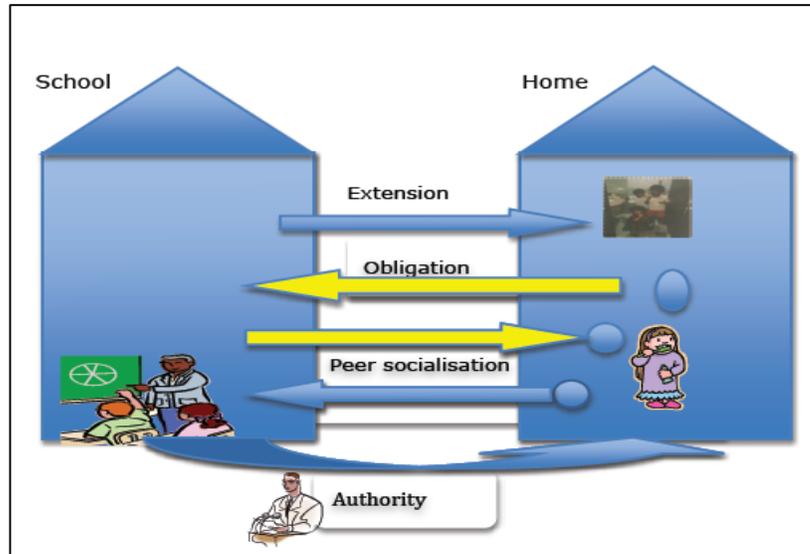


Figure 8.3 Supportive factors and mothers' agency in the school environment

Indeed, many mothers asked for support to enable their role in facilitating their children's oral health practices, and recognized their need for additional support from the dental team for early intervention, treatment and to prevent further problems. It can be argued here that mothers in Saudi Arabia are dental treatment agents who acquire services for their children. Dental public policy in Saudi Arabia is still working on the high risk strategy to treat existing problems and then prevent them. We can imply here that the environment is not supportive and therefore the mother cannot be blamed if there is lack of early preventive intervention for children. Therefore, increasing emphasis on the prevention of disease and the reduction in levels of dental decay in the West has made dental care for children much more manageable in recent years. Whereas in Saudi Arabia this area is still developing. Within the data, there appeared to be three stages in which the mother exerts her agency in relation to her child's oral health in the dental setting; accessing services, dental clinic as a source of oral health information, and in the dental clinic during treatment.

In terms of accessing services the mother was found to be involved in preparing her child before going to dental clinic, convincing the child to attend, going early to the dental clinic with her child for check-up to prevent serious problems. Likewise the form of discipline in this study was also of interest. Some mothers described the dental visit as not being

optional and therefore the child should be told to go and not rewarded for attending the dentist. It was therefore an expectation rather than an act of volition. Mothers were trying to enhance their children's agency by strong discipline in relation to regular dental visits. The mothers' agency appears here to be limiting or controlling their child's agency and the freedom to choose in relation to dental visit, but concurrently mothers sought to have an increased level of oral health for their children.

In this respect the mothers' beliefs about their children's oral health were both controllable and uncontrollable because children's oral health was something they felt responsible for, but simultaneously believed that the dental profession was also responsible for supporting them in their daily dental effort with their children. It might be argued that in this respect mothers may be expressing decreased control over her child's oral health with increasing control being attributed to the dentist. In this study Saudi mothers felt they were responsible for their children's oral health but at the same time also felt they needed support from the dentist to check for disease. All mothers identified that the advice of the dentist in the clinic was a considerable source of support with their children's oral health. The findings of this study certainly suggest that the effects of the dental setting, including the role of the dentist, should be investigated as possible mediators in assisting mothers to develop agency in order to be effective agents for their children's oral health in Saudi Arabia.

Although interactions with dental health care providers in the clinic tended to be treatment focused, routine oral health advice was given. In the public domain of the dental setting, there were two aspects to the exercise of mothers' agency in Saudi Arabia. By accessing services mothers yielded their children up to the 'gaze' of the clinic, and aided the 'disciplining' of the child into dentistry (Nettleton, 1992). Secondly, it was through the exercise of different forms of knowledge within the encounter; medical, personal and experiential, that the mothers' agency was realized. Within the encounter scientific knowledge provided insight into the level of disease and advice on the techniques of dentistry to be exercised in the home. Mothers then enabled the translation of these practices into the everyday lives of their children. In doing so they enabled the bio-power of dentistry and realized their own agency (Nettleton 1992). The findings of this study support the claim that 'bio-power' in dentistry operates through the 'clinical gaze', and the

techniques that are developed as a consequence of the preventive advice given in the clinic. The findings further demonstrate how the public space of the clinic enables the recruitment of the mother as an agent of dentistry. As we presented the school and dental clinic as public domains of mothers' agency, we need now to move on to explore the private domain of Saudi mothers in relation to their agency. We will discuss its implications on children's oral health within the next few chapters (9, 10, and 11).

9. Results and discussion: The Private domain and mothers' agency

In the previous chapter I discussed the public domains and how these have a significant impact on mothers' ability to act as agents of oral health. This chapter explores the private life domain which represents the social structure, family member's roles and cultural traditions of Saudi family life. Only then can I suggest the ways in which the agency of Saudi mother is might be similar to and also differs from other mothers cross the globe. Analysis of the private daily routines of a Saudi mothers' life and traditions is a necessary element for understanding the structure of mothers' agency in Saudi Arabia, in order to explore the similarities and variations with agency in the West. Thus, I will discuss the family as a social system in Saudi culture and as in other cultures, can then provide some understandings of how Saudi mothers practice their agency in relation to their families and culture.

The first section in this chapter presents a definition of family, it goes on to explore the structure and organisation of the family in Saudi life this includes a discussion of the distribution of roles and responsibilities in the family before going on to explore how this impacts on the agency of mothers. The second section describes the dimensions of private Saudi life; the different family types, uncovering the degrees of tightly organized lives through their relationships with extended family members either living within the family in the same home, or in a separate house, and then the influence on mothers' agency with children in relation to oral health. I will present the ways in which this varies from family to family.

9.1 Distribution of family roles, organization and structure of Saudi family

In traditional and modern Arab societies the family is instrumental as the main unit of social organization for social and economic sources, and as central social institution in all three Arab types of living, these include:

- *Rural*; for those who live in villages in the rural areas of oases, for example, in the Asir highlands involving work mainly in agriculture,
- *Urban*; people who live in the cities, the population classified as mainly urban in Saudi Arabia (Littlewood and Yousuf, 2000) and
- *Bedouin*; the nomadic Bedouin, a small nomadic group, settled in villages and in and around cities, and villagers left their communities for rapidly growing urban areas, for individuals and groups (Cole, 2003).

We can infer that Arab society is more collective rather than individualistic, and social stability and reproduction are the main reasons for marital relations (Crabtree, 2007). In what follows I will present the centrality of the family to Saudi life before going on to explore the (Lacoste-Dujardin, 2013) importance of this to the mothers' agency in this study. The family is of paramount importance for Arabs so the family is respected and highly valued in these societies, as is the honour and integrity of the family unit. A woman is responsible for the protection of family honour (Aroian et al., 2006) and rearing children, especially boys, who will be responsible for the family in the future (El-Saadawi, 1995), care provision in relation to physical and social children's needs and other family members through eating and health practices (Quisumbing et al., 1995). Children in Arab societies stay with their parents until they are married and sometimes live with their parents even after their marriage and will remain under and defer to parental authority (Aboul-Enein, 2010).

It is mandatory to respect older people in the Arab family structure (Barakat, 1993), older parents usually live with one of their children (Aboul-Enein, 2010) and this is highly valued family duty (Binghalib, 2011). This gives older parents the freedom and authority to be involved in the son's family and their wisdom provides guidance (Rebzani, 1997). This respect for older people coupled with the unspoken understanding around their authority protects them from conflict with their son's family (Suleiman, 2006). There are more details of this type of relationship in different families with extended family members in the second section of this chapter.

Some families live in a separate house according to their family size (Lacoste-Dujardin, 2013). The husband provides social support to the wife within the marital relationship in an

Arab family (Houria and Mohammed, 2014). The wife is responsible for the stability of the relationships between family members through her regulation of communication between both her own family and within the relatives. She is responsible for this role more so than her husband to ensure better comfort and happiness in her marriage (Timmer and Veroff, 2000, Reiss and Oliveri, 1983). Arab culture emphasises relationships and personal family contacts within kin ties with relatives, parent, children, and siblings. Therefore family relationships are more important for women than men and this takes a large proportion of their time and energy (Bastani, 2007, Wellman, 1992).

In Saudi Arabia; “*Family is the heart of Saudi society*” (Altorki, 2000, p. 629); “*The family is the nucleus of the Saudi society*” (Georgas et al., 2006, p. 440). If we think in biological terms about a nucleus, it is the control centre for all activities of a cell and without a heart a body cannot function; therefore these statements stress the importance of the family relationship in the Saudi society (Al-Saif, 1997). Saudi families are often large and exert influence on a person’s life through close and joined relationship as I introduced earlier in the literature review. There are 3 forms of family types in Arab society: single (father, mother and children), extended (father, mother and relative(s) such as a parent, sibling, grandchild etc) and multiple (two married brothers, their wives and their children, or and older married couple, their unmarried children, their married son, their daughter- in-law, and their grandchildren and so on) (Young and Shami, 1997, p. 9).

Recently, the nuclear family (a married couple and unmarried children) has become more prevalent, possibly due to the expansion of the large cities and increasing urbanization in Saudi Arabia. People from old cities also moved to newly developing cities and experienced occupational change, nonetheless, even within a nuclear family structure members of the family keep in regular contact displaying the strong social bonds with relatives (Al-Masaad, 1995). The mother’s relationships with other family members are considered as connecting link in the interactions of the family (Rossi, 1990).

The relationship between a wife and her husband is based on respect and love (Aroian et al., 2006). This interaction becomes central through wider participation in a lot of women’s decisions and carrying out tasks away from the home such as work. Such work often leads to independence away from the parental family but dependence on maids to carry out house

work and child care (Suleiman, 2006). The quality of this relationship has been suggested as influencing parenthood and child development, so co-parenting through sharing responsibilities by supporting each other directly is said to influence children's behaviours (Feinberg, 2003).

It can be claimed that in many families in Saudi Arabia, the woman's role centres on the home and women's participation in the workplace is lower compared with men's participation, because the societal pressures around family responsibility for a woman means she also has to balance family, parental and occupational roles when she makes a decision to accept paid work (Bickel et al., 2000). Some research suggests that work may impact on her relationships with her husband, children and family life and on her children's performance at school (Mitwalli et al., 2014). However, in the Western literature, women who have higher self-efficacy if they can manage family conflicts and responsibilities. It has been argued that they then appear to have a less difficult; more satisfied and balanced family life (Hennessy and Lent, 2008). Whether this applies to women in Saudi Arabia is at present unclear. What is clear is that changes happening in living (housing, furniture, etc.) appear to be occurring quicker in Saudi Arabia than changes in family roles and responsibilities. For example, traditionally in Saudi Arabia, it was common for an exaggerated respect to be shown towards the husband whereas these days shared respect and understanding is becoming more common (Al-Khateeb, 1998).

The roles of men and women appear to have become modified. Even though the man has lost some of his social and religious authority in the family, his economic and general authority remains the same. This means that the Saudi family remains a male-dominated organization with the important decisions still being made by the father. Saudi culture maintains the authority of men within the family and society (Al-Khateeb, 1998). The socially constructed nature of the role of the family ties the family members in Saudi Arabia to each other similar to any other country in the world. Although the mother is the main home keeper and female children are encouraged to help her at home, in many homes maids are taking over most of the mother's functions such as cooking, cleaning and child sitting in middle income and rich classes of Saudi families (Al-Saif, 1997). Depending on maids happened as a result of education and woman's work, the rise of the nuclear family,

and the lack of nurseries near the mother's work place, or even with a house wife who has a large number of children and cannot manage all the housework unaided as some mothers in this study. This changes the distribution of roles and relates to the economic and social changes in Saudi Arabia (El-Haddad, 2003).

All of these changes are reflected in my interviews with mothers, especially if they have a lot of children. Even with the existence of a maid, the mother remains the main provider and the children are her responsibility. The maid as an extra resource may be seen as enhancing the mothers' agency, enabling them to have more time with their children. This is reflected in participants' data Saudi mother is responsible for her children's education and encourages extra studying at home, the nutrition of the child reflects the ability of the mother to feed her child appropriately, educating her child on bodily self-care, their general health and their oral health related daily practices. I found this for every mother interviewed apart from one mother who has five children and no gap between them and she was forced to depend on two maids in order to be able to effectively carry out the daily oral health practices of her children.

9.2 The Variability of mothers agency

In this section, I will explore the variability of mothers' agency in the private sphere in Saudi Arabia. This section begins with a discussion of four vignettes to illustrate the key variables that appear to be related to mothers' agency. After this the section will explore how these variables can combine to lead to a highly varied situation for mothers within their families. Saudi mothers, similar to other mothers globally, become good mothers when she cares for her children's health and oral health (Nettleton, 1991). This has already been apparent in previous chapters, for example, in the ways in which a mother exhibits her agency through daily actions such as brushing with fluoridated toothpaste, management of sugar intake and visiting the dental clinic with her children. After this introduction on the family importance, structure and organization of family member's roles in a Saudi Arabian family, I will present some examples of participants' data of Saudi mothers in their lives with the family at home. I will then go on to examine how the mother plays her role as a dental agent through daily practices, controlling eating habits, and other mothers'

responsibilities such as educational progression and home chores. This analysis will include examining how other agents from the family (the father, sibling) or external (a maid or a driver) can enhance or impact on the mothers' agency.

9.2.1 Vignettes of mothers' agency

In this section I wish to begin my exploration of mothers' agency in the private domain through the use of vignettes. These vignettes have been designed to highlight the key variables that shape mothers' agency in the private domain. Table 9.1 demonstrates the issues that influence mothers' agency in Saudi Arabia, such as father's role, family resources, and other agents in relation to children's oral health. It presents 4 examples of Saudi mothers; Jawaher, Nawal, Haya and Huda to illustrate a typology of the key aspects of agency within the private domain.

Table 9.1 Typology of the key dimensions affecting agency in Saudi mothers' lives

	Jawaher	Nawal	Haya	Huda
Variability of mothers' agency	High demands of disabled child within nuclear family of 4 children responsibilities Less oral health practices supervision for other 3 children but can control their diet at home.	Children demands within extended family. More demands with extended family responsibility such as food preparation and respect for the older people. Less control on her children's diet within extended family house.	High demands within large nuclear family (6children) Low agency+ Less able on children's oral health practices and children themselves less control on sweet.	Work and 4 children nuclear family(2university students), children old enough to care themselves except the youngest Able to supervise the youngest and more difficulty with other agents in sweet control+ more agency with family resources.

Father's role	Abdul-Aziz: less demands, with the driver but not interfere in children's OH practices (as a head of the family), driver provision enhance mother's agency to visit dental clinic.	Youssef: more demands with his family and the extended family members. No support in relation to child's OH, but drive mother and children to dental clinic.	Rakan: Less oral health support within large family demands without resources (schools, hospital appointments, shopping, any other visits). Not interfere in OH practices, but drive mother and children to dental clinic.	Sultan: more support in relation to children's oral health teaching and supervision (Supportive role), with provision family resources, enhance mother's agency to get dental clinic.
Family resources	Maid takes the house work, more time with children, enhance mother's agency Driver for schools, hospital appointments, shopping and any other visits, enhance mother agency in relation to dental visit with children if the father is busy.	No maid, more housework within extended family house. Driver: travel the children to and from their schools but provide sweet to children and impact on mother's agency in sweet control.	No maid, less time with children and less mother's agency. No driver	Maid takes the house work, more time with children, enhance mother's agency Driver: hospital appointments, shopping, any other visits, enhance mother agency in relation to dental visit with children if the father is busy.
Other agents	Sibling involvement in daily practices support, daughter practical support, enhance mother's agency.	Sibling involvement in oral health practices, and child sitting during dental visit (practical positive support), help in house works, enhance mother's agency.	Sibling involvement in daily practices, support in child sitting, house chores responsibility food preparation, Ironing, support mother role at home, and enhance mother's agency.	Elder siblings provide sweet at home, impact on mother's agency with the youngest child.

As we can see from table 9.1, Jawaher has a disabled child with extra responsibilities and demands on her time. This leads Jawaher to involve the older siblings in supervising the younger children's tooth brushing, but she can still control the intake of sweets. So she has low agency for children's tooth brushing supervision but high agency because of her control with sweet intake. Jawaher's husband (Abdul-Aziz) also helps her to extend her agency by providing the family resources (maid and driver) which enhance her agency. Although Abdul-Aziz has fewer demands because of the driver, he has low agency in relation to children's daily oral health practices because of his long working hours.

Nawal lives within the extended family house with the mother-in-law who gives sweets to the children daily. This then impacts on Nawal's agency and this leads to low control where sweets are concerned. Nawal's children travel to and from school with a school bus driver who lets the children buy sweets on their way back, this also reduces her agency (see appendix (IX) for more details). Nawal's husband (Youssef) has low agency because of his work and both his own family demands and the extended family (his mother and his sister) demands, he does not have a driver and is responsible for transporting his wife, mother and sister. Youssef has low agency and low control and has little or no involvement in the children's oral health practices and cannot extend Nawal's agency in the same way Abdul-Aziz can do with Jawaher.

Haya as you can see in the table 9.1 has six children and her time is taken up with the household chores, ensuring the children study and keeping them motivated with their daily oral health and general health care. Thus the number of children impacts on her agency and supervision of each child for daily tooth brushing leading her to involve the older girls in supervising the others and even sharing in the household chores. This means Haya has low agency in relation to daily routines. The same for the father (Rakan) who also has reduced agency as well because of the number of demands placed on him; he is the transport for all the school journeys, hospital appointments, shopping, and any other visits, this low agency also means he has low control over the children's oral hygiene practices.

Huda has more time to spend with her children because she has a maid who carries out all the housework and her 2 older children are old enough to take care of themselves. So she can supervise the younger children's brushing routines but struggles with the younger son's

sweet intake especially when the older children bring sweets into the home. So the older children then impact on her agency in relation to sweet control. The same for her husband (Sultan) who also has higher agency as well because of his less number of demands by providing 2 house drivers who handle all family demands. Sultan then extends Huda's agency by supporting her with the children's daily oral health practices and supervising them. All these factors enhance Huda's agency in relation to children's oral health.

9.2.2 The diversity of mothers' experiences in the private domain

It is important to illustrate that the private domain is highly diverse and varied. In what follows I hope to demonstrate how each of the variables in the previous section can combine to lead to a highly nuanced and varied social life for mothers' in relation to agency and oral health. In what follows I will present a vignette that will enable a discussion of the private domain of a Saudi mother, Nuha, and the distribution of her family members' roles which clearly illustrates her position in the home.

Nuha

Nuha is a mother of five children [two nearing graduation from university, one at secondary school, and two at primary school] who lives with her husband Khalid in their own home, and not in an extended family. Khalid is responsible for the household expenses, and if he is not busy can take Nuha and the children to the hospital appointments. He asks the children to brush their teeth sometimes but does not really interact with them, and instead he buys them sweets. Nuha is responsible for arranging and visiting the dentist with her children when she notices 'sosa' visually (*sosa means caries and tooth worm in Arabic*), and when the children complain of pain. Nuha has a closer relationship to her children than their father, and is responsible for everything such as the children's oral health. Khalid works hard from early in the morning until late at night. Therefore, the majority of the responsibility in the home is Nuha's. She has a maid for house work only who is not involved in the children's daily care. Nuha discussed with me the daily oral health practices for which she is responsible. She started cleaning their teeth when they were one with a cotton bud after bottle time, when the teeth were erupted enough

she began brushing them twice a day; in the morning and before bedtime. Nuha is an oral health model (this means she stands and shows the children how to brush, and expects them to copy her behaviour). She puts the correct amount of toothpaste on their brushes for them, and makes sure they brush correctly; she uses floss on herself in front of them, and flosses their teeth once a day. Nuha supervises them until they can do it independently, except the youngest “*it is my responsibilities [...] the adults by themselves only advise them to brush by talking*”. She provides oral health instruments brushes and tooth pastes at home, and replaces sweets with healthy options at social gatherings when relatives visit. Nuha can control her children’s sweet intake at home. In the family gatherings, she collaborates with her sisters in order to replace sweets with more nutritious foods that are low in sugar, and encourages her children’s brushing by having a wall chart with stars on it that each child must fill in weekly. At the end of the week the children receive a small gift for brushing daily.

During other family occasions, for example, celebrations, and going out to the shopping malls it becomes difficult for her to control her children’s sweet intake because she has to take her relative’s wishes into consideration. For example, she has difficulty with her mother-in-law giving sweets to the children “*she is an old woman and inside I am not satisfied (happy) but it is difficult to stop her*”. Nuha has a lack of support from the children’s father and wishes her husband would help her with controlling the children’s sweet consumption in order to improve their oral health. Nuha thinks that Saudi mothers cannot manage all their children’s oral health especially if they have a high number of children, and a lot of responsibility in the home.

Nuha:

“Saudi mother can’t manage all children’s oral health especially with other responsibilities” (Interview with Nuha, 30-9-2012)

Nuha as a Saudi mother has a closer relationship more than Khalid with her children according to her continuous interaction/existence with them at home. Nuha has a maid to help her with the house work and this gives her more time to spend with the children.

Various mechanisms indicating a mothers' agency at home appear in practices such as tooth brushing and flossing. As well as the daily dental care and supervision of children during these routines controlling sweet intake as well as access to the dental clinic for dental assessments and treating dental problems is also important. In this vignette, Nuha as a dental agent shows and supervises her children though cleaning with a cotton bud in the early stages, brushing and flossing, controlling the amount of toothpaste, asking them to brush when they become older. Nuha's agency in relation to eating habits is exercised by controlling their sweet intake at home, and replacing it with healthy options in her family meetings, but she has difficulties in controlling sweets when they are out of home.

Khalid is responsible for the household expenses and sometimes acts as a facilitator for dental services with the children. Although Khalid has no daily interaction with the children's brushing routines, he can help occasionally by ordering the children to brush. Nuha faces a lack of support in relation to sweet control, because Khalid buys sweets for the children and is not concerned about the consequences of his actions. Nuha needs him to be more cooperative with her to improve her children's oral health. This example shows Khalid's role as a Saudi father who is the main provider for the family needs, through his external activities more than as a father inside the home, especially because he is busy till late in the evening. The absence of the children's father may put more pressure on Nuha to take all the responsibility for the children including oral health.

Aunties meetings are a supportive environment for Nuha and extend her agency by replacing sweets with healthier options. Aunties also recommended that Nuha attend the dental clinic with her children. Nuha is positively influenced by her relatives and friends advice to visit the dentist. With her sisters she arranged a brushing wall chart to encourage oral health care for her children and her nephews, at the weekly gatherings with her extended family. Thus, Nuha's agency extends to her family meeting to improve children's oral health, whereas, in her husband's family meetings she has less control and has a challenge with her mother-in-law concerning the children's intake of sweets. This illustrates the position of the daughter-in-law in Saudi society and the respect she must show to her husband's family and in the same time for older people as a Muslim in general.

As a consequence it also reveals how different families interact and how this interaction can shape the oral health of children in the kingdom.

Noura is an example of a working mother, but who also, is supported by the father as a facilitator concerning daily practices, the control of sweets, accessing the dental clinic and providing a maid for the house work.

Noura

Noura is a mother of 4 children [18, 14, 10, and 1yr] who lives with her husband Abdulla in their own home, and not in an extended family. In contrast to Nuha, Abdulla and Noura share the responsibility for the household expenses, the children, and daily dental practices are shared. Noura or Abdulla stand with children for tooth brushing, both take the children to school and clinics. Noura considers that Abdulla's role is important for her in relation to their children's oral health to travel to the clinic or engage in daily practices such as tooth brushing. Abdulla gives Noura the freedom to direct the children and ensures that they listen to Noura. There is a maid to help Noura with the house work. Noura has a gap between her children's ages but still they are her responsibility especially the youngest child (Anas).

Noura:

“Children responsibility is sharing [...] daily dental practices are sharing mum and dad, either mum or dad stands with them for brushing [...] he take to school and clinics. The father role is important to me, he can give mum the freedom to direct children and ask children to listen to mum to support her [...] Child complain to mum more than dad according to closer relationship, then, I arrange appointment time with dad, we go together to the dental appointment...also the father's role is important which increase of efficiency of mother role for example I direct dad when he wants to buy sweet to buy the high quality not the cheaper one” (Interview with Noura, 19-11-2012)

Abdulla is a facilitator of Noura's agency through enabling access to the dental clinic with the children, supervising daily dental practices and following Noura's advice to control sweet intake.

Noura wakes up at 5am to get dressed ready for the children. Abdulla takes Noura to her work as a teacher and the children to their schools, when Noura returns from her work she helps the maid with the cooking. In relation to her dental agency at home, Noura supervises her children during brushing time but, she involves her elder daughter in supervising the younger children's daily dental practices. For eating habits, Noura makes sure there is healthy food such as salad and vegetables daily and no soft drinks in the children's meals and replaces it with Laban (yogurt drink) or water, controls sweet intake and extends her power and agency in using the father to make sure sweet intake is under her control. Although Noura considers herself a dental agent she considers the children's father to also be a facilitator for her agency in relation to their children's oral health.

Noura:

“Me or the eldest daughter stand with the child, supervision is necessary until age 8yrs, them reminding especially before bedtime, brushing twice[...] If the mother is worker this will avoid her from perfect oral health care for children [...] that's why I asked the eldest daughter to supervise them[...] According to daily healthy food I ensured there is salad and vegetables daily and no soft drinks in our meals and put instead Laban or water because our children have problem with less milk drinking and mum has the essential role in child's oral health by control sweet and feed them healthy in the first years at home [...] I can control sweet intake at home [...] I direct dad when he wants to buy sweet to buy the high quality not the cheap one” (Interview with Noura, 19-11-2012)

Although Noura is busy with her work, her home life, and her children's studying every day, Saudi society expects that she visits or becomes involved in some form of social relationship with her extended family members. In family gatherings, Noura's family has

no sweets because the family members are worrying about dental caries and being overweight.

Noura:

“There is pressure on mother by social relationships, Saudi mother under pressures such as her house asking, her children society and its requirements so she can’t take care children’s teeth in perfect way, although I have only 4 children but I am worker and the work takes all my energy so no energy at home. Mum put pressure on herself work and share in payment sometimes especially because children’s requirements now are more expensive, everything from famous brands and boys as girls” (Interview with Noura, 19-11-2012)

Noura describes the public expectations of Saudi society and the private world that she juggles to fulfil her role as a good enough mother and wife. Her paid work, similar to mothers in the West, impacts on her ability to be a good enough dental agent. She blames herself for having to work and share the household expenses. Since, she thinks her time should be with her children as her main responsibility.

In contrast, Fatima appears to be more comfortable with her children’s responsibilities and her house work without the help of a maid.

Fatima

Fatima is a mother of 3 children [Fahad 9 years, Asma 7 years and Najd 4 years and a half] and lives with her husband Hammad, his mother, and his sister in an extended family house, which is how traditional Saudi families live. She is not working and responsible for everything to do with the children; she is a housewife. She carries out the house-work; cleaning, washing and ironing, food preparation, child minding and studying. There is no maid to help Fatima with the housework because she feels a maid will influence her children negatively. Hammad works and is responsible for the household expenses, drives her and the children to hospital appointments, shopping and any other visits they may need to make during the day, if he is not busy with his work. Fatima lacks Hammad’s support with daily oral

health practices and sweet intake because he works and brings sweets for the children alongside the other family members.

Fatima:

“It is hard but I don’t want to have a maid in my house [...] I don’t want her to affect my kids [...] She teaches them the wrong ways [...] it’s possible that I get busy with anything and they will follow her ways. I’m not against maids but they do effect children intentional or not they do[...]I am against maid [...] I have to organize the time and the other family members are old enough to take care of themselves [...]I work in a system [...] I organize my time with them[...] after the school kids are out I take care of the house chores[...] and after they are back I’m free for them[...] I help them with their homework and soI work in a system, organize time with them, house chores, children’s homework and so[...]Mother stay with them, closer relationship, cares of them all the time, cleaning is my responsibility none interfere” (Interview with Fatima, 1-10-2012)

Fatima wakes up at 5am to get dressed ready for the children and prepares the breakfast for the children. Hammad takes the children to their schools. While the children are at school Fatima takes care of the house (cleaning, washing her children’s stuff and then starts preparing the lunch for all the family members). Fatima supervises her children during brushing time because all of they are still young but sometimes she needs to remind them to brush before bedtime.

Fatima:

“If I don’t care for them [...] they are kids [...] they don’t know better [...] they eat everything. I have to be after them [...] CLEAN YOUR TEETH, DONT EAT THAT. It will cause caries don’t sleep while your teeth are dirty and so [...] the mother have the biggest role [...] she need to direct the kids in everything. They wake up for school[...] and go to the bathroom[...]come on, brush your teeth, I put the toothpaste in the brush, come on brush by yourself[...] because I taught them in the beginning[...] and now they do it by themselves” (Interview with Fatima, 1-10-2012)

In contrast to Noura, Fatima has less control of sweets and refers this to the father and extended family members' negative role in regards to sweet provision for children at home. This example illustrates that the father and other family members are other agents who inhibit her agency with her children at home.

Fatima:

“The community around him at home[...] the family[...] they need to avoid sweets and don't present it to their children[...] in my house their father[...] their grandma and their aunt present sweets[...] that's another factor at home rather than the mother[...] the same goes in my family side[...] you can't prevent the children when they see the sweets in front of them[...] and when the elders give something you can't deny it out of respect in our society. We respect family ties[...] you can't tell them anything about what they give your children[...] you can't control the sweets [...]and that is considered as an obstacle to the mother[...]it's hard to control kids with their presence especially in the sweets matter [...] if I am living alone with my kids my control over their bad habits like eating sweets will be better[...] The family I live with[...] when they see the kids in pain or they notice caries [...] they advise me to go to the clinic[...]that encourages me to take them” (Interview with Fatima, 1-10-2012)

In contrast to sweet control, Hammad is considered as a facilitator for Fatima in relation to accessing dental services with the children and he stays with the other children during the appointment especially because the dental services in the dental school are segregated and the father is not permitted to attend with the child in the female dental school. This is the same for many other medical services in Saudi Arabia (Al-Gaai and Hammami, 2009). So children attend with their mother generally.

Fatima:

“If the mother wants to take them to the clinic the father role will be to bring them and take them back and be committed to it [...] it depends if he will help or not [...] both of them have a great role or when he delivers me to the appointment [...] he stay with the rest of the kids in the car waiting [...] Because if he comes and the dentist is a female he

won't get in and the kids are always with their mother" (Interview with Fatima, 1-10-2012)

Fatima shows that a mothers' agency is supported by the father's role and then can influence on her children's oral health behaviours in sweet intake. Even though she lacks Hammad's support in sweet control, but she confirms that the co-parenting, with both parents sharing responsibility by supporting each other, influences the children's behaviours (Feinberg, 2003). This has an obvious effect on her agency and Hammad's role in relation to the children's oral health behaviours. This is supported by research which suggest that parent self-efficacy contributes directly to children's health directly (Jones and Prinz, 2005).

In contrast to Fatima, Eman is example of mother who seems unable to manage all her responsibilities and recently has worked and requested an assistant for the house chores, and the father's role in not supported.

Eman

Eman is a mother of 8 children (15, 13, 11, 9, 7, 6, 4 ½ years, and 2). She lives with her husband (Ali) in their own home and not in an extended family house. Ali is responsible for the household expenses and takes the family members to the hospital, visits or trips out but does not really interact with children in regards to daily oral health practices. Eman manages her day time which revolves around her 8 children and the structure of Saudi life, this involves their food preparation, children's studying progression and children's care, health and dental health especially the 2 youngest children, and the house chores. Eman struggles with all the house work, she teaches her children returning and cleaning everything when they use it; and this provides some support for Eman in cleaning work. Eman has worked recently to persuade share Ali to share with the in children's needs and because she is a worker she cannot manage all the house work alone by her own as before. In response, Ali provides a maid who carries out the house-work, cleaning, washing and ironing, food cooking and preparation in order to help Eman. So Eman

depends on the maid for house work only, the maid is not involved in the children's daily care.

Eman:

“House and children are my responsibility [...] Children are the first in my life studying, house chores, cooking and have 2 little child [...] recently maid has arrived for house chores not for children cleanness” (Interview with Eman, 5-11-2012)

Eman started cleaning her children's teeth with a cotton bud after bottle time, and then with the toothbrush and fluoridated toothpaste when the child's teeth erupted; in a round motion 10 times on all the teeth with a straight motion inside and out twice a day; morning and before bedtime. She stands and shows the children how to brush, and expects them to copy her behaviour. She puts the correct amount of toothpaste on their brushes for them, makes sure they rinse enough, and makes sure they brush correctly. Eman supervises the children with their tooth brushing and oral health care when she considers them independent enough to continue unsupervised with her only reminding, and makes sure that she finishes off what they have missed. When Eman's family increased and the children became older, Eman found it difficult to look after all eight children's dental health. She asks her eldest daughter Ranya, who is 15 years, to supervise the others and that leaves the two youngest girls as her responsibility.

Eman:

“I supervise the children's teeth brushing or I asked Ranya my elder child [...] I depends on her in their teeth brushing” (Interview with Eman, 5-11-2012)

Mechanisms of mother's agency at home appear in tooth brushing, daily dental care and the supervision of children during these routines but does not appear in access to dental care. Here, Eman acts as a dental agent by showing and supervising stand/show/supervise her children in cleaning with cotton bud in early stage, brushing and controlling the amount of toothpaste used.

In Eman's story, the father (Ali) appears negative with respect to sweet control, since he will provide sweets to the child immediately on request and finds it difficult to refuse the children.

Eman:

“Saudi mother do care of children's teeth but the problem is the sweet provision[...] mothers do care about the children's oral health and make sure the children brush their teeth before sleeping time, but the problem is a lot of sweet everywhere[...] our system is full of sweet and this is the cause of caries problem”(Interview with Eman, 5-11-2012)

In relation to eating habits, Eman's agency appears limited in controlling sweet intake at home, and the children's agency influences her own agency. Although she has tried to stop providing sweets to the children in order to prevent caries, when the child cries a lot and is pestering her, she will give him or her sweets in order to prevent a further headache and to continue with her house work. She also has another difficulty in sweet control when relatives visit, or when they are out of home and at weekly family occasions. During the weekly gatherings because of Arab hospitality cultural norms she cannot stop the sweets being offered to her children, at the same time she cannot prevent her children from eating sweets. So her children's agency and that of the extended family inhibits her agency.

We could also suggest that the size of Eman's family; eight children, may also exert an effect on her agency. Although it is difficult judge or blame Eman about her role with sweet control, but Eman still struggles with her responsibility. It might be that she has less self-efficacy at home. However, it would appear that there are many competing factors that inhibit Eman's agency and her self-efficacy. Research suggests that females who have higher self-efficacy can manage family responsibilities, and subsequently have a less difficult, more satisfied balanced family life (Hennessy and Lent, 2008). For Eman this just does not appear possible. In the next section, I will present focused examples of the fathers' role and how it shapes the mothers' agency.

9.2.3 The fathers' role

In relation to children's health and oral health, the father is less involved compared with the mother. Previous work in Saudi Arabia on parents of 97 children aged between 2-6 years to assess the variability in parent's perception of the oral health quality of life of children in Riyadh Colleges of Dentistry and Pharmacy found that the status of Saudi fathers do not correlate with the oral health status of children. It demonstrated that the mother was more knowledgeable about the child's health and well-being (Al-Gaai and Hammami, 2009). It is usually the boy who attends clinics with the dad and the girl often attends with the mother (Pani et al., 2012). So although the father can often demonstrate concern for his children's oral health, this concern is not associated with the child's oral health status (Pani et al., 2012). These findings illustrate why mothers' agency is seen as central to children's oral health in Saudi Arabia. This section illustrates some examples of the fathers' role in the family and in regards to children's oral health through participants' experiences in their private life.

There were some cooperative fathers in this study who, for example, shared teaching and supervision of daily brushing and dental practices such as teaching them about Miswak usage, arranging dental appointments, taking the mother and children to the dental clinic and helping to controlling sweets. Consequently, the father can act as a facilitator of mothers' agency in relation to children's oral health.

Fatima:

“My husband is supportive father[...]he is the driver “and she laughs” Father main factor[...]he brings you and takes you[...]its hard who will stay with the kids at home[...]when he delivers me to the appointment[...]he stay with the rest of the kids in the car waiting[...] Great role” (Interview with Fatima, 1-10-2012)

Jawaher:

“Father likes Miswak and teaches children how to use it provides brushes and pastes for children, no daily care. In relation to dental visit he provide a driver, gives me freedom to visit dentist and treat children's teeth” (Interview with Jawaher, 15-10-2012)

9.2.4 Family resources

In Saudi Arabia, there are maids to help the mother in house work; they are there to help with cleaning and cooking. This helps to shoulder some of the responsibility for mothers who are left with more time to focus on the children. This creates more supportive setting for mothers in Saudi Arabia, and subsequently enhances mothers' agency in relation to children's oral health. Other resources such as having a driver for the family to access dental services and other visits can also have an important impact on the mothers' agency. The following examples of Amani and Arwa are indicative of this:

Amani:

“Maid for house work (cooking, cleaning etc.) and may remind them to brush if I am in the gem. She is one of our family 6yrs with us help us in preparing cloths, mum who has 4 or more child needs a maid because the responsibility is tiring . Does not touch children, only for helping and preparation when we are in outdoor activity with family if he (father) is busy I will go with children to clinic with the driver” (Interview with Amani, 5-11-2012)

To sum up the private domain represents the social structure, family member's roles and cultural traditions of Saudi family life. Consequently, I discussed the family as a vital social system in Saudi culture, and how Saudi mothers practice their agency in relation to their positions and responsibilities within families and within the complexity of this familial system. I have described the dimensions of private Saudi life through uncovering the degrees of tightly organized lives through their relationships with extended family members either living within the family in the same home, or in a separate house, and therefore how all these issues impact on the mothers to be oral health agents of their children within Saudi culture. The next chapter (commensality) will explore the private life of mothers in more depth that represents the Saudi culture, traditions, and social relationships within Saudi families, and therefore how all these factors produce the degree of mothers' agency in daily life.

10. Results and Discussion: Commensality

In the previous chapter I discussed how mothers exercise agency within their positions and responsibilities in the private domain and suggested that the social relationships within the family and extended family have a considerable impact on children's oral health. This chapter is a deeper exploration of the private domain which exemplifies the *traditions and social relationships of Saudi families*. It discusses an important issue related to family relationship that is commensality in different family types within Saudi culture. It will discuss the theme of importance of commensality within Saudi culture and how it is immovable, even with the shift in family structure towards a more nuclear family. As we shall see how the commensality as a key factor impacts on the mothers' agency in relation to children's oral health.

10.1 Overview of commensality

Commensality is eating together (Sidenvall et al., 2000) or eating in groups (Grevet et al., 2012) "*Commensality is eating with other people*" (Sobal and Nelson, 2003, p. 181), and means the shared activity that is related to dining practices (King, 2008). Cross cultural norms, there are different arrangements and customs in relation to commensality such as commensal eating around a table in some cultures. Consequently, personal behaviours and social life are regulated by meals (Fischler, 2011).

Indeed, sharing food creates interaction, equality and conversation and the capacity of commensality provides a chance for people to strengthen their social bonds and improves the quality of their relationships in every culture (Sagne, 2009). That is why food occasions can sometimes be arranged to bring family together who have not seen each other for period of time to return loosened bonds, who gather with their disperse children and their kids (Bloch, 2005). In some societies commensality is related to religious and political dimensions such as in Greece; institutions and religion facilitate public meals in order to

forge links between people and communities. It then promotes the relationships and trust between individuals within the same community (Scheid, 2005).

In Saudi society, the idea of eating together is to follow the prophet Mohamed so within Saudi Arabia commensality is reflected in the Sunna. The Sunna encourages sharing food in order to build good relationships between Muslims within their society. Therefore, the Islamic protocol of commensality is more than individual rituals or traditional 'table manners'. The reason of eating etiquette in group in the Sunnah is to remember of Allah (God), modesty, and to consider others.

لقاعنها لله ضد هير ة أبعن : وسلم عليها لله صلدا لله رسول قال :

(الثمانية تكفي لأربعه طعام، الأربعة تكفي لاثنينو طعاما لاثنيني كفيالوا احد طعام)

[يار خبلارواه (5392)]

Abu Hurairah (May Allah be pleased with him) reported:

Messenger of Allah (ﷺ) said, "The food of two persons suffices for three persons, and the food of three persons suffices for four persons" (al-Bukhari, 5392)

وسلم عليه هالصلدا النبي، أصحاباً " نشبعو لأنكأ لثنا لله سولياً قالوا . قال :

"تفترون فلعكم" تعمقأوا . قال " فيها كمار كني عليها لله سولاً ذكر وأطعمكم علفاً جتمعوا "

[د اودأبيسنن (3764)]

The Companions of the Prophet (ﷺ) said: Messenger of Allah (ﷺ) we eat but we are not satisfied. He said: Perhaps you eat separately. They replied: Yes. He said: If you gather together at your food and mention Allah's name, you will be blessed in it" (Dawud, 3736)

Commensality would be either daily in the private sphere at home within the family, or also in occasions such as in holidays or gatherings and events (Grignon, 2001). Although

commensality occurs as a daily social habit (Otto, 2011) with industrialisation the family spends less time together and the evening meal become a celebratory (Kahneman et al., 2010). It is the transition of eating alone to eat in company with others at meals (Simmel et al., 1997, p. 130). Commensality essentially blends the private and public domains (Hirschman, 1996) because public health and nutrition emerge in the private sphere. Consequently, individuals are said to have control of their own health choices. The media and public health activities focuses more on eating habits, nutrient, food amount and body weight. We could also argue that eating habits are a result of social factors which exert influence on the context of commensality; this includes social support and individual control in western cultures (Eckersley, 2006, p. 252).

Some studies suggest that social factors in the West have actively decreased commensality (Tuomainen, 2014). For example, in a study to compare American, Italian, British and French countries, individuals are considered responsible for their health, eating patterns and choices. The results suggest that autonomy and locus of control are valued more than the social factors related to traditional structured meals and commensality (Rozin et al., 1999). We could speculate that the reasons for the decline in commensality in the West is because of changes in living that have occurred as a result of the Industrial Revolution and the gradual fragmentation of family structure. These changes have led to a pressure towards individualisation, the nuclear family accompanied by reduced interaction within families (Whyte, 1994).

Generally, commensality differs between cultures and each culture has a particular notion, practices and arrangement (Danesi, 2014). This section of my thesis adds to the knowledge base around commensality by illustrating the ways in which commensality occurs in Saudi society and how it is strongly linked to the mothers' agency in the private domain. It is important because if we are to understand the key dynamics of the mothers' agency in Saudi Arabia we have to understand commensality.

10.2 Commensality and mothers' agency in the private domain in Saudi Arabia

From my data, food negotiation is strongly linked to mothers' agency and family life within the Saudi home. Food negotiation is a way for mothers to exercise their agency, and it is

within the family that children and other agents may act to strengthen or contradict this agency. For example, in this study when older children brought ‘junk food’ (the mother’s term used in the interviews) into the home this had an impact on mothers’ control of the family environment. The mother then has the opportunity to exercise her agency by controlling the amount of sweets that are distributed in the home. It has been argued in studies that food can manage family relationships and emotional feelings and my study reflects this perception (Punch et al., 2009).

My data indicates that there are three aspects to mothers’ agency in food negotiations with their family. The first is related to *situational negotiations* which take place *during the meal* when the mother asks the child to eat or drink specific foods (see figure 10.1). The second aspect is related to *the spatial and temporal negotiations*, when mothers ask their children to *eat together at a specific time* with the other family members as part of the structured organization of Saudi family life (see figure 10.2). The third aspect is related to the influences of *other agents* rather than the mother on the family such as the father, elder siblings, grandmothers and aunts, or other family members (by providing sweets) which I have called familial and resource food negotiations (see figure 10.3). Indeed, all of the women in this study influence both mothers and children and the relations between them, thus shaping in many ways the family ‘food ways’. All three aspects are connected because they highlight the negotiations that occur in each context. The data illustrates that the process of eating and feeding children is negotiated between the mother and other family members involving the children in a private space in Saudi Arabia.



Figure 10.1 The situational negotiations within commensality



Figure 10.2 The spatial and temporal negotiations within commensality



Figure 10.3 The familial and resource food negotiations within commensality

10.2.1 Situational negotiations

There are (16) interviews that describe situational negotiations taking place during the meal. This is where the mother asks the child to eat or drink certain foods. These negotiations illustrate the mothers' agency within the home environment in relation to food control.

Noura:

“I ensured there is salad and vegetables daily and no soft drinks in our meals and put instead Laban or water because our children have problem with less milk drinking and mum has the essential role in child’s oral health by control sweet and feed them healthy in the first years at home” (Interview with Noura, 19-11-2012)

Noura believes in her ability to control her children’s food, so she makes sure the meals are healthy, contain salad, vegetables and dairy products such as Laban (yogurt drink) on a daily basis. She prevents the intake of soft drinks during the children’s meals and controls their sweet intake. These examples reflect her power and agency. Her husband supports her by assisting with controlling the children’s access to sweets at home.

Sara:

“I make sure they get Laban and Yogurt because “Ahmed” my son– God bless his heart – doesn’t like Laban or Yogurt he only drink milk But now I am trying with him with the yogurt and I tell him you have to eat it because you need calcium for the new teeth, you don’t want white spots in your teeth[...]I took care of my kids [...] eat calcium[...] compared to others the white spots in their teeth is irremovable because of the lack of calcium[...] I try to keep sweet to the minimal and deny them candies with chemical colouring and gelatine that sticks[...] I tell them to stay away of that at home – thank god – I can[...] No Pepsi or 7UP enters the house[...]unless we are entertaining, we bring it for the guests[...]they don’t drink it[...]Thank god I waited few years and I found results” (Interview with Sara, 24-9-2013)

Sara’s agency is exercised through directing her children to take dairy products daily with their meals in order to have enough calcium, and to prevent demineralization (white lesions are the first stage of cavity occurrence). Her agency is exerted through controlling the intake and presence of sweets and soft drinks at home. Her effort in controlling sweets and soft drinks also teaches her children to become oral health agents and by monitoring their diet they also become health agents.

Mona:

“I make sure my children are continuous in drinking milk with main meals and healthy snacks such biscuit or dried fruit instead of sweet and crackers [...] and no soft drinks with the main meals [...] no sweet at home I told them it will influence on your teeth and will make sosa (caries)” (Interview with Mona, 3-11-2012)

Mona, similar to the other mothers, exercises her agency by controlling the level of extrinsic sugars in the main meals and snacks in order to improve her children’s oral health. She explains the impact of harmful food on their teeth to prevent an increase in levels of “sosa” which translates directly from Arabic to English as caries.

Through situational negotiations during meal times and within the home environment commensality in Saudi families is visible through the agency of mothers who control extrinsic sugars in their children’s diets and direct them towards eating more nutritious foods and drinking water. This also reflects the ways that mothers adjust their children’s oral health behaviours through diet when eating together. This illustrates that Saudi mothers play important roles in increasing healthy options in meals and decreasing the amount of extrinsic sugars consumed by their children.

10.2.2 Spatial and Temporal Negotiations

This section illuminates the Saudi family routines in relation to eating food together at specific times and places within the home. This occurrence applies to both extended and nuclear families and is regulated by the times of prayer in Saudi Arabia.

Farah:

“Our breakfast is fast because I am a worker and my 5 children will go to their schools. So we sit together to eat our breakfast but quicker than in lunch and dinner [...] When my children return from their schools I asked them to wash their hands in preparing to take the lunch together [...] our dinner before the children’s sleeping time (9pm) between Magrib prayer and Isha prayer times and after the dinner, children brush their teeth and stop eating until the bedtime” (Interview with Farah, 8-10-2012)

As a commensal unit, Farah's family members meet each other at specific time in a specific place to consume their meals. Farah her children and husband will eat breakfast together at approximately 6am after first prayer call. During a school or working week, lunch will be primarily for the mother and children after the second prayer call at noon. There will be a snack mid-afternoon just before prayer call and evening meal will be for the children and adults who will usually eat together in the family room which is set aside for this particular purpose.

Hanan:

"I ask my children to wash their hands when they arrive from the school to eat the lunch together [...] I brush their teeth after having the dinner together [...] I have to arrange my responsibilities [...] to have the lunch on time and then the child studying time and consider my husband's coffee time later on and is always after the sun set" (Interview with Hanan, 14-10-2012)

Hanan's family take their main meals mostly in the dining room that situated in the side of the main living room (see figure 10.4). So she, her husband and her children eat the main meals together, the breakfast will be around 6 am before going to school, the lunch will be after Duher prayer time and when children return from their schools and her husband from his work. The dinner is always after Isha prayer when her husband returns from the local mosque. Hanan's eating activity is always in the same place, except during her husband's coffee time which is taken after the Magrib prayer when her husband has returned home from the local mosque. Before Isha prayer time it is usually placed on the tea table in the living room near their children in their family time. The Arabic coffee time with dates or a sweet snack is also an important a habit that has been incorporated into Saudi society as the Magrib snack (see figure 10.6 &10.7). The reputation/importance of coffee as drink habit enables the family to sit together, and is served to guests that considered as a part of the hospitality in Saudi houses.

Amani:

“My daily system in eating with my family at home is; our breakfast together before going to my work and my 4 children to their schools and “Salah” (my husband) to his work, then return to put the lunch with the maid to make sure everything is alright and ask children to wash and change in order to eat together, then studying until Maghreb (sunset) prayer time, then my coffee with Salah before our dinner time with the children” (Interview with Amani, 5-11-2012)

Amani and her family have organized various meals times. The breakfast will be after Fajer prayer and before the parent's got out to work and the children go to school. All family members usually eat the morning meal together in the small dining room located in the side of the living room. The lunch will be ready when the father (Salah) brings the children from the school and returns them home to eat together in the separate dining room that is prepared for commensal purposes in many Saudi houses. It is usually located in the ground floor designed with 2 doors with separate toilets and many sinks (see figure 10.5). If they have visitors there is a separate room to serve the visitor's food in through the second door in the corridor, doors; one opens inside the house and the other one to opens to the guests or traditional hospitality area. There will be a snack just after Maghreb prayer time which will be for the children and this can be pieces of fruits or vegetable sticks. At the same time the parents will usually sit together and take their Arabic coffee in the family living room near their children. The dinner meal will be for the parents and children who will usually eat together in the separate dining room.

In all 25 interviews mothers discussed how family members sat together in order to eat the meals or at Arabic coffee time when the husband and wife usually discuss the day or any happenings. This clarified how the Saudi family naturally structure their daily routines in relation to food time, their familial relationships and how they replicated and reinforced Saudi customs in their homes.

This part of the research explores Saudi women experience in their private space of feeding their family. These women discussed their everyday food practices in their experiences in relation to children's oral health. Through their discussion about the food practices includes

making Saudi traditional food for the main meals until to sitting on the table at meal time. The findings of this study show how the private space has many aspects of mothering role that related to meal time and eating habits. This can give more understanding of participants' practices of local food culture to perform a sphere where the family members display their collective identity around eating practices and norms such as commensality, and food consumption such as sweet intake as children's practices. The home is therefore considered a significant domain for the mothers' agency.

Saudi society is a collective society and families still live together, exhibiting strong relationships. Commensality is at the heart of this sociality manifesting itself in daily life practices and all meal times (see figure 10.6). The process of commensality in Saudi homes appears in some activities that take place naturally in the commensal space (dining room or around the dining table) such as when the mother asking her children to wash their hands before eating, inviting or asking the father and children to sit around the table to eat together with their parents (see figure 10.4). It also occurs with other family members such as the grandmother or auntie. After such meals the mother again may ask the youngest children to clean their hands and rinse their mouths in the dining room sinks before going to their work or play, or brush their teeth after dinner before bed time, and even for the Arabic coffee time the mother will ask the family members to join her and they all spend time together (see figure 10.7 & 10.8). This means a lot for the continuance of family connections and relationships in the Saudi home especially in relation to food routines (see figure 10.10).

10.2.3 The family and food negotiations

In this section, the data suggests that other agents within Saudi houses can be both barriers and facilitators for the mothers' agency in relation to children's food and oral health. These other agents may be the father, siblings, extended family members or other family resources such as maids. The other agents can act to support mothers' agency, or they can undermine it by their actions.

Hanan:

“The father provides sweet [...] I am serious with eating sweet but he appeals/tries with me to break my system. I give them fresh juice or handmade cake instead of sweets at home[...] but in the extended family meeting all provide sweet to children the grandmothers, aunties, uncles. I told my children No more than 2 pieces, then I take away the rest from the child’s hand, and till the child I will give it to you in another time actually it ruin their teeth and make them hyperactive [...] I told the grandmother to give me the sweets if my child already has taken in the same day and I will give it to him later” (Interview with Hanan, 14-10-2012)

Hanan as Saudi mother has to attend the family gathering with her children for both in her family and in her husband’s family, that take place regularly in Saudi families once a week or in some families twice a week in which all the extended family members meet each other with older people of the family. Older people are highly valued and respected in family life in Saudi Arabia (see more in chapter 4). Saudi people respect older people for their wisdom and there is significant Saudi etiquette when dealing with them in the family.

In family gatherings, grandmothers and other family members frequently provide sweets to children. The children will accept the sweets because it is impolite to refuse. This can create conflict and causes concerns for Hanan because she cannot argue with her mother-in-law when she distributes sweets to her children and sometimes old traditions such as offering sweets to children is the norm. It is therefore difficult to change and can create difficulty in trying to control sweet intake at gatherings. At the extended family house or where the family plan to gather, as the most influential place outside the home, there was an increased risk for the child and mother to be involved in the sweetie culture (see figure 10.9). It seemed that the provision of sweets for children is considered normal and associated with the family gathering. Hanan felt that they lived in an environment where sweet treats are a normal and expected part of the gathering and thus hard to avoid. Hanan respects the grandmother but she feels she needs to speak up for the sake of her children’s health in order to control the amount of sweets being distributed in the family gathering.

Although Hanan has managed to exert some agency in these situations her husband does not help to extend her agency by supporting her in controlling the sweet intake at home. Instead he provides sweets to their children and therefore inhibits her agency to prevent sweet intake in her children. This scenario between parents and in the family gathering acts as inhibitors for mothers and therefore limits their agency in relation to children's oral health. Similar to the work of Smith & Freeman (2009) the 'sweetie culture' acted to conspire against mothers in their attempts to maintain their children's oral health. There are therefore also difficulties in Saudi society in challenging the 'sweetie culture'. The impact of the 'sweetie culture' resulted in problematic issues on children's oral health.

Mona:

“No sweet at home I always say to children sweet causes (sosa=caries) they can eat it only once at the weekend in the extended family meeting [...]the father told grandmother stop providing lollipop to children[...] the father advised the grandmother about the harmful effect of sweet and the (sosa=caries) and she is ok now” (Interview with Mona, 3-11-2012)

In contrast to Hanan's life, Mona has managed to exert her agency about sweet intake; her husband is working with her and so appears to extend her agency by supporting her. He recognized the difficulty that Mona was experiencing when trying to manage the quantity of sweets during key gatherings. Mona, as a mother felt that encouragement from the father would be helpful in containing their children's sugar consumption. Mona and her husband were able to explore the sense that parents felt besieged by the 'sweetie culture'. Both parents in this example acted as oral health agents. A key norm in Saudi Arabia is where mothers acted to adopt the role of family health keeper particularly in family gatherings. In Mona's case both parents were working to monitor and deal with sugar snacking habits.

Abeer:

“I limit the sweet amount at home and if I provide it only in high quality of chocolate not sweet [...] in family gathering, relatives distribute alternatives of sweets such as coconut to be healthier for children [...] and if there is sweet, I say to my children “ONLY ONE” and they implement” (Interview with Abeer, 13-11-2012)

This is contrasting to Hanan's family gatherings; where all the family provided her children with sweets. Abeer expressed annoyance as to how what was good for her children by providing healthier snacks to their children during gatherings and she was certain of the contents of what family members provided to be nutritious snacks. However, Abeer's family members shared her grasp and desire to limit snacks to the children. As a consequence Abeer exhibits much higher agency in relation to her children's oral health compared with Hanan. Abeer has managed the sweet intake at home and in family gatherings. At such gatherings family members work with her to extend her agency by supporting her in providing alternatives to sweets for her children. At the same time her children's cooperation supported her agency by becoming oral health agents themselves. This suggests that more social support for mothers in restricting children's sugar intake is of central importance.

Layla:

“In the morning I will be busy fixing their sandwiches and their bags [...] When I'm not there (in the kitchen) I find that the morning sandwiches are stuffed with chocolate and not eggs because they are faster for the maid [...] I become aware and I took control myself and I start watching them with the sweets I don't let the maid give them without directions from me and I keep the sweets in a special storage [...] The problem starts at home[...] [...]I'm afraid about their teeth because it was ruined from sweets[...] And the father is an affective factor when it comes to make the sweets available[...]He doesn't deny them the sweets and that's my problem with him[...]he want to buy his head even the young ones says we want to go out with him when it comes to buying sweets[...] they say no not with you mommy[...] because he is negative, he doesn't try to convince them or direct them, he just give them whatever they want. Although he is educated but unfortunately that caused a big problem between us because now he buys them sweets behind my back. Sometimes he even has the sweets in the car with him and when he takes them to school.” (Interview with Layla, 13-11-2012)

This contrasting case illustrates the complexity of Layla's life and the fact that her agency is constantly being undermined in relation to her children's oral health. The maid's actions are controllable but not the actions of her husband. Despite Layla's attempts to prevent

sweets at home, the father provided sweet snacks to their children. The father seemed unaware of the importance of his role in supporting Layla's agency to ensure sweet supervision. Regular sweet eating was acknowledged by the father as the norm and he considered it natural to give sweets to the children.

In this case we can see the pervasive nature of the 'sweetie culture' (Smith and Freeman, 2009). He felt that they lived in an environment where sweet treats were everywhere and difficult to avoid. There was also something about the reputation of Saudis for having sweets with children as part of their family life. As Mintz (1984) once said of Western culture, sugar has never been associated with evil (Mintz, 1985). Layla's life is illustrative of the difficulties experienced when sweets are delivered directly to the home by the father. In providing sweets when shopping they were used as special currency of affection between him and his children.

Although it is a widespread norm within Saudi families for sweets to be given as gifts to children with the intent of being merely friendly and hospitable, it appears that the father is using the sweets to gain his children's affection. This is in line with the argument made in the Western literature by Mauss, 1967, that through gift giving the child becomes indebted to the gift giver as gifts always have strings attached, As (Scheper-Hughes, 2007) suggests that act of gifting may be used to exploit the recipient and thus used as a method of social control in this example the father is unknowingly exploiting the children for their affection and using the sweets as a form of social control.

This resulted in the children understanding that they could demand sweets from him and not from the mother. Thus this can create a special bond between the father and children. This is a very good example of conflict and struggle between the mother (Layla) and the father (Yaser) in relation to sweet provision to their children. Layla's advice to prevent sweets was poorly remembered by him. Although she was trying to act as the 'good mother' (Nettleton, 1991) in controlling sweets at home she nevertheless spoke of feeling upset at her children's needs for sweet prevention or control without the father assistance. Layla's life seemed to pose significant difficulties, since she felt overwhelmed by the difficulties of implementing healthy behaviours at her home. Residing in the 'sweetie

culture' with this father, who appears to have reduced awareness of sugar content of foods, placed constraints on Layla's agency.

Amani:

"I limit the sweet amount at home and my children eat sweet only at the weekends [...] some weeks pass without sweet [...] not sticky or nougat. I am worried about (sosa=caries), diseases and overweight because people who don't care their diet will have more caries and diseases. I tell my children NO SWEET your dad refuses it [...] even in our family meetings sweet is not always there and if it is exist will be really limited, since we also have few dentists in our family such as my uncle and my cousin[...] my husband does not prefer sweet or crackers with children and he helps me a lot, he always tells me "if we don't care or control their diet now we can't do anything in the future, we have to care of them" he is the biggest facilitator to me in forbidding the junk food in my house" (Interview with Amani, 5-11-2012)

In contrast to Layla, Amani was able to manage her children's diet. She has managed this with her husband's assistance in reducing sugary snacks. This father's attitude seemed to support Amani, who also acted as an agent of oral health for their children. The focus of both parents extended from dental health matters to concerns for their children's well-being; this meant dental health took first place. Both parents acted to resist the 'sweetie culture'. This indicates that the 'sweetie culture' could be managed when both parents worked together to collaborate in controlling their family's diet.

Munira:

"My University girls bring sweet with them from the university to have it in our coffee time after the sunset and I cannot forbid the others to share the [...] some children put pressure on mum by crying when see the sweet in front of them with my the university daughters so mum gives them just because she is not patient with their crying noise" (Interview with Munira, 11-11-2012)

Munira's home life with 8 children is complex; there are many agents that exert some power over her. She faced some of conflicts in the daily interaction between her and the older children over the consumption of sweets during coffee time. This created a problematic issue that impacted on the younger children who then attempted to copy the older children and gain power over her as well. It is obvious that Munira, experienced difficulties in controlling her children's demands for sweets. Although she is not aware of how to look after her children's oral health or manage the amounts of sweets in the face of the older girls' power who were acting to limit her agency at home. She was however aware of the influences of her older children's behaviour on her younger children. She felt that the family lived in a home where sweets were hard to avoid. Her case illustrates the difficulties experienced when sweets are delivered directly to her younger children in the house. She was experiencing reduced agency.

Indeed, within this study Munira had much more responsibility with the biggest family in this study and fewer resources. For her oral health and the related control of sweet intake came second place. She found it hard to find time for herself and the daily norm of Arabic coffee at Magrib time was considered a break time for her to spend time with her older daughters and the others. Rather than experiencing conflict she wished to relax during this time and could not cope with the children's nagging to demand sweets. The routines of Munira's family life therefore posed significant challenges for her by adding to her already busy life concerns about her children's oral health. She was clearly caught in a dilemma. On the one hand she had to grant her older children some independence when they had started university life, but this had the effect of undermining her own agency when it came to controlling the sweet intake of her younger children. These conflicting demands therefore impacted significantly on her agency.

Samya:

"I live with my mother in law in the same house who presents sweet daily to my daughter "Danya" anytime and my social relationship with her is respectful and important as elder woman and as my mother in law and she thinks she spoiled my daughter with sweet. So I asked her to stop giving her because it will influence on her teeth, and then she gave her behind my back and now I deal with her to give her once a day at

Maghreb's (after sunset) coffee time when I already returned from the clinic and have the coffee with whole family to control the amount of sweet and brushing her teeth after eating [...] the extended family who I live with helps me in my daughter eating when I am at my work like the lunch meal when she returns from her school she stays with them and they involved in her positive raising but the studying and personal cleaning is my responsibility ” (Interview with Samya, 6-11-2012)

In contrast to Munira, who was unable to cope with her children's agency, Samya demonstrated that it is possible to gain some control over older relatives. She negotiated the sweet intake of her children and attempted to time sweet treats during the coffee time when the children's grandmother was with them. Despite the grandmother providing Samya's child with sweets, Samya was certain of the amount of sugar that she wanted her child to have. She was nonetheless acutely aware of the importance of her relationships with her mother-in-law and sought to balance this with the risks to her child's oral health. Samya's focus shifted from stopping sweets to controlling the time when sweets would be consumed. She used her social skills to maintain her child's oral health in finding this balance. Samya spoke of feeling happier than other mothers in this study. This attitude seemed to provide some sort of relief and acted as reassurance. It also enabled her to act in favour of her child's oral health against the strains of extended family life. However, there is something else about Samya that we should know. She is a dentist, has high social status and has a good grasp of how to apply her knowledge in an effective manner to control sweets followed by daily brushing practices.

My data clearly illustrates the importance of understanding commensality and gift giving as an important aspect that influences mothers' agency in the private domain. Mothers are married and spend a considerable amount of their time with their families, both immediate and extended. Mothers in this sample revealed that the usual meals (breakfast, lunch, and dinner) are regularly eaten in the company of the extended family (see figure 10.6). Participants claim they can control their children's eating habits, but, as we have seen, there are a number of influences on their children's eating habits. These include siblings who bring junk food into the home (see figure 10.8), other family members who can act to either

support or undermine her family practices and finally the importance of resources relative to the size of the family (see figure 10.3).

I would also argue that we ought to make a distinction between everyday commensality and occasional commensality. This study has focused on current everyday commensality as a daily routine within the Saudi houses. Saudis still spend time on cooking and eating time with the family at home in daily basis, food frequently served is presented in the specific area or room that for this commensal practices (see figure 10.4, 10.5 & 10.7), the composition of meals is not simple and contains a lot of homemade fresh and cooked food (see figure 10.6). Even older children who bring food into the home from the outside will share it with all family members (see 10.8).



Figure 10. 4 The separate dining room that prepared to this commensal purpose in many Saudi houses located in the ground floor



Figure 10.5 The dining room's separate toilets with many sinks (hospitality area)



The lunch meal



The Dinner meal

Figure 10.6 Daily commensality for all meals in Saudi houses



Figure 10.7 Daily commensality for daily Arabic coffee and snack after Maghreb prayer time in Saudi houses

In the family living room near their children.



Figure 10.8 Sweet consumption is more with the elder children during coffee time



Figure 10.9 The provision of sweets is considered normal and associated with the family gathering

Therefore, these eating issues that are provided by the women's views of everyday life in their homes; where the mother is the main provider (agent) for food, health and family practices, enabled me to understand the dietary practices in Saudi families. They offered more understanding about the social rules and cultural constructions associated with eating habits that may promote children's oral health or even present the negative dietary practices amongst the Saudi families (see figure 10.9). The findings of this research show how family life in Saudi culture is deeply valued. They also demonstrate how daily commensality in Saudi homes has not changed even with the advent of recent developments leading to an increase of nuclear family structures (see figure 10.10).



Downstairs living room



Upstairs living room

Figure 10. 10 The living room

This room is a highly important space in the Saudi house because it hosts all the gatherings. These can be repetitive during the days especially at Arabic coffee time.

To conclude, the mealtime in Saudi family life is a very structured social time. The importance of commensality relates to the collectivization and strong social meaning of mealtimes in family life. These meals do vary and hide different lines of compromise and conflict that can act to undermine and promote mothers as agents of oral health. The findings of this study suggest that future interventions ought to consider the diversity in Saudi culture when applying public health policies aimed at individuals. Such policies need to consider the deep rooted dynamics of everyday family life in Saudi Arabia.

As this chapter presented the daily practices and sequence of Saudi family life and how the emergent activities and practices can impact on the mothers' agency and children's oral health. The next chapter as a last chapter of research results will continue to clarify the interaction between the role of mother within several variables such as Islam as a religion, family relationships and within Saudi culture to have more understanding of private life in Saudi homes.

11.Results and Discussion: Analysis of key variables affecting mothers' agency

As the aim of this study is to explore mothers' agency in relation to children's oral health in Saudi Arabia. The previous chapter enabled me to investigate interaction between the factors around the mother in the private sphere. This chapter seeks to clarify the relationship between variables that have an influence on mothers' agency in relation to children's oral health within the private domain. The chapter therefore discusses how these variables interact with each other. Illustrations will be provided in order to aid a more detailed understanding of how mothers' agency operates within the Saudi home. These variables include; defined and fixed role, religion, family relationships and culture.

11.1 Defined and fixed mothers' role

It is hypothesized that:

- 1- The more defined the mothers' role, the higher the level of expectations that may be placed on mothers and as a consequence this may lead to decreased agency. As a consequence a highly defined mothers' role will have negative consequences for mothers' ability to have a positive impact on their children's oral health (Table 11.1).
- 2- The more 'fixed' a mothers' role is as a consequence of low family resources and increased demands at home the lower a mothers' agency might be. Living in the conditions of a fixed role will also have the consequence of limiting mothers' agency and as a result such conditions will have a negative influence on mothers' ability to positively influence their children's oral health, Table 11.1).

These variables can also combine the results of which are summarised in more detail through the use of a contingency table (Table 11.1).

Table 11.1 The relationship between defined and fixed mothers' role

(D) Defined mothers' role	(F) Fixed mothers' role		
	+		-
	+	Highly Defined & highly fixed role means high social expectations with less resources and lots of demands (less agency).	Less fixed but more defined role means more social expectations and high demands countered by more resources.
-	Less defined and more fixed role means lower social expectations but lots of demands because of minimal resources.	Less defined & less fixed leads to lower social expectations and less demand more resources (high agency).	

A fixed role can be determined by the structure of the family where the mother is expected to fulfil many obligations associated with availability of resources and high demands can have a severe impact on mothers' agency. If the family size is big or dealing with problems such as disability this can put more demands on mothers and subsequently can have a significant impact on how mothers interact with the family structure.

Having a defined role results from social expectations where the mother and her children live, either within the extended family or in their own separate house. This can subsequently result in the expectation that additional tasks can be assigned to the mother. For example, as we have seen, Nawal lives with her mother-in-law, as a consequence she had additional tasks defined for her to fulfil as the mother. As a daughter-in-law she is expected to meet social expectations such as providing meals and overseeing the social gatherings for her in-laws. The presence of gifts within the family in the form of sweets meant it was especially difficult for her to resist sweet consumption. A highly defined role can also be affected by how the mother interacts with other family members, such as; elder

siblings, father, or older people who live in the same house. This can also result in increased pressure to allow higher levels of sweet consumption.

Being aware of the degree to which a mothers' role is both fixed and defined may enable predictions about the level of her agency in relation to her children's oral health within the private domain. The results of this study demonstrate that mothers who have less fixed and less defined roles are more likely to have agency than other mothers who have high fixed and highly defined role (Table 11.1).

The role can be defined rigidly or not, and this interacts with how fixed the situation of family structure is for the mother in relation to her agency. For example, a mother who lives at the extended family house (Nawal), who has a high fixed social role as a mother leading to high demands will have much less agency than a mother who lives independently at their separate house. In contrast Huda who had the lowest fixed social role (high resources and less demands at home) and lowest defined social role (minimal expectation in a separate house) appeared to have very high agency compared with other mothers in this study (Table 11.1).

It appeared impossible for every mother in this study to perform her role fully according to the social expectations in Saudi Arabia. There are some distinctions, for example; some mothers may not be able to perform their roles to the full satisfaction of society or even family members. Extra demands on their roles may subsequently create conflict. Consequently, there can be tensions within their role. Nawal talked about coming into conflict with other family members when it came to acting as an agent for her children's oral health. In contrast those mothers who lived in a separate house (Jawaher and Huda) appeared to find it easier to control of their children's' diet within a small structured family were no one expected them to have extra tasks to do with other family members. We can suggest here that multiple tasks and increased expectations can limit the mothers' role and ability to enable their children's oral health.

Mothers' agency also is influenced by a few facilitators which can also be barriers such as enough resources to give the mother extra time and energy to look after her children's health and oral health. When supported and the possibility of space without social

expectation is apparent, the mothers' agency seems to be expanded and have more power to control their children's oral health. Lots of demands impact on Saudi mothers similar to other mothers globally, one example is having a high number of children and another is having a child with disabilities.

This brief discussion illustrates how mothers' agency is affected by family and social structure and subsequently reveals how this structure may promote or inhibit her child's oral health practices. Changes within a mothers' role is therefore a result of the interaction between variables that have an impact on agency. It appears there may be many factors beyond mothers' control that may affect their agency in relation to children's oral health such as social expectation, low resources within big family and high demands that can subsequently shape their role. Taking control of children's oral health is therefore dependent on their capacity to exert their agency within the private setting. Mothers' agency is also in some ways constrained by their position in relation to society, including what society expects them to be able to achieve with children. These variables should be taken in consideration when we consider mothers' agency in Saudi Arabia. The next part of the results explores how Saudi culture and, in particular, religion, can act as an important factor in relation to the agency of mothers.

11.2 Religion, family relationships, culture and mothers' agency

How religion interacts with the family as a social unit is a central consideration when thinking about Saudi culture in the private sphere. The influence of religion in social culture has been discussed by Douglas in her "Grid and Group Theory" which in turn has resulted in her "grid-group analysis". Douglas (1970) argued that there are two types of social control within each culture (Douglas, 2004). The first is called the group. According to Douglas (1970) the group illustrate the ways in which an individual is constrained by social groups and is interpreted as a dimension of how the person is incorporated into a "*bounded social unit*" (Kemper and Collins, 1990). This dimension leads us to explore how group pressure can affect a person's character and incorporation into society (Caulkins, 1999, p. 110). The second is called the grid. Analysing the grid involves exploring how an individual is restricted or controlled by social external rules (Douglas, 2007). This form of

constraint is constraint “*by rule, by ordered structure*” (Kemper and Collins, 1990). The grid group theory has been widely successful and as a consequence has been deployed in many fields of social science for example, for those interested in rituals, symbols, food/drinking habits, in order to deal with cultural variety everywhere especially in isolated places (Mamadouh, 1999) and is applicable in many disciplines (Chi et al., 2009). The approach uses culture as a central variable in explaining the social life of people (Wildavsky, 1987, Thompson et al., 1990).

As we shall see the theory has particular relevance for this study of the position of mothers within Saudi culture. In what follows I will apply ‘Grid Group’ theory in my research to highlight the lives of Saudi mothers and the many aspects of their daily life within Saudi culture and the private domain. Saudi culture involves many different aspects including the religion (Islam) and how it regulates social behaviour, social rules, daily practices and social relationships in the family unit. As we shall see applying the grid group theory to this culture can also reveal hidden patterns of interaction of key variables in social life that may subsequently act to influence mothers’ agency.

11.2.1 Islamic daily practices and mothers’ agency

In chapter 4, I discussed that one of the five pillars in Islam is prayer (salat) and that there are 5 prayer times embedded naturally and structured in the Saudi life. Prayer needs some preparations performed prior to prayer time as I presented in appendix 10 (X). These Islamic practices are performed daily in Saudi private life to keep the spiritual hygiene of Muslims, for example ritual washing (Wudu) and Miswak/Siwak usage before prayer. These practices may have an impact on mothers’ agency. Let’s discuss each one separately.

Farah:

“I teach them by convince and discussion such as Wudu before prayer time, teach them cooperation with each other for example in brushing time to clean mouth[...]Washing mouth in Wudu 5 times all the time[...]Islam asked us to have clean mouth such as Miswak usage” (Interview with Farah, 8-10-2012)

Farah demonstrates she is a good Saudi mother by teaching her children about Wudu and the preparations necessary before prayer; this is carried on into other aspects of Saudi life by different mothers.

11.2.1.1 Wudu (ablution):

Wudu (Arabic word) means the procedure of washing body parts with water before prayer time. Wudu has been explained in the Quran and Sunna (methods of the Prophet) in many Hadiths (collection of sayings and behaviours of the Prophet Mohammed). It is prescribed by Islam that mothers should teach children Wudu as a religious duty. The aim of Wudu prior to prayer time is to confirm spiritual physical cleaning and signifies obedience to God's commands (see appendix XIII). It is not hard to see how this duty can facilitate mothers' agency by supporting mothers to maintain the oral hygiene and cleanliness of her and her children frequently during the day. Through these practices the mother can guarantee that children rinse/wash their mouths many times during the day. There were many examples of this in the data:

Nouf:

“Mouth rinsing is part of our daily Wudu and we teach our children pray and wash body parts before prayer time[...] Islam and the Prophet asked us to have clean mouth (rinsing) by Wudu. Islam encourage cleanness in mouth and children's cleanness[...] the prophet asked us to perform Wudu before even bedtime because it has many benefits such as mouth cleaning and this is to show the importance of cleaning mouth before sleep” (Interview with Nouf, 19-11-2012)

Haya:

“Cleanness is highly religious matter [...] cleaning mouth is religious order not as other who only depends on brushing time” (Interview with Haya, 11-11-2012)

It should be emphasised here that Wudu is tied to religious practices and uses flowing water which is symbolic and viewed as pure. Anything additional to water, such as mouthwash, would not be accepted because this is not viewed as pure. For example, it would be difficult to promote health using Wudu because it is part of a particular religious purpose.

11.2.1.2 *Miswak/Siwak:*

This is a stick that is used to clean teeth and, as such, is used for this purpose in Muslim populations, see chapter 4 for more details. It was a practice of the prophet to clean the teeth with Miswak before prayer time. Miswak usage is encouraged in many Hadiths and Muslims use it to follow the prophet's Sunna (the Prophet's method). It can be used not only with prayer rituals but also be in many occasions such as in the morning (when we get up), after eating (Laird et al., 2015), fasting time, and during Friday prayer time as in many Hadiths. Once again there were many examples of this in these data:

Jawaher:

“I use Miswak with my children and provide it at home and even their father likes Miswak and teaches them how to use it [...] Miswak is Sunna. Miswak renews weekly for children” (Interview with Jawaher, 15-10-2012).

Amani:

“Teach children Miswak usage as Sunna especially on Friday (Miswak is cleanness for the mouth and obedience for the God) Hadith” (Interview with Amani, 5-11-2012).

The data indicate that Islamic practices are strongly linked to mothers' agency within the Saudi home. Therefore, when a mother taught her children Wudu practices and using Miswak as an example of implementing the Sunna, she was enabling her children to imitate the Prophet and therefore to get God's reward. This was clearly indicated in the interviews. The effect of this social practice was therefore to enhance mothers' agency in relation to oral health through the use of Islamic teachings. Mothers drew on many Hadiths to encourage their children in general to clean their bodies and their mouths either by using a tooth brush or using Miswak.

11.2.2 Children's agency and mothers' agency in relation to Islamic daily practices

In the light of such relationships between the family members at Saudi home in relation to Islamic daily practices (Wudu and Miswak usage), I can suggest that children copy and internalise Islamic values as well as the meaning of Saudi family relationships. The transition of practices based on Islamic knowledge from adults to children within the Saudi

home can create children's acceptance in relation to daily practices. This can increase the agency of mothers both for being Muslim and for oral health.

Arwa:

“Islam encourages cleanness in general and mum applies this idea with children daily[...]I, as a Muslim mother, recommend pray and Wadu together with children[...]Islam asks us about children quality of them and God will ask us about them”(Interview with Arwa, 18-11-2012)

The analysis of this section presents Islam as a practical way of everyday life in Saudi Arabia. It has been argued in studies that Islam is “everyday religion” (Ammerman, 2007, 2013 and McGuire, 2008). This appears to be saying that Islam is tangled up with everyday practices and it is very difficult to separate them. Religion and Saudi culture reinforce each other; Islam is vital in Saudi culture and justifies social relationships.

11.2.3 Raising children and the social expectations of Islam

As we can see Islam as a religion in Saudi Arabia is an important factor that interacts with mothers' agency in everyday life and daily practices. Since Islamic values and beliefs correlate closely with the values that are dominant in the social environment, these values have a dominant effect on social relationships. Islamic regulation shapes cultural expectations for mothers in Saudi Arabia. Hendry (1999) suggested that three main features were central to Douglas' (1971) framework (classification, power and moral order). Following from these, Saudi mothers are therefore classified as more responsible concerning their children if they draw on the power of Islam to direct her children in daily Islamic oral health practices. Mothers are also seen to behave responsibly with their children when they follow the Islamic moral order by drawing on those values to raise their children. Islam therefore provides mothers with a framework through which to do ‘what is best’ for their children. In this respect Islam is seen as a facilitator for mothers' agency. Since, agency is an ability to shape one's own life and influence the lives of others (Hart et al., 2014), is depicted as a sense of individual freedom and power; to decide something related to social interaction (Flaherty, 2003). From the participants' data, Islamic

obligations are strongly linked to mothers' agency in relation to children's and family life within the Saudi home.

From the point of view of Douglas' (1971) theory it might seem that women in Saudi society are constrained by Islamic rules and as such they experience highly defined and fixed roles and therefore less agency. Likewise as we have seen in some instances the family unit acts as a strong constraint on their agency. In Douglas' (1971) terms this means they are also in a high grid group. It might therefore seem that mothers are heavily constrained by their social position. Yet what Douglas' (1971) theory suggests is that the culture enables them to be mothers in Saudi Arabia. The aim of the theory is not to assess what other people (society) put on the individuals such as mothers, but to find the relation between the culture (cosmological ideas) and social relations (Douglas, 2004).

Therefore whilst it might look like the religion and culture acts to constrain agency because of the grid classification system derived from Islamic practices, this is not the case. In Saudi culture, Islam creates a less fixed but more defined role within the grid acting as an available resource for mothers which enables them to become better mothers for their children. The point is that Saudi culture and Islam equips mothers with the tools to organise their lives. So, in some respects, because there are all these tools – religion as a power, belief in a reward and punishment, Islamic moral, social relationships cultural expectations, we can see that the mothers have a repertoire of symbols to support them to become mothers in Saudi Arabia. As a consequence this theory provides a greater awareness of how different interactions between culture, religion and social order interact to affect the mothers' agency.

Now, at the end of the last chapter of research results, those have been presented with detailed discussion in the last 5 chapters. The next chapter will present an overall discussion of this research combined with the strengths and limitations of the study.

12. Discussion

12.1 Overview

The aim of this study was to explore the agency of mothers in Saudi Arabia in relation to oral health. As such this is the first study of its kind; it critically evaluated the legitimacy of Western conceptualisations of oral health promotion in a very different culture. This study explored the agency of mothers through their daily lives in Saudi Arabia and examined how this might be related to oral health related practices in the family. The study analysed the extent that Saudi mothers are considered as oral health agents for their children and described the factors that shape Saudi mothers as facilitators of oral health. As such in this section the key findings will be appraised and compared with those of previous studies. This discussion section will consider the implications of the study, the relevance of the study, recommendations will be made for policies, and the strengths and limitations of the study will be evaluated. Finally, considerations for future related research will be presented.

The central problem of this thesis is the degree to which mothers can act to support or improve the oral health of their children. Previous studies in the literature risk 'blaming' mothers if a child's oral health care is not 'perfect' because they are strongly correlated to the mother's oral health knowledge and practices (Mohebbi et al., 2008, Hoefl et al., 2009, Nettleton, 1991). As stated in the literature review many of these studies touch on the concept of agency without directly acknowledging its importance. If there was a greater awareness of the concept of agency and its meaning it may well be that these undesirable side effects could have been avoided. Within the literature the term 'agency' has been implicit rather than explicit. What this study attempts to achieve is to make the concept of mothers' agency an explicit aspect of children's oral health.

12.2 Key findings

This research found that the mothers' agency has a high significance for children's oral health in Saudi Arabia. Mothers' agency was realized within the public and private domains differently according to the nature of public services and Saudi culture and how they impact on each other. Previous work in dentistry as tended to discuss factors within the public domain but they have not discussed how this impacts on the private domain, especially on maternal dynamics and responsibility. Providing dental advice without knowing how this advice will be practically applied in the home is highly important. How to direct mothers to apply preventive advice has yet to be examined in significant depth (Hoeft et al., 2015, Freeman, 1999). As can be seen from the analysis in chapters 7, 8, 9, and 10 these factors are really important. Family life is complex and there are several significant variables that can interact to either promote or restrict the mothers' agency in relation to oral health. This chapter will however move beyond these issues to discuss the main findings of this study in the light of previous literature.

12.2.1 The public domain and mothers' agency

In the public domain of the school, there were several aspects to the exercise of mothers' agency. This is through the oral health school programs for example; these school programs were not only interested in the children, but actually extended to motivate the mothers and enhance their agency in relation to children's oral health. These programs were highly acceptable and supportive for children as well as the mothers. Consistent with models of support for mothers in Western countries for example, UK programmes (Pine et al., 2000, Denman, 1998). See more about the school setting in Chapter 7.

This work highlighted how mothers in this study were guided through these public programmes with their children with the mothers showing their readiness to take part with their children. This may be why all the mothers in my sample suggested a school meeting for health issues as the way forward. The mothers in this study seemed to recognise their need for participation "as a component of their agency" in school public activities as a way of 'empowering' themselves in relation to their children's oral health. Consistent with the participatory learning approach such as child-parent relationship has been suggested in

western countries to improve children's oral health (Kasila et al., 2006). Mothers highlighted how their children's agency was also enhanced by these school activities and how this could consequently improve their own agency. Therefore, mothers' agency in this setting was obviously extended and challenged by the school culture and nature of public life.

In this way, health promotion in Saudi Arabia may need to consider the willingness and ability of mothers to participate, and the practicalities of integrating pupils, parents and teachers into oral health promotion within the school and wider community. The effective participation of mothers in oral health promotion in the West would appear to be reliant on the communication process between the mother and her children, and other community organizations (Laverack, 1999).

The dental clinic appeared as another setting that could promote mothers' agency. The study findings demonstrated that mothers recognized their need for additional support from the dental team for early intervention, treatment and to prevent further problems. A few issues were important for the mothers to enhance their agency; this included the use of oral health information (encounters with the scientific and medical knowledge from the dentists), the mothers' communication and cooperation with the dentist within the encounter through exercising their personal and experiential knowledge about their children. All of these factors contribute to agency with the goal of improving their children's oral health.

The findings of this study support the claim that 'bio-power' in dentistry operates through the 'clinical gaze', and the techniques that are developed as a consequence of the preventive advice given in the clinic (Nettleton 1992). The findings further demonstrate how the public space of the clinic enables the recruitment of the mother as an agent of dentistry. However, no data is available on mechanisms of oral health practices between the mothers and children at home despite the significant caries problem in Saudi population (6.1 dmft).

This study showed that the maternal access to dental care in Saudi culture and this finding is not surprising according to the gendered nature of dental services in the dental college. The mother is the main agent of access to dental care and therefore exercises her agency through going with her children to the dental clinic (Chan et al., 2002, Hoeft et al., 2009). The dental system in Saudi Arabia tends to focus on emergency treatment and as a consequence there is a lack of early preventive intervention for children. Previous studies have found that the positive relationship between the regular visit and improvement of children's oral health through following the dental advice such as teeth brushing with fluoridated toothpaste (Petersen, 1992, Chan et al., 2002, Hoeft et al., 2009). Research has shown that starting tooth brushing is affected by mothers' motivation to start brushing through guidance from the mother about tooth brushing coupled with guidance from the dentist (Salako and Ghafouri, 1995, Jeboda and Ogunbodede, 1995). Therefore, increasing emphasis on the prevention of disease and the reduction in levels of dental decay in the west has made children's dental care much more manageable in recent years. This area is still clearly developing in Saudi Arabia and there is a need to promote a more supportive environment for mothers through upstream action in the public domain (Watt, 2007).

In accordance with this work's findings, a study on Mexican American mothers found that maternal characteristics were associated with a high incidence of caries in children (Hoeft et al., 2009). This study suggested that poor knowledge about preventive measures had a direct impact on children's oral health. This was as a result of several obstacles from being able to attend for preventive dental check-ups to benefitting from dental care programs. In Saudi Arabia, attending mothers for preventive measures may be for similar reasons. The early preventive measures that children receive may be both deficient and not clear for the mothers and this lack of guidance impacts on the mothers' agency and subsequently on the children's oral health. In addition, mothers' might also be missing out and therefore blaming themselves for their children's oral health because they are not getting advice early enough. What these data show however is that there is little or no occurrence of 'blaming' within dental clinics and mothers themselves do not appear to feel 'blamed' for their children's oral health status. This might be because in Saudi Arabia matters of hygiene are part of the private domain and therefore not subject to scrutiny in the same way that mothers in Western countries might be subjected to scrutiny. Accordingly, the most

prominent finding from this study was that the Saudi mothers are agents of oral health. However, when it comes to prevention the system still demands treatment and does not promote prevention. Services remain focused on treatment and do not serve to promote the agency of mothers.

This is such because of several issues that were all significantly impacting on the ability of mothers to be oral health agents in the public sphere:

Accessibility, the transportation and the driver was one of the important issues for travel and accessing professional oral health advice and treatment. Driving is not permitted for women in Saudi Arabia as government restriction. The father therefore is mainly responsible for taking mothers and children to get health and dental care. Saudi mothers are familiar to ask the father to get health care or other places, so for all mothers in this study access was an important issue. Hence, the availability of family resources such as (a home driver, their family's driver taxi, a special driver) is necessary to enhance the mothers' agency to get the dental clinic with their children. Therefore, mothers who have family resources may have more access than the mothers who have not. This finding is similar to previous work conducted in Bolivia and the Caribbean aimed at assessing mothers' agency and children's' health. It has been found that mothers who have a voice in decision making and the ability to negotiate concerning their children's needs have more control, can get care and therefore can provide better children's care than those who do not have a voice or the ability to negotiate (Caruso et al., 2010). However, the present study revealed that mothers often do not negotiate with fathers to get to the dental clinic and when this didn't happen was related to the availability of a driver.

Another important issue in getting dental services is related to the structure of the fathers' role. Mothers who had support from their husbands in getting to services may have higher agency than those who do not. Therefore, according to the family members roles (family setting) fathers' responsibility more often than not appeared to take family members to get dental services or provide a driver (family resources). This demonstrates that the fathers' agency may increase the mothers' agency in relation to children's oral health. This finding is similar to the previous studies on sharing parental roles and how this can support mothers practically (Hook, 2010). Not only is the mothers' role an effective influence on children

but also fathers can be helpful by helping to improve the quality of the mothers' role (Räihä et al., 2002, Caruso et al., 2010).

12.2.2 Private domain and mothers' agency

This was the first research to explore mothers' agency in relation to children's oral health, as a result the first to consider how the mothers' agency impacts on the social organisation around children's oral health especially within the private sphere and within a conservative culture. This work considers the characteristics of Saudi Arabian culture and how this influences the dimensions of agency in private daily lives of the participants. In doing so the study covers the dimensions of agency within Saudi Arabian homes (chapter 10), this includes a discussion of family structure and responsibilities (chapter 7), the nature of private life within the family and extended family spheres (chapter 9), commensality as daily practices and religion as an vital aspect when study the agency of Saudi mothers as I discussed in (chapter 10). Therefore, the Saudi mother has a multi-tasking role; this study showed how all these dimensions cumulatively impact on Saudi mothers' agency and how their agency varied in relation to their positions and responsibilities within the familial system. This finding is similar to previous literature that has illustrated how mothers' agency operates within the extended family. It has been found that the process of mother's decision-making is difficult, not because the size of family, but also because of the complexity of the organization of extended families (Cole et al., 1998). This complexity can limit mothers' agency with regards to health (DeSocio et al., 2003).

Similar to the West, the greater the number of children in the family the greater this impacts on mothers' capacity to deal with the everyday nature of health for example, in relation to oral practices (Basavanthappa, 2008). Hence, mothers who had large numbers of offspring may have an increased burden of caring, less time to maintain their children's oral health and may therefore have had more constraints on their agency as I discussed in chapter 7. Indeed, Saudi mothers have a higher than average number of children (5.25) compared with the western mothers (Khraif, 2001). For example the French is 2.6, Italian is 1.3, and 2 is the ideal number of children within European countries (Goldstein et al., 2003).

Although the number of children is considered higher than the western families, there are maids as a family resource to help the mother in household work (cleaning and cooking etc.). This shoulders some of the responsibilities for mothers who may then have more time to focus on their children. This created a more supportive setting; allowing the mothers to provide better oral health care to their children than the mothers who did not have maids and therefore again family resources such as maid provision could be seen to enhance mothers' agency in relation to children's oral health. Though, it was difficult to find comparable findings in the dental literature to compare the current results.

This study showed the mealtime in Saudi family life is a very structured social time. For example, commensality as a daily practice and a deeper exploration of the private domain exemplifies the traditions and social relationships of Saudi families. This finding was contrary to western literature that has discussed commensality as an occasional activity (Kaufmann, 2010). The importance of commensality relates to the collectivization and strong social meaning of mealtimes in family life within Saudi culture. However, these meals do vary and hide different lines of compromise and conflict that can act to undermine and promote mothers as agents of oral health. For example, older children and other agents (older people, grandmothers, and aunties) may act to strengthen or contradict this agency through sweet provision for children. This provision was usually at Arabic coffee time as a part of the daily activity at homes and within the family meetings in Saudi culture, as discussed in chapter 9 & 10 (see pages 156, 158, 164 & 165).

The extended family meeting was a risk where mothers and children became exposed to the sweetie culture. In accordance with this work's finding, the work of Smith & Freeman (2009) in the UK found that a 'sweetie culture' acted against mothers in their attempts to maintain their children's oral health. In Saudi society, the 'sweetie culture' may be a challenge and resulted in problematic issues for children's oral health for similar reasons. The interesting finding from this issue was that the level of mothers' agency were important in these family meetings, the mothers who had higher agency through negotiation on behalf of their children and about what was healthier for them, have more control of their children's sugar intake than the mothers who had the lower agency and who cannot express their opinion within the extended family meetings as discussed in Chapter 9.

Therefore commensality was considered as a key factor that impacts on the mothers' agency in relation to children's oral health. The findings of this study suggest that future interventions ought to consider the diversity in Saudi culture when applying public health policies aimed at individuals. Such policies need to consider the deep rooted dynamics of everyday family life in Saudi Arabia. Hence, the daily practices and sequence of Saudi family life and how the emergent activities and practices can impact on the mothers' agency and children's oral health. Sweet consumption as a daily practice within Saudi life is strongly related to the high level of caries within children (Wyne and Khan, 1995).

12.3 Strengths of the study

Nature of the study

So far no work on Saudi mothers, this study was the first of its kind in relation to mothers' involvement. Hence, Saudi mothers inhabit a conservative society and it is not easy to talk in public with female meetings taking place in total privacy, making it difficult to get access if you are not a member. A Saudi woman can't talk easily to strangers even if she is a female about her life with children, so I felt extremely fortunate to have gained this rich data for my study.

The current study expands the insight of Saudi mothers' experiences in relation to children's oral health. It was focused on mothers themselves as facilitators/agents of oral health, raising awareness about mothers more and how they negotiated their role within Saudi Muslim society and culture. More crucially it represents the previously hidden voices of Saudi mothers.

This research was the first of its kind to explore the concept of agency of mothers to understand how this concept functions on children's oral health. This was by consideration the many factors and other pressing issues cumulatively, as a result, the first to consider how the agency as a maternal characteristic influence on oral health as an outcome. Therefore, this research provided a new perspective to understand children's oral health as western perspective that could influence on the future dental policy and oral health programs in the Kingdom.

Methodical approach

Two qualitative methods (ethnography and narrative approaches) were used to gain this study's data. This consists of combination of interviews and observations of mothers with their children in the dental setting. Since, as Cain and Finch (1981) argued that multiple methods (different sources: documents, observations, interviews) help to understand the issue as deeply as possible (Flick, 1992). Using combination of methods has shown improvement of the coherence and fruitfulness and therefore can enhance the quality of research politically (Seale, 1999).

(Fetterman, 2010) presented a holistic ethnographic perspective that describes religion, politics, environment, economy, cultural concepts, social structure and social relationships or functions of some members of the group. Using this approach has shown recognized benefits to explore people's lived experiences and their culture and its social rooted (Marschan-Piekkari and Welch, 2011, Hammersley and Atkinson, 2007). This is similar to this research as it explored the interaction in the daily lives of mothers in Saudi Arabia in order to examine cultural themes and the life cycle in mother's social worlds. Therefore, using ethnographic approach may be considered as one of the strengths of the current study.

Triangulation of data is considered a powerful tool to produce good qualitative research which is a multiple method of social research (Creswell and Clark, 2007). Similar to this study where it employed extensive field notes that give insight into the daily lives of Saudi mothers, alongside insight into their cultural surroundings, description setting and contexts of treatment session or the interview. Using this process of analysis may enable the researcher to verify the sources, overcome the bias (Jakob, 2001), and therefore to increase the confidence validity of the study's findings (Yeasmin and Rahman, 2012).

Reflexivity perhaps considered as one of the strengths of this study. It is important tool in narrative analysis as an operation between the researcher and the data within the interpretation stage (Mauthner and Doucet, 2003). The researcher of this study was reflective on the way of presenting the mothers experiences to provide the validity of data (Denzin, 1997b), and within the analysis stage to present credible, cognitive data (Richardson, 1999) (See the reflexivity chapter 6).

12.4 Limitations of the study

This study has some limitations as any research that should be considered to understand the present research results:

The study sample

Due to the nature of public dental services in the dental school, the sample selected was a convenience sample from the dental college clinic only in its own both branches. Therefore, the results of this study may not be generalizable for the entire population of all mothers in Saudi Arabia for the reasons are as follows:

- Although the mothers were from different areas in Saudi community who attended the dental school with their children, but there were some mothers have not accessed the dental services in the dentistry school either to the availability of the appointments or to their geographic area in relation to dental school. Since, the location of dental school is in the capital where the mothers get services the study may have failed to involve other mothers who live in distant locations from the school.
- The data was taken from the dental school clinic only, and the dental service is provided in many government/public hospitals and private hospitals and clinics that were not covered in this study.
- This sample was focused on the dental clinic only as a health institution and did not cover other public institutions where the mothers can be found.
- These mothers were the main caregivers to their children and attended the dental clinic with them. However, there were some mothers who cannot attend the dental visit with their children and send the children with someone else from the family members for example.
- The sample did not consider the SES that was difficult to assess. Therefore, this sample did not present the mothers who were with lower education, work, and income. Hence, this study focused solely on the paediatric dental clinic in King Saud University, although wide range of families access the clinic to obtain oral health care, many people with different socio-economic circumstances may find it more difficult.

Future research with Saudi mothers will be challenging to achieve/reach all range of Saudi mothers. In Riyadh, as in many parts of Saudi Arabia there are many other health related institutions; private clinics or other government hospitals, and children's schools. Since government higher education institutions do not fund research in private clinics and the Ministry of Education/ school systems do not permit the researcher to work in school time easily.

Methodological limitations

One issue was that the interviews were in Arabic and although I translated them into English, and tried to stay as close to the original meaning as possible, it is possible that I may have altered the meaning of what was being said (Emmel, 1998). To mitigate this occurrence this I wrote the original quotes and English quotes next to each other in the main body of the text in order to clarifying the meaning in analysis (Temple, 2008) and therefore have an accurate translated data (Regmi et al., 2010). Interview was not the primary tool and I undertook observation in a dental setting while observing mothers with their children.

Narrative analysis was used to analyze the data in this research by construction of vignettes about the mothers' experiences. A main limitation of using vignettes as a tool of narrative analysis is the artificiality, because the essential parts of social life are intricately woven into the continuous interaction between people and their environments. There is a criticism about vignettes in that they cannot replicate and represent the complexity of people's social worlds. In contradiction, others argued that the social life process is multiple and complex and vignettes provide a chance to isolate specific aspects of social issue whilst assessing the researcher to manage the complexity of daily life (Corkery, 1992). However, there is no method can completely capture the complexity of social life (Barter and Renold, 1999).

12.5 The implications of the study

This study represented one of the great concerns of mothers about the sugar consumption and their children's oral health in Saudi houses as a private domain of mothers' agency. The control of sweets is not prominent nor part of a clear strategy for oral health promotion

in the private sphere in Saudi Arabia, and this is depending only on the mothers themselves (on their abilities) to restrict their children. The association between the caries level and easy access and frequent sugar intake (Wyne and Khan, 1995) have to be considered in Saudi population especially if the children brushed their teeth regularly as most of the mothers illustrated. Based on findings of the study, oral health promotion must be focused on the importance of the mothers' agency to improve their children oral health, respectively. See the recommendations section in this chapter.

Although it is difficult to implement any action to enter the Saudi private houses according to the culture but we have to take real actions in the public that will influence the availability of sugar in the private sphere and within families. These actions therefore may improve the mothers' agency in relation to children's oral health and sugar restriction. Hence, mothers' agency will be limited if sweets were just available everywhere around them in private and public environments. The availability of sugar in Saudi culture was a challenge on mothers' agency and their children's oral health.

Therefore, oral health promotion has to take the broader context of mother's lives when we rely on their agency. Dental advice in the clinic or in oral health promotions programs about decreasing sugar are often not enough and this work supports this claim. Saudi mothers need more cooperation from all other sectors in the kingdom to support them in their private lives on this reduction, and provide them with more healthy options. The next part will introduce some recommendation that already applied on many populations and were effective on sugar consumption.

12.6 Recommendations for policy

To strength community actions in relation to mothers' agency and children's oral health, public oral health programs should adapt/ develop the style of these programs rather depending only on presenting of the daily oral health practices and the importance of healthy food. This should be extended to tackle the mothers problems in sugar management for example, and I can argue this work is a start to hear from the community individuals (the mothers) about their own similar challenges and needs about their children's oral

health by their voices rather than depending only on dental specialists. Mothers' concerns should be considered if we recruit them as oral health agents of their children.

Therefore, to enhance this agency we have to communicate with the mothers to empower them, listen to their experiences, their difficulties and their suggestions. This is could be within community networks to develop oral health promotion and therefore to improve children's oral health in Saudi Arabia. This approach has been applied in Glasgow, UK, on groups of people who have a similar difficulty with affording healthy food products in community cafes. This action enables them to share their problems and their solutions on healthy food (McGlone et al., 1999).

To build supportive environment, health promotion should be integral in the public setting to make a real change in oral health. Hence most of oral health promotion programmes aiming school age children. The younger children therefore were missed these programmes. These programmes should take place and extent to other places such as the GPs, hospitals prenatal units to advice the mothers and work areas in order to improve the mothers' agency and therefore to have better children's oral health. It is urgent need to have effective oral health programs for children before school age.

It is also important to develop the available school polices in the Kingdom for example, more emphasis on healthy food provision and sugar free policy within school canteens, involving mothers as an important agent to improve children's oral health practically and not only dependant on the printed leaflets through their participation in the school oral health programs and meetings to enhance their agency respectively. Many countries have benefited from these kinds of school policies in promotion of children's oral health (Kwan et al., 2005).

There is a strong need to adjust the dental services system especially within preschool age children from the treatment to preventive approach to improve the mothers' agency and therefore children's oral health such as fluoride application. However, I made an attempt to raise the attention of not only mothers' agency, but also of health professionals regarding the importance of the early prevention measures in dental services for children especially before school age.

To reorient the health promotion in Saudi Arabia, The public services need to shift from treatment focussed dental services to services that promote oral health and prevent dental problems. Therefore, it should focus more on preventive measures and train more dental hygienists and therapist to cover the shortage of dental preventive staff in the public dental system and support and maintain oral health for children. Mothers may need some instruction about how they check the white lesion on their children's teeth at home, to prevent disease.

Services also need to consider the guidance of available preventive measures hence most of the mothers of this study did not know how to conduct preventive measures before the treatment stage with their children. Accordingly, dental professionals need to be supported to provide preventive measures in relation to the time and resources in the dental contexts. Health visitors may enhance mothers' agency and this services had a good outcome in the UK for example to provide oral health advice to the mothers at home for their preschool children (Whittle et al., 2008).

To build a healthy public policy in Saudi population, the health sector has to take into consideration children's oral health in the policy agenda. In relation to the sweetie culture and how it impacts on the mothers' agency to control sugar intake with their children. Hence the contexts where the Saudi mothers live have to be considered before going further and asking them to restrict the amount of sugar in their children's diet in order to improve their oral health. The availability of sugar is everywhere around the mothers and impacts on their agency with their children. There are several strategies applied globally and were effective in reducing the sugar consumption. There is a need to frame a policy for oral health to develop the community public services. The recommendations based on the findings of this study are as follows:

For long term, to create supportive environment as a public policy, the public services could include water fluoridation to implement in this population. Hence the dmft (6.1) is considered high and children considered within the high risk of caries. Water fluoridation has been working successfully to reduce the caries level in many countries (Locker et al., 2007, Daly et al., 2013).

Public policy should determine the costs of sweets and consider applying a sugar tax in order to increase the price of sweets and therefore reduce the consumption of sugar within Saudi families. This taxation policy is already applied effectively in European Union as health promotion measure and is called Fiscal policy to increase the price of unhealthy products such as high fatty and sugar foods, drinks and cigarettes (Marsh and McKay, 1994, Daly et al., 2013). For example, this policy commonly applied in the Britain by 6% taxation on the high sugar soft drinks (Briggs et al., 2013, Mytton et al., 2012, Newton et al., 2015). Another example by 10 % on sweet drinks in Mexico and this was effective in reducing the sugar purchasing by 6% in few months in 2014 (Colchero et al., 2015). In Saudi Arabia the taxation has been applied only on the cigarettes by 100 %, and it would be beneficial to apply it gradually on the sugar products.

This population needs more awareness about oral health practices and the importance of a healthy diet with reduced sugar. For example, more awareness about the level of sugar in the diet within the public institutions such as the health sector, at work areas in order to decrease the amount of sugar and the amounts of each portion (Church, 2008). This can be also be implemented through the places that may influence on people's healthy choices within local authorities for example sport zones and entertainment places (Gardner et al., 2007, Newton et al., 2015). This is to increase knowledge about healthy food and to help people in choosing healthier food. It will be useful to link the sweet intake with associated health problems such as obesity (Ambrosini et al., 2013), heart disease (Logue et al., 2011), some cancers (Te Morenga et al., 2013) and dementia (Stephan et al., 2010) for example to be more effective and not only related the sugar with the dental caries. This type of awareness extends to involve the family members (fathers and relatives) to be more careful about the sugar intake and therefore enhance the mothers' agency.

Monitor the government sectors to provide healthy foods in their catering such as the hospitals and one example of effectiveness of this recommendation is in the NHS system in the UK (Caraher and Coveney, 2004, Newton et al., 2015).

The media (sweet advertisements) is one of the constraints on the mothers' agency that may be used to decrease the sugar intake and increase the awareness about healthy food. Advertisement about sweets are not allowed in the Saudi channels but can be available in

other children's channels. In the UK sweet advertisements can influence children's sugar intake negatively (Boyland et al., 2011).

Sweet marketing in public such as the purchasing the sweet in the cashier and till areas might be another strategy to consider (Sakurai et al., 2014). Such product placement should be removed to help mothers to manage their children's demands for sweets. There is evidence on how this discount on sugar marketing has influenced sweet intake in England (Thow et al., 2014, Pechey et al., 2013).

To be successful in these examples of action, we need universal collaboration between all the Kingdom organizations, the government, local authorities, the public sector, food industries, at work, private shops, malls and cafes etc., and the individuals and families to decrease the sugar intake and to provide healthy foods. This is to improve the mothers' agency and therefore children's oral health in lowering the consumption of sugar in daily diet.

12.7 Recommendations based on the mothers interviews

In view of the patient-centred nature of this research, these recommendations reflect the findings from the interviews for improving children's oral health. These recommendations take into account the participants' accounts and how they can be improved in their role in relation to children's oral health. From their experiences, we can suggest adjusting the function of the mothers' role whilst at the same time allowing for practical solutions that enable them to participate in a society where they are regulated.

Whole family approach

Mothers suggested that oral health awareness should be promoted with all family members and the whole community and not only for children. This provides support because it aims to enhance the mothers' role with their children. We have already seen the benefit of fathers' involvement, their position and how they can support mothers as identified earlier in the discussion chapters. Understanding how extended families influence children's oral health is also crucial for the design of effective policies and interventions in the Kingdom to address these issues and create potential to increase their influence. Policy needs to also

seek to integrate older women and fathers within the families rather than focusing exclusively on mothers and children.

Dental services (Availability and Accessibility)

- Mothers advocated their need to have more focused preventive dental services. They requested that dental clinics should provide them with dental advice about prevention in the earlier stages of their children's lives.
- Mothers had wishes regarding a regular dental visit for children every 6 months as well as the need to remind them about dental check-ups, similar to the system used for vaccination reminders in the Kingdom.
- Mothers felt that governmental dental clinics should be in local neighbourhoods instead of the big hospitals to increase accessibility. This would partially reduce the need for drivers or for their husbands to take time off work to drive them to the hospitals.
- Mothers felt that Oral Health Awareness programs should be introduced in each neighbourhood centre for mothers and their children.
- Mothers suggested that they needed more extensive services, for example weekends and evenings. They also suggested that reducing waiting lists would enable their attendance at dental clinics.

School

Mothers wanted support from schools with oral health care. For example, information on how caries starts and the correct brushing method. They also felt that children should be involved in activities at school to promote oral health awareness and parents should also be involved in these activities. They also suggested improving awareness of healthy food as well as a system that enforced affordable, healthy snacks. For example, a basket of fruits for children in the school, rather than sweets. They also suggested dental check-ups in schools and a referral where necessary.

General Oral Awareness

- Mothers recommended Oral Health Awareness in all aspects of their life such as the media for example TV programmes to target children's oral health awareness as well as in public places in the Kingdom.

12.8 Recommendations for future research

- Based on the findings of this research, consideration of mothers' agency in oral health promotion research is fundamental to sustaining positive children's oral health outcomes, as a valued framework / agenda for oral health promotion.
- Collaborative research to identify facilitators for mothers' agency are also required. Similarly, interventions involving mothers' experiences also may be more effective to motivate the mothers to successfully improve their children's oral health.
- Future work should be repeated among different and more institutions to provide a broader picture of Saudi population.
- In considering strategies to reduce caries, approaches that also seek to increase mothers' agency and engagement of mothers is strongly encouraged. Similarly, oral health promotion should consider other dental agents such as family members that may influence mothers' agency. They should also consider family resources, family size, and mothers' responsibilities either in the home or in society.
- This research looked exclusively at how mothers' agency influences children's oral health. Future studies should take into consideration the effect on mothers' agency on children especially who are at home and under school age who are not applicable to the oral health school programs.
- This research should be replicated among varied populations in other institutions in Riyadh, and in other cities in Saudi Arabia and may be in other countries in order to identify the similarities or differences between this research's results, different subcultures, or/ and cultures.

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Appendix (2) (II)



School
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Najla Aldossari

University Research Ethics
Committee (School of Clinical
Dentistry)

9th July 2012

Research Ethics Lead - Dr Lynne Bingle
Claremont Crescent
Sheffield S10 2TA
Telephone: +44 (0)114 271 7954/51
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Email: l.bingle@sheffield.ac.uk

Full title of study: Agents of their health? Mothers and children as active agents in Saudi Arabia
Reference number: 52

On behalf of the committee, I am pleased to confirm a favourable ethical opinion for the above research based on the revised application form, protocol and supporting documentation. If any further changes are made to these documents the Ethics Committee should be informed and their opinion requested.

With the Committee's best wishes for the success of this project

Yours sincerely

A handwritten signature in black ink, appearing to read 'Lynne Bingle'.

Lynne Bingle
Research Ethics Lead



Appendix (3)(III)



School of Clinical Dentistry.

Aide memoir

These questions will guide the interviewer during the interview in this project in order to explore a range of Saudi Arabian mother's experiences of their children's oral health care.

List of questions:

Source of oral health knowledge, oral health responsibility, importance of supervision:

Where do you get your children's oral health information?

Who looks after you children's oral health?

Who is responsible for the oral health daily practices?

Who helps you to take care of your child/ren's oral practices?

Who is else involved in caring children's oral health?

Agency and oral health practices:

How do you clean your child/ren teeth??

How often??

Approximately how old was your child when you started?

What sort of toothpaste?

Do you use anything else for mouth cleaning with your child/ren?

What is it and how often?

Does your child eat sweets?

If yes, how often?

Who gives them?

Beliefs, religion:

In what ways do you feel Islam is involved in oral health care?

Are there any particular beliefs that you hold about oral health?

How do you feel Saudi Arabia compares with other countries in relation to oral health?

Importance of dental visit or dental services, access:

Do you go to see the dentist?

Have you child/ren visited a dental professional?

If yes **how often** and **when** you start to **visit** with your child/ren?

Could you tell me about the previous visit?

How you can get the dental services?

SES, education level:

Who is in the house held?

Did you go to school, or are you educated?

Do you have a work?

How you can manage the children's oral health if you have other children, worker, living with extended family?

Family structure, number of children:

How many children do you have?

Do you live with your family or in extended family?

How are decisions made about health/oral health?

Appendix (4)(IV)



School of Clinical Dentistry.

Covering Letter

Dear Mother,

I am a PhD student at the School of Clinical Dentistry in Sheffield, UK conducting research to look at a range of Saudi Arabian mothers' experiences of their children's oral healthcare. I want to find out things like where a Saudi mother gets her knowledge about oral health, is anyone else involved in caring for her child's oral health, what influences are there on her daily life and how do these affect her caring for her children's oral health, how does she know when to access a dental professional, and can this be done with ease, what the barriers and facilitators are to her caring for her children's oral health? If you feel that you can help me explore these questions and would like to take part then I will ask you to be interviewed by me. I would also like to observe what goes on when you attend a dental clinic with your child/children, I will only watch and not take part in the appointment.

In the interview you will be asked to:

Talk about your experiences in relation to your children's oral health. This interview will take place either at the dental clinic or at home (this could take up to an hour and a half). The interview will be taped so I can transcribe it later. After the interview I will discuss what I have understood to make sure I have your story correctly. You will have a chance to make sure I have understood all you have told me. I will give you a false name so nobody will know who you are; all details that may identify you will be removed. The tape will be destroyed after I have transcribed what has been said.

You do not have to take part and may withdraw at any time during the study, I will not be offended. Whether you decide to participate or not will have no influence on your child's treatment.

There will be no immediate benefit to you taking part, this research is an exploration. If you would like the results of the study in an easy read format then please let me know and I will arrange to send them to you.

If you are interested in taking part I will contact you to arrange a date for the interview.

Ethical approval for this research has been obtained from the University of Sheffield; School of Clinical Dentistry Ethics Sub-Committee. Permission has also been granted by Professor Al Wazzan; Dean of King Saud College of Dentistry, Riyadh, Kingdom of Saudi Arabia.

If you wish to obtain more information about the study please email Najla Aldossari (naldossary1@sheffield.ac.uk)

Warm regards,

Najla Aldossari

Appendix (5)(V)



The
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ورقة تعريف البحث

أنا طالبة دكتوراة في كلية طب الأسنان بشيفيلد بالمملكة المتحدة، أقوم بإجراء بحث حول الدور الذي تلعبه الأمهات السعوديات فيما يخص صحة وسلامة أسنان أطفالهن. أريد أن أعرف معلومات مثل من أين تحصل الأم السعودية على المعلومات فيما يخص صحة الفم والأسنان؟ وهل يتدخل آخرون في صحة وسلامة أسنان الطفل غير الأم؟ ما هي العوامل التي تؤثر على حياتها اليومية وكيف تؤثر هذه العوامل على عنايتها بصحة الفم والأسنان لصغارها. كيف تعرف متى عليها مراجعة مختص بصحة الأسنان، وهل يمكنها عمل ذلك بسهولة؟ ما هي العوامل المعيقة والمشجعة لها فيما يخص عنايتها بصحة أسنان أطفالها؟ إن كنت تحسبن أنه يمكنك مساعدتي في الإجابة على هذه الأسئلة وترغبين في المشاركة فسأطلب منك مقابلتي، كما أرغب في ملاحظة ما يحدث عند زيارتك لعيادة طبيب الاسنان مع أطفالك. سأراقب فقط ولن أتدخل طوال فترة الموعد.

أثناء المقابلة سيطلب منك التالي:

التحدث عن تجربتك فيما يخص صحة وسلامة الفم لدى أطفالك، وستجري هذه المقابلة إما في العيادة أو في المنزل (وستستغرق حوالي الساعة إلى ساعة ونصف). سيتم تسجيل هذه المقابلات حتى تتمكن من تفرغها لاحقاً. وبعد المقابلة سأناقش معك ما فهمته لتأكد من أنني استوعبت تجربتك بالشكل الصحيح. وسيكون لديك الفرصة للتوضيح لتأكد من أنني فهمت ما أخبرتني به. سأعطيك اسماً مستعاراً حتى لا يعرفك أحد وسيتم استبعاد أي تفاصيل تساعد على التعرف على هويتك. وسيتم إتلاف الشرائط التسجيلية فور تفرغها كتابياً.

لا يتوجب عليك المشاركة ويمكنك الانسحاب في أي وقت أثناء الدراسة، ولن اتضايق أو استاء من ذلك. وبغض النظر عن رغبتك في المشاركة من عدمها لن يؤثر هذا بأي صورة على علاج ابنائك. لن يكون هناك فوائد مباشرة لك عند مشاركتك، وإن أردت نسخة مبسطة عن نتائج البحث أرجو إخباري بذلك وسأرتب أن يتم إرسالها لك.

إذا كنت مهتمة بالمشاركة سأقوم بالاتصال بك حتى نرتب موعداً للمقابلة، لقد تم منح الموافقة الأخلاقية على هذا البحث من قبل جامعة شيفيلد من قبل اللجنة المختصة بأخلاقيات طب الاسنان في الجامعة. كما تم منح الأذن لإجراء الدراسة من قبل الدكتور الوزان عميد كلية طب الاسنان بجامعة الملك سعود بالرياض بالمملكة العربية السعودية.

إذا أردت معرفة المزيد عن الدراسة أرجو مراسلة نجلاء الدوسري
(naldossary1@sheffield.ac.uk)

مع أطيب التمنيات بدوام الصحة!
نجلاء الدوسري

Appendix (6)(VI)



School of Clinical Dentistry.

Information sheet

Mothers experiences of their children's oral health and care in Saudi Arabia.

You are being invited to take part in a research study. Before you decide it is important that you understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

I want to look at a range of Saudi Arabian mothers to explore their lives in relation to their children's oral healthcare experiences. This research has not been done before and there is no information about Saudi Arabia, all we have is information from the West. The study aims to add to the knowledge in dentistry by exploring a different culture and identifying what factors help and create barriers for Saudi mothers in relation to their child's oral health.

Do I have to take part?

It is completely up to you to decide whether or not to take part. If you choose to take part in the study you will be asked by an oral consent and you will be given this information sheet to keep. You will still be able to withdraw from the research at any time and you will not have to give a reason for that.

What will happen to me if I take part?

If you decide to take part you will be asked to be previously agreed to participate in this study with the dentist, and conduct observations the mothers in the dental clinic. Then, mothers will be approached by the chief investigator and the project will be explained and

will take oral consent from the mothers before the interviews. The interviews will be at spare room at the dental school or at the mother's home. They may take up to an hour and a half.

What do I have to do?

Participating in this study will not pose any restrictions to your lifestyle. The only adjustment you will have to make will be to find an appropriate time to participate in the interview.

Will I be recorded, and how will the recorded media be used?

Interviews you will take part in will be recorded. The audio records of the interview will be transcribed into written text, and this data will analysed. No other use will be made of the data without your oral permission and no one from outside of the project will be allowed to access the original recording. The tape will be destroyed immediately after transcription.

What are the possible disadvantages and risks of taking part?

There are no known risks. If you will feel uncomfortable to discuss any specific topic during the interview, for example because you feel it is too personal, you don't have to discuss them.

What are the possible benefits of taking part?

There might be no immediate or direct benefits to you. However this research will help us to understand the experience of mothers in Saudi Arabia in relation to their child's oral health.

Will my taking part in this study be kept confidential?

All information that you provide us for this study will be kept strictly confidential. To protect your privacy the following measures will be taken to ensure that no-one, apart from the research team has access to your identity:

Your **name** will **not** appear.

Your **real name** will **not** be used in the analysis or writing up of the findings derived from your interview.

The researcher will assign false names to the participants

Your true identity will only be known to the researcher.

All transcribed data will be kept on password protected computer.

Tapes will be destroyed immediately after transcription in agreement with participants.

All information supplied by you will be anonymised, and any identifiable data removed.

What will happen to the results of the research study?

Following completion of the study we will write to you giving you a summary of our findings (and details of how you can obtain a full copy of the report). We will also produce publications based on the results of the study.

Who is organizing and funding the research?

The study is a part of the PhD project of Najla Aldossari based at the School of Clinical Dentistry, University of Sheffield. The project is being supervised by Dr Barry Gibson and Dr Janine Owens from the Academic Unit of Dental Public Health within the School of Clinical Dentistry in Sheffield, UK. The research is being funded by Saudi government.

Who has reviewed the study?

The study's protocol has been reviewed and approved by the University of Sheffield Research Ethics Committee. Permission has been granted by Professor Al Wazzan; Dean of King Saud College of Dentistry, Riyadh, Kingdom of Saudi Arabia.

Who can I contact for further information?

Further information about the study is available from Najla Aldossari Academic Unit of Dental Public Health, School of Clinical Dentistry, University of Sheffield, Sheffield, S10 2TA.

Alternatively, you can contact Dr Barry Gibson; b.j.gibson@sheffield.ac.uk and Dr Janine Owens; jan.owens@sheffield.ac.uk Academic Unit of Dental Public Health, School of Clinical Dentistry, University of Sheffield, Sheffield, S10 2TA.

Thank you for reading this

Appendix (7) (VII)



School of Clinical Dentistry.

ورقة معلومات

تجارب الأمهات حول صحة الفم والعناية به لدى أطفالهم في المملكة العربية السعودية

لقد تم دعوتك لتكون جزءاً من هذه الدراسة البحثية، قبل أن تقرري المشاركة من المهم أن تفهمي سبب إجراء هذا البحث وماذا يحتوي، أرجو أن تتأملي في المعلومات التالية جيداً وتناقشيها مع الآخرين إن أردتي. أسألينا إذا أردتي الاستيضاح أو احتجتي المزيد من المعلومات وخذي وقتك لتقرري إن كنتي حقاً تريدي أن تكوني مشاركة.

ما هو هدف هذه الدراسة؟

أريد أن أراقب مجموعة من الأمهات السعوديات لأكتشف المزيد عن تجاربهن ذات العلاقة بصحة أسنان أبنائهن، لم يتم عمل هذا البحث من قبل ولا يوجد معلومات حول المملكة العربية السعودية بهذا الشأن. كل ما لدينا هو معلومات عن الغرب. تهدف الدراسة إلى معرفة المزيد عن صحة الأسنان باكتشاف حضرات أخرى وتحديد العوامل التي تساعد أو تعيق الأمهات السعوديات فيما يخص صحة أسنان أبنائهن.

هل يجب علي المشاركة؟

يعود لك القرار كلياً لتقرري أن كنتي ستشاركي أو لا. إذا اخترتي أن تشاركي فسيتم طلب موافقتك الشفهية، كما سيتم إعطائك ورقة المعلومات هذه لتحتفظي بها. وسيكون من حقك أن تنسحي من البحث في أي وقت وبدون إيضاح الأسباب.

ماذا سيحدث لي إذا شاركت؟

إذا قررتي أن تشاركي سيكون عليك زيارة طبيب أسنان موافق عليه مسبقاً، كما سيتوجب عليك السماح له بملاحظتك كأم في عيادة الأسنان. ثم ستقابل الأمهات وسيتم شرح المشروع لهن

وطلب موافقتهم الشفهية قبل إجراء المقابلات. سيتم إجراء المقابلات في غرفة إضافية في كلية الأسنان أو في منزل الأم وستستمر لساعة أو ساعة ونصف.

ماذا سيتوجب علي عمله؟

إن المشاركة في الدراسة لن تضع أي قيود على نمط حياتك، إن التعديل الوحيد الذي سيتوجب عليك عمله هو إيجاد الوقت للمشاركة في المقابلات.

هل سيتم تسجيلي، وكيف سيتم استخدام أداة التسجيل؟

سيتم تسجيل المقابلات صوتياً، وسيتم تفرغ المقابلات كتابياً وتحليل هذه البيانات ولن يتم استخدام هذه البيانات أي استخدام آخر بدون موافقتك الشفهية ولن يسمح لأحد من خارج فريق الدراسة بالإطلاع على هذه التسجيلات، وسيتم إتلاف الشريط مباشرة بعد التفرغ.

ما هي المخاطر والعيوب المحتملة للمشاركة؟

لا يوجد مخاطر معروفة، إذا شعرتي بعدم الراحة لمناقشة أي موضوع خلال المقابلات، مثل أن تشعر أن الموضوع شخصي جداً فلسستي ملزمه بمناقشت

ما هي المنافع المحتملة للمشاركة؟

قد لا يكون هناك منافع مباشرة لك، ولكن هذا البحث سيساعدنا على فهم تجربة صحة أسنان الأطفال في السعودية وعلاقة أمهاتهم بها.

هل مشاركتي في هذه الدراسة ستبقى سرية؟

كل المعلومات التي ستمديننا بها من خلال هذه الدراسة ستكون محل السرية التامة، لحماية خصوصيتك سيتم اتخاذ هذه الاحتياطات للتأكد من أن شخصيتك وأسمك لن تكون معروفة لأي أحد خارج فريق الدراسة. لن يتم استخدام اسمك الحقيقي في التحليل ولن يكتب في النتائج المستقاة من مقابلاتك.

سيتم إعطائك اسماً مستعاراً من قبل الباحث ولن تعرف هويتك الحقيقية إلا من قبل الباحث نفسه.

سيتم الاحتفاظ بالمعلومات المفرغة في جهاز حاسب محمي بكلمة سر.

سيتم إتلاف الشرائط المسجلة فوراً بعد تفرغها، وتعتبر جميع المعلومات التي زودتينا بها مجهولة المصدر. وسيتم استبعاد أي بيانات تميزك عن غيرك وتعرف عن هويتك.

ماذا سيحدث لنتائج الدراسة البحثية؟

بعد انتهاء الدراسة سنرسل إليك مختصر للنتائج التي توصلنا إليها (والتفاصيل حول طريقة حصولك على نسخة كاملة عن التقرير). كما سننتج منشورات مبنية على نتائج الدراسة.

من الذي يقوم بتنظيم وتمويل هذه الأبحاث؟

هذه الدراسة هي جزء من درجة الدكتوراة الخاصة بنجلاء الدوسري في كلية الأسنان بجامعة شيفيلد. ويتم الإشراف على المشروع من قبل الدكتور بيرى جيسون والدكتورة جانين أوينز من الوحدة الأكاديمية للصحة العامة للأسنان التابعة لكلية الأسنان بشيفيلد في المملكة المتحدة، ويتم تمويل هذا البحث من قبل حكومة المملكة العربية السعودية.

من قام بتدقيق ومراجعة الدراسة؟

تم مراجعة بروتوكول الدراسة من قبل لجنة أخلاقيات البحث في جامعة شيفيلد، وتم منح الإذن بها من قبل الدكتور الوزان عميد كلية طب الأسنان بجامعة الملك سعود في المملكة العربية السعودية.

بمن يمكنني الاتصال للحصول على المزيد من المعلومات؟

تتوافر المزيد من المعلومات حول الدراسة عند نجلاء الدوسري في الوحدة الأكاديمية للصحة العامة للأسنان. كلية طب الأسنان بجامعة شيفيلد في شيفيلد S10 2TA . كما يمكنكم الاتصال بالدكتور بيرى جيسون b.j.gibson@sheffield.ac.uk والدكتورة جانين أوينز Dr Janine Owens; jan.owens@sheffield.ac.uk من الوحدة الأكاديمية للصحة العامة للأسنان التابعة لكلية الأسنان بشيفيلد في المملكة المتحدة S10 2TA

شكرا لاطلاعتك على هذه المعلومات

Appendix (8) (VIII)



School of Clinical Dentistry.

ورقة تعريف البحث

أنا طالبة دكتوراة في كلية طب الأسنان بشيفيلد بالمملكة المتحدة، أقوم بإجراء بحث حول الدور الذي تلعبه الأمهات السعوديات فيما يخص صحة وسلامة أسنان أطفالهن. أريد أن أعرف معلومات مثل من أين تحصل الأم السعودية على المعلومات فيما يخص صحة الفم والأسنان؟ وهل يتدخل آخرون في صحة وسلامة أسنان الطفل غير الأم؟ ما هي العوامل التي تؤثر على حياتها اليومية وكيف تؤثر هذه العوامل على عنايتها بصحة الفم والأسنان لصغارها. كيف تعرف متى عليها مراجعة مختص بصحة الأسنان، وهل يمكنها عمل ذلك بسهولة؟ ما هي العوامل المعيقة والمشجعة لها فيما يخص عنايتها بصحة أسنان أطفالها؟ إن كنت تحسبن أنه يمكنك مساعدتي في الإجابة على هذه الأسئلة وترغبين في المشاركة فسأطلب منك مقابلتي، كما أرحب في ملاحظة ما يحدث عند زيارتك لعيادة طبيب الاسنان مع أطفالك. سأراقب فقط ولن أتدخل طوال فترة الموعد.

أثناء المقابلة سيطلب منك التالي:

التحدث عن تجربتك فيما يخص صحة وسلامة الفم لدى أطفالك، وستجرى هذه المقابلة إما في العيادة أو في المنزل (وستستغرق حوالي الساعة إلى ساعة ونصف). سيتم تسجيل هذه المقابلات حتى تتمكن من تفريغها لاحقاً. وبعد المقابلة سأناقش معك ما فهمته لتأكد من أنني استوعبت تجربتك بالشكل الصحيح. وسيكون لديك الفرصة للتوضيح لتأكد من أنني فهمت ما أخبرتني به. سأعطيك اسماً مستعاراً حتى لا يعرفك أحد وسيتم استبعاد أي تفاصيل تساعد على التعرف على هويتك. وسيتم إتلاف الشرائط التسجيلية فور تفريغها كتابياً.

لا يتوجب عليك المشاركة ويمكنك الانسحاب في أي وقت أثناء الدراسة، ولن اتضيق أو استاء من ذلك. وبغض النظر عن رغبتك في المشاركة من عدمها لن يؤثر هذا بأي صورة على علاج ابنائك.

لن يكون هناك فوائد مباشرة لك عند مشاركتك، وإن أردت نسخة مبسطة عن نتائج البحث أرجو إخباري بذلك وسأرتب أن يتم إرسالها لك.

إذا كنت مهتمة بالمشاركة سأقوم بالاتصال بك حتى نرتب موعداً للمقابلة، لقد تم منح الموافقة الأخلاقية على هذا البحث من قبل جامعة شيفيلد من قبل اللجنة المختصة بأخلاقيات طب الاسنان في الجامعة. كما تم منح الأذن لإجراء الدراسة من قبل الدكتور الوزان عميد كلية طب الاسنان بجامعة الملك سعود بالرياض بالمملكة العربية السعودية.

إذا أردت معرفة المزيد عن الدراسة أرجو مراسلة نجلاء الدوسري
(naldossary1@sheffield.ac.uk)

مع أطيب التمنيات بدوام الصحة!

نجلاء الدوسري

Appendix (9) (IX)

The 4 Saudi mothers' stories that used for the 4 vignettes in data analysis stage

Jawaher' story	
<p>Jawaher is a thirty year old mother of 4 children; Sara who is 12years old, Rawan who is 9 years old, Mohammed who is 8years old and Tariq who is 7 years old. Jawaher lives with her husband Abdul-Aziz and their children in their own home in the centre of Riyadh, which is the capital of Saudi Arabia, and not in an extended family which was how traditional Saudi families once lived. Jawaher is responsible for everything to do with the children and so she is a housewife. Abdul-Aziz works and is responsible for the household expenses. Jawaher has a maid who carries out the house-work, so cleaning, washing and ironing, occasional food preparation and child minding if necessary. She also has a driver to get her and children to and from the schools, for hospital appointments, shopping and any other visits she may need to make during the day. Jawher's day revolves around her four children and the structure of Saudi life. She rises at (5 am) washes and then performs Fajr prayers before she starts her day. She will then wake her children and begin the process of washing them and preparing breakfast.</p> <p>When the children were younger she would clean their teeth with cotton gauze and when they were on a bottle she would finish off each feed with fresh water. As they grew older and their teeth erupted she introduced a toothbrush, first allowing the children to play with it so they were familiar with it before she showed them how to brush and place it in their mouths. She introduced fluoride toothpaste when their teeth had erupted and made sure that she used the correct amount according to their age. Until the age of six she would stand over them whilst they brushed and made sure that she finished off what they had missed. Sara uses floss and she shows Rawan how to use it. After the age of six, Jawaher considered the children old enough to take the task on unsupervised. Sometimes she knows that they omit to clean their teeth and so they all have a traditional stick of Miswak, which is from the branches of the Neem tree which they can chew to create bristles, and they can use after breakfast to clean their teeth.</p> <p>When Mohammed was born, Jawaher found supervising the children difficult because he has multiple physical impairments</p>	<p>“Own home”</p> <p>A mother of 4children</p> <p>Mother's role</p> <p>Father's role</p> <p>Extra resources(maid)</p> <p>Extra resources(driver)</p> <p>Structure of Saudi life</p> <p>Oral health practices and mother's agency</p> <p>supervision</p> <p>Islam oral health practices</p> <p>Extra responsibility</p>

<p>because of a genetic disorder and he is extremely dependent on her. Sara, his daughter, takes over for Jawaher in the morning and assists her with washing Tariq and supervising his tooth brushing whilst Jawaher cares for Mohammed. When Mohammed is washed and dressed she takes him to his wheelchair and then goes to the kitchen to make breakfast for the children. Breakfast in a Saudi family normally consists of Eggs; fried, boiled, scrambled, or shakshuka (egg with tomato, onion, green pepper)], cheese several kinds, honey, peanut butter, Za'ater (Middle eastern/Arabian herbs from oregano served with olive oil), slices of tomato and cucumber, Fulmedams (middle eastern dish consist of brown beans partially or completely mashed served with olive oil) with Tamis (fresh Afghani bread) and sometimes Jawaher will ask the driver to bring Ful and Tamis in the morning, because in Saudi Arabia Ful and Tamis shops open after Fajr prayer and close before Dhuhur (mid-day) call. The different foods are t put into small dishes on the table and eaten with the bread basket (Arabic bread, toast, Tamis bread, etc). Jawaher already prepared thermos of hot milk and tea for children and coffee for her and Abdul-Aziz early when she entered the kitchen. All the family members sit around the table to take the breakfast together at the same time before going to their schools or work.</p> <p>After breakfast, Jawaher calls for the driver and he arrives to take her and the children to their schools at 6:15 am. Jawaher sends the boys (Mohammed and Tariq) to the all-boys school, and the girls (Sara and Rawan) to an all-girls school.</p> <p>While the children are at school, Jawaher is a member in the Disabled Children's Association so she will attend some mornings. The Disabled Children's Association is a community association to help children and parents to manage their lives and educates and raises awareness through lectures about general and oral health and gives tips on enabling self-care and management. The organisation also provides a place where mothers can meet in supportive groups to discuss their child's challenges and compare experiences. .</p> <p>While Jawaher is at the meetings, she gives the driver a list and he does the fresh food shopping at supermarket. She then returns home before Dhuhur prayer at mid-day to wash, pray and then prepare the children's lunch. The maid will have prepared everything before Jawaher arrival and will assist her with the lunch. Jawaher will call the driver again to take her to the</p>	<p>(disabled child)</p> <p>Sibling involvement in daily practices</p> <p>Eating habits</p> <p>Family bond/family sitting on meals</p> <p>Mother's agency/responsibility</p> <p>Extra Mother's responsibility with disability</p> <p>Extra resource</p> <p>Structured day with prayer time</p> <p>Food supervision/help</p>
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<p>schools to pick the children up at 12:30</p> <p>The first thing that will happen when the children return home is that they will change their clothes and wash before eating. After eating they will then perhaps study or sleep until the Asr (afternoon) prayer time because the heat during the day means that it will be too hot to be outside.</p> <p>After lunch, most of Jawaher's time is consumed with Mohamed's medical appointments such as physiotherapy, occupational therapy and follow ups. Sometimes after lunch she will take the children for their dental appointments, but she struggles when she has Mohammed as well and needs help with caring for him. Frequently her daughter Sara will be around and gives her the support she needs in caring for Mohammed along with the maid in the home, so Jawaher can concentrate on the other children and take them for their appointments. Sometimes her sister goes with her to the dental college's clinics with the children to give her support. Jawaher does not have to attend with Mohammed because she has ensured that he has no dental decay and does not have to visit the dentist in the dentistry schools' clinic. This is because Mohamed has a dental check up every 6 months as a part of many medical appointments she has with him on her everyday life.</p> <p>When she is at home at Asr prayer call Jawaher will wash, pray and the children will all pray in his or his room. She will then call all of them to go to the studying room which is a specific room in the ground floor arranged like a small library or class with 4 tables and 4 chairs, the last table is for Mohamed near the small sofa and small table. Each child will sit on their chair in order to start studying until sunset. Jawaher makes sure that Mohamed is moved from the wheel chair to his study chair to start his studying. Disability is not an excuse for lack of schooling in Jawaher's house. Whilst the children are studying, she sits on the side small sofa in front of the wooden table surfing the internet on her laptop, supervising the children, helping them with their revision and staying beside them drinking her tea. The maid enters the room with a big tray containing a tea pot and Jawher's cup, and a big fruit basket with a big dish, the maid puts everything on the table in silence near Jawaher and takes the tray. After drinking her tea, Jawaher will cut the fruit into small pieces in front of her on the table. Each child then automatically takes some fruit, without being told, and eats in silence, they then continue with their</p>	<p>Extra resources</p> <p>Structure of Saudi life</p> <p>Extra responsibility with disabled child</p> <p>Access dental care</p> <p>Disabled child</p> <p>Daughter support</p> <p>Extra resources</p> <p>Practical extended family support</p> <p>Structure of Saudi life</p> <p>Studying responsibility</p> <p>Extra resources</p> <p>Control eating habits</p>
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<p>homework. This routine continues while the children are at school and it is Jawaher’s responsibility to ensure that they do well at school.</p>	<p>Educational progress</p>
<p>At sunset, Maghreb prayer time is called and the children know that their studying is finished. Jawaher and her children go upstairs wash in their en-suite bathrooms and pray in their rooms. After praying, she goes downstairs to supervise the preparation and cooking of the children’s dinner with the maid.</p>	<p>Structure of Saudi life with prayer time Food supervision</p>
<p>While she is supervising and preparing the food, her husband Abdul-Aziz will arrives from the mosque from Maghreb prayer saying (“Salam alikum” peace be with you in Arabic. The children will race noisily down the stairs when they hear Abdul-Aziz’s voice. Jawher will greet him with “walaikum Salam” (peace be also with you) and then asks the maid to prepare and bring the Arabic coffee (roasted coffee favoured with cardamom and saffron served in a small specific cup without handle) mostly served with some fresh or dried dates. Abdul Aziz will fetch Mohamed from his room and they will all sit together in the living room in the ground floor.</p>	<p>Structure of Saudi life with prayer time Family time and Arabic coffee.</p>
<p>Jawaher will drink Maghreb’s Arabic coffee with Abdul-Aziz while the children take a rest after the studying time, playing near them in the huge area of living room but at the same time they stay with their parents as family time. The children will chat with Abdul-Aziz telling him what they did during the day and at school. Jawaher will listen to them, but most of the interaction is left to their father. The children prefer watching TV or using their iPads but often Jawaher specify 30 minutes for this and no more, and Abdu Aziz asks them to stay with them as a family.</p>	<p>Family meeting time Father’s role Mother’s agency</p>
<p>After she is satisfied that the children have spent time with their father, Jawaher calls the maid to bring the dinner for children on the big wooden table covered with a layer of glass with 10 chairs on the side of the living room. Jawaher asks the children to eat before the food become cold, mostly it will be fresh pasta, or vegetables with any type of meat served with fresh bread, and salad or falafel (chick pea balls and spices) and Humus, rolled in Arabic bread, or pastry filled with fresh meat /veg/cheese, all are as homemade, and they may eat similar foods to what they eat in the breakfast such as egg and Fuland Tamis. The children run to the dining table while Abdul-Azizpushes Mohammed’s wheel chair to be with others. The</p>	<p>Importance of family relationships Control eating habits Family togetherness</p>

<p>children will eat dinner while Jawaher and Abdul-Aziz stay in the living room and continue their chatting, while facing the children.</p> <p>When they are finished, the children go upstairs and then brush their teeth and wash preparing for Isha prayer which is the last prayer call of the day. Then, Abdul-Aziz goes to the mosque to pray, the two boys will attend mosque with him in the evening by the time they reach 10 years of age. At the moment, they pray at home and Jawaher will go with Mohamed help him with washing and changing into his pyjamas, she then puts him back into his wheelchair and checks the other children's brushing. They will all pray at Isha prayer time in their rooms (the girls in their rooms and boys in their rooms). Later, Jawaher goes to one of children's rooms (usually Mohamed's) to read a bed time story for all of them. After the story she will ask each child what his preference for lunch is the next day and she will tell the maid later in order for her to help in the preparation. She leaves them in their rooms in the second floor and goes down stairs she is almost finished with her work with her children for the day.</p> <p>Abdul-Aziz returns from the mosque after praying and sits in the living room, he may continue drinking coffee. Jawaher will write a list for food for the next day and tell Abdul-Aziz who will call the driver and give him some money for food and petrol. Jawaher will ask the maid to hang the children's school uniforms in each children's room, and tell her what needs preparing for the next day. Abdul-Aziz will return from chatting with the driver and making sure his own car is clean and filled with petrol for the next day. Jawaher will then ask the maid to bring the dinner and they eat together before either going for a drive while the maid babysits, or sitting and chatting together at home.</p>	<p>Oral health practices</p> <p>Structure of Saudi life with prayer time</p> <p>Disabled child responsibility</p> <p>Mother's role</p> <p>Mother's agency and eating habits</p> <p>Wife's role</p> <p>Extra resources</p> <p>Father's role as a head of the family</p> <p>Wife and husband's life</p>
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Nawal's story	
<p>Nawal is a 40 year old mother of 3girls (Reem who is 16 years old- Maha who is 12 years old, Leen who is 10years old) and a boy (Bader 8 years old). Nawal lives with her husband (Youssef), his mother (Mizna), and his sister (Manal who has finished her degree and is trying to find work) in an extended family house, which is how traditional Saudi families live, in the East of Riyadh, which is the capital of Saudi Arabia. Youssef's family live upstairs and Mizna and her daughter live downstairs. Nawal has graduated from University but is not working. She is responsible for everything to do with the children and she is a housewife. Youssef works and is responsible for the household expenses. Nawal carries out the housework, so cleaning, washing and ironing, food preparation and child minding and studying. Youssef drives her and the children to hospital appointments, shopping and any other visits they may need to make during the day, if he is not busy with his work. The children travel to and from their schools by private bus. Nawal manages her day time which revolves around her four children and the structure of Saudi life within the extended family. She rises at (5 am) washes and then performs Fajr prayers before she starts her day. She will then wake her children and begin the process of washing them and preparing breakfast.</p> <p>When the children were younger she would clean their teeth by rinsing after eating while she washes their hands. She makes sure they learn how to rinse, by making bubbles in her cheeks to explain to them and they mimic her by saying "ball" before putting water in their mouths. She then put them in front of the mirror to let each child look at themselves and she says "ball" and they copy her. She considers this way of cleaning their mouths as fun for all of them. As the children grew older they started eating sweets with the extended family members. She cannot argue with her mother-in-law, Saudi respect for older people and their wisdom and Saudi etiquette when dealing with the family. This causes concerns for Nawal because she has been careful about their oral health from an early age. At the age of three, as soon as she felt her child could hold a tooth brush she started teaching them the brushing technique that she learnt from the awareness program at her school when she was a child as well as and from their school's leaflet. She uses fluoridated toothpaste to clean and protect their teeth in a round motion 10 times on all the teeth with a straight motion inside and out twice a day morning and evening. She brushes with them in front of a mirror because she thinks they do it too fast so she stands with them to remind them to go slower. Nawal supervises</p>	<p>Live with extended family</p> <p>Mother of 4 children</p> <p>Structure and rules in Saudi house</p> <p>Mother's role</p> <p>Father's role</p> <p>Mother's role</p> <p>Father's role</p> <p>Extra resources</p> <p>Structure of Saudi life</p> <p>Oral health practices and mother's agency</p> <p>Other agents and sweet control</p> <p>Importance of elderly people in Saudi house</p> <p>Teaching and supervision of oral health practices</p>

<p>the children with their tooth brushing and oral health care until the age of 9 when she considers them independent enough to continue unsupervised with her only reminding them. Sometimes Nawal's children use "the traditional stick of Miswak to clean their teeth once a month or once a week. They use it whenever it's available which is mostly on a Friday after Friday's Dhuher prayer since there are some Miswak sellers in front of the mosque's door. Youssef brings some to the family members and Bader distributes it.</p>	<p>Islamic oral health practices (facilitator)</p> <p>Structure of Saudi life with prayer time</p>
<p>Nawal supervise her children's tooth brushing in the morning before they dress in their school uniforms. When they are all dressed, they go downstairs to the kitchen to have their breakfast, following Nawal. The breakfast will be cereal or a quick sandwich with a hot drink or juice in the kitchen on the small table before the bus arrives. Nawal sits with them while they are eating and distributes their money allowance that the child have it to buy food from the school's canteen in the break time, when they are finished hey rinse their mouths and wash their hands. She will walk with them to the gate which exits from the high wall surrounding the house protecting its privacy like all Saudi homes to wait for the school bus. She checks their final appearance and clothes before they leave on the bus at 6:00 am. All her girls go on the bus to the same all girl local school, whereas Bader goes into the living room waiting for Youssef to come down from upstairs to take him to the school in his way to work at 6:30.</p>	<p>Organized daily routine</p> <p>Mother's role (breakfast preparation)</p> <p>Commensality Family relationship (togetherness)</p> <p>Sense of responsibility</p> <p>Extra resources</p> <p>Father's role</p>
<p>After the girls and Bader have left, Nawal returns to the kitchen to clean the table and wash the dishes before Mizna wakes. While the children are at school Nawal takes care of the house (cleaning, washing her children's stuff and then startspreparing the lunch for all the family members). While she is cooking the lunch Mizna enters the kitchen to take her breakfast and her cup of tea on the kitchen table at 9:00. Nawal sit with her, both eat their breakfast, then go to the living room to watch the morning programs on the TV and Nawal checks the lunch frequently while it is cooking, until the Dhuhur call at midday. Then, they go wash and pray in their separate rooms. Nawal will go to her floor upstairs and Mizna will pray in her room downstairs.</p>	<p>Cleaning responsibility</p> <p>Respect mother's in low/mother's in low position in Saudi family</p> <p>Commensality/Strong family relationship</p> <p>Structured life with prayer time</p>
<p>When Nawal finishes her praying she returns to the living</p>	

<p>room to join Mizna and has a cup of Arabic coffee that Mizna prepares. Then Maha will join them.</p>	<p>Extended family Responsibility</p>
<p>At 1:30 pm the children arrive back from school, usually with sweets. The bus driver stops at the supermarket on their way back from school and all the children buy sweets. Nawal has phoned him to ask him to stop letting the children buy sweets but he says <i>“all mothers agree you are the only mother that doesn’t agree”</i> so it is out of her control it is not easy to contact the other mothers and gain their help in stopping the bus driver because of the way Saudi society operates and she will have no contact with the other mothers. In this time, Nawal and Manal enter the kitchen to put the lunch in the dining room for all the family members which is a separate room. Off the same hallway is a separate bathroom with many long sinks, at floor and waist level for washing hands and feet.</p>	<p>Other agent(constraint) Mother’s agency and sweet control Shared responsibility Structure of Saudi house</p>
<p>They all eat downstairs together as a traditional Saudi family. If they have visitors there is a separate room to serve the visitor’s food in through the second door in the corridor, doors; one opens inside the house and the other one to opens to the guests or traditional hospitality area.</p>	<p>Commensality</p>
<p>The grandmother stays on her chair in the living room to continue watching TV and drinking her coffee. The children arrive noisily and go straight away to their grandma Mizna to kiss her head and her hands, she gives them something sweet to eat because she believes it will give the man appetite for the lunch. The children will accept the sweets because it is impolite to refuse. This creates conflict because Nawal does not provide sweets in order to protect her children’s teeth and she provides them with alternatives to sweets like popcorn or occasionally an ice-cream as a treat when they are out. Nawal arrives to see her children, they kiss her on her head and cheeks as well.</p>	<p>Saudi etiquette with elderly people/respect elderly people Other agents(constraint) Mother’s agency and sweet control Position of mother in Saudi family</p>
<p>When Nawal was younger she felt she could not say anything to Mizna about distributing sweets to the children, but as the years of her marriage have progressed she has changed and become stronger. Now when Mizna takes her afternoon coffee and she brings the children sweets. Nawal says <i>“No, it’s not allowed... it will ruin their appetite for lunch”</i>. Although, Mizna now knows Nawal’s rules she may still give the children sweets from time to time. The character of Nawal as a mother is important when it comes to those who live in the same</p>	<p>Mother’s agency and sweet control sense of efficacy</p>

<p>house, but sometimes old traditions such as offering sweets are difficult to change. Nawal respects Mizna but she needs to speak up for the sake of her children's health, because she knows sweets have no nutritional value, the sugar can make them fat and they have a risk of type 2 diabetes, and it can also damage their teeth.</p>	<p>Sweety culture Mother's agency and sweet control</p>
<p>While all of them sitting together and chatting they wait for Youssef. Youssef enters the house and kisses the grandmother's head and hands, then removes his Ghutra, which is the traditional Saudi head covering for men, a square piece of material which is traditionally white in the summer and red and white chequered in winter. He will also remove his Agal which is an accessory made of heavy twisted cord which is fastened around the Ghutra to hold it in place and usually black in colour. Youssef will sit nearer to Mizna his mother and the children come to kiss the dad's head. Nawal will then ask them all to go to the dining room and have lunch.</p>	<p>Commensality Elderly people position in Saudi family Mother/father position in Saudi family Commensality</p>
<p>After the lunch, Nawal asks the children to start studying while she cleans the kitchen with Manal. Youssef and Mizna may have a nap in this time. Nawal goes to supervise the children's studying before going to have her short nap because all of them are old enough to continue, except the youngest who needs Nawal to come to check his home works. Manal watches the TV or uses her laptop because she is free and the children are viewed as Nawals' responsibility.</p>	<p>Studying responsibility/educational progress</p>
<p>Sometimes after lunch Nawal will take the children for their dental appointments in the Dental school's clinics in the centre of Riyadh, which is far from her house in the East, and takes an hour's journey .Nawal sometimes needs to explain what will happens in the dental clinic to the children, she reassures them in order to prepare them for the dental visit, except Bader who is confident and counts the days to see his dentist. Nawal has started to visit the dental clinic recently, when she noticed Leen's refusal to smile because she used to suck her thumb and the teeth stick out.</p>	<p>Access to care Far distance(barrier) Child preparation Children's agency and dental visit(facilitator) Child appearance(facilitator)</p>
<p>Nawal's children are closer to her than Youssef and Yousef depends on her a lot and even when the children</p>	<p>Child/mother/father</p>

<p>ask him for anything he says “<i>check with your mother if she is ok [...]then ok</i>”. Youssef depends on her a lot when it comes to their health because he knows she cares.</p>	<p>relationship Health is mother’s responsibility</p>
<p>Nawal struggles with dental visits sometimes when Youssef cannot be excused from his work to take them or when he is busy with other thing and he then asks her to go to the nearby clinic. This is not satisfactory for Nawal because there is no a pedodontist and will see them a general dentist who does not have a specific convinced way with children so cannot prepare them and will start the treatment straightaway as adults. So if Youssef is unavailable will give her money and she will go by taxi with the children. Women are not allowed to drive in Saudi Arabia and so Nawal is dependent on Youssef and whatever transport they can afford.</p>	<p>Access care Transportation issue Father’s work Quality of private services (acceptability) Father’s role to access care</p>
<p>The children’s appointments take so long that there is no time to review their studying when she returns because of the length of the journey. Nawal feels that on the days of the appointments she can do nothing else and on returning they hardly find the time for dinner (quick sandwiches) and they are off to their beds in preparation for the next day.</p>	<p>Mother’s roles, educational progress Food preparation</p>
<p>When Nawal has an appointment with one child, she leaves the other with her eldest daughter (Reem) who is 16yearsold and considered old enough to take care of them and continue studying at their floor at home. Her eldest daughter provides some support for Nawal by monitoring and looking after the younger children when necessary and this will prepare her for eventual motherhood.</p>	<p>sibling involvement in studying responsibility and child sitting during dental visit (practical positive support) daughter’s responsibility</p>
<p>When Asr prayer is called, Mizna and Youssef wake to wash and pray. Youssef prays in the mousque with the other men, even the children will stop studying to pray and continue later. From this time until Maghreb prayer call, Nawal stays with her children reviewing their homework especially Bader because it is important as a male that he has a good job after university in order to support his family. If the children finish their studying early they will go downstairs to join Manal watching TV</p>	<p>Structure of Saudi life with prayer time Son’s responsibility extended family relationship</p>

<p>or have a chat with Mizna and Youssef.</p> <p>After the Maghreb “sunset” prayer call, all pray at home and Youssef goes to the mosque again, he then goes to bring in the shopping for the household, or some traditional food from the street vendors. .</p> <p>Nawal with Manal will prepare the children’s dinner in the kitchen. While Nawal and Manal are preparing the dinner, all the family members stay together in the living room with children talking, watching television or playing with them. Then, Nawal ask children to have their dinner in the dining room when it is ready. While the children are eating, Nawal stays in the living room with the other family members. The girls will clear up and return the dishes to the kitchen for Nawal to wash them. Then Nawal will go with them to brush Leen and Bader, the younger children’s teeth, they will then pray at Isha prayer call and then retire to their beds.</p> <p>Nawal goes downstairs to stay with Mizna and Manal while Youssef finishes his praying in the mosque and then returns to stay with all of them. Sometimes Nawal needs to go out with Youssef to shop for the children’s or household needs. Manal will stay with Mizna at home because they will have visits from some of her other brothers or sister who come to see Mizna regularly as traditional Saudi families do. The visitors may stay until suppertime 10:00pm. Manal and Nawal will be expected to prepare the supper. After everyone has left, they both clean the kitchen before retiring to bed. If Nawal is tired she will retire earlier because she has to be up for the children in the morning and leave Manal with the others to continue her work.</p>	<p>Structure of Saudi life</p> <p>Father’s responsibility</p> <p>Shared responsibility(food preparation)</p> <p>Commensality</p> <p>Family time</p> <p>Extended family relationship</p> <p>Daughter’s responsibility</p> <p>Mother’s agency and daily dental practices</p> <p>Extended family relationship</p> <p>Structure of Saudi life with prayer time</p> <p>Mother and father’s role</p> <p>Saudi family meetings</p> <p>Mother’s position in Saudi family</p> <p>Shared responsibility</p>
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Haya's story	
<p>Haya is a 38 year old mother of 6 children; Dima who is 14years old, Dalia who is 13years old, Jood who is 9years old, Nada who is 7years old, Nawaf who is 5years old and Faisal who is nearly 2years old. Haya lives with her husband (Rakan) and their children in their own home in the south of Riyadh, which is the capital of Saudi Arabia, and not in an extended family which was how traditional Saudi families once lived. Haya has a bachelor's degree in social work but does not work because she gives priority to her children. She is a housewife and in Saudi Arabia this means that she is responsible for everything to do with the children. Rakan works and is responsible for the household expenses. Haya carries out the house-work, so cleaning, washing and ironing, food preparation, child minding and studying are her responsibility. Haya is dependent on Rakan to drive the children to their schools, for hospital appointments, shopping and any other visits she may need to make during the day because Saudi females are prohibited from driving because of government restrictions. Haya's day revolves around her six children and the structure of Saudi life. She rises at 5 am, washes and then performs Fajr prayers before she starts her day. She will then wake her children and begin the process of washing them and preparing breakfast.</p> <p>She starts tooth brushing routines from the age of 2. As the children grow older and their teeth erupt she introduces a toothbrush, first allowing the children to play with it so they are familiar with it, then, shows them how to brush and place it in their mouths. She uses kid's fruity fluoride toothpaste and she makes sure that she uses the correct amount according to their age. Haya would stand over them and supervise their brushing and make sure she finished off what they had missed until the age of five. After the age of five, Haya considered the children old enough to perform the task supervised by their elder sister Dima. Haya asks Dima to brush/ put the toothpaste and supervise Nada and Nawaf while they are brushing especially if she was busy with the house work because she does not have a maid to help her and she has a lot of children. Haya feels guilty when she involves Dima or</p>	<p>Own home, separate house</p> <p>Mother of 6 children</p> <p>Structure and roles in household</p> <p>Mother's role</p> <p>Father's role</p> <p>Mother's role and responsibilities</p> <p>Father's role</p> <p>High children's number</p> <p>Structure of Saudi life with prayer time</p> <p>Oral health practices and mother's agency</p> <p>Supervision</p> <p>Sibling involvement in daily practices (elder daughters)</p> <p>Big responsibility</p> <p>Blaming</p>

<p>Dalia in the children's tooth brushing supervision because she feels it should be her responsibility.</p>	
<p>As the first three girls grew older, Haya had the fourth child (Nada) and then the fifth (Nawaf) and then the sixth (Faisal), she found supervising the children difficult because she has to multitask; her daughters are in different grades at school and they all need her. The size of the family home means a lot of housework, and the floors are cleaned daily because Riyadh can be dusty, especially if there are Shamals (winds carrying dust) blowing which can last for 3 days.</p>	<p>Mother's multitask role</p> <p>Educational progress</p> <p>Housework responsibility</p>
<p>Haya she can concentrate on 2 or 3 children at a time for their self and oral care, but not all of them. Dima or Dalia take over for her in the morning and assist her with washing Jood and Nada and supervising their tooth brushing, washing and dressing whilst Haya washes and dresses Nawaf and Faisal and then takes them to the kitchen to make breakfast for the children. When all the family members are washed, dressed, and have tidied their rooms, they will sit around the kitchen table to eat breakfast together before the children go to their schools or during the holidays when Rakan goes to work, this is a normal routine in a Saudi family.</p>	<p>Siblings involvement in children's washing and brushing</p> <p>Mother's responsibility/role</p> <p>Commensality</p>
<p>After breakfast, Rakan gives the girls their money allowance that they use to buy food from the school canteen in the break and asks the girls to wait for him in the car so he can take them to their schools at 6:15 am. He takes the girls (Dima and Dalia) to the all-girls intermediate local school and (Jood and Nada) to an all-girls primary local school.</p>	<p>Father's role</p>
<p>While the children are at school, Haya cleans the house, does the washing and house work. Before Dhuhur prayer she prepares children's lunch while Nawaf and Faisal are watching TV in the living room. Then at midday when Dhuhur prayer is called, she goes to her room to wash and pray. The girls will pray at school because there is a specific prayer time in all public places in Saudi Arabia, they then return home with the local community school bus at 1:30 because Rakan can't leave work to pick them</p>	<p>Mother's responsibility/role</p> <p>Structure of Saudi life with prayer time</p> <p>Extra resources</p>

<p>up at this time.</p> <p>At 2:00 pm, the children enter the house, kiss Haya's head and hands, and then Haya asks them to change into their home clothes, and wash their hands while she puts the lunch on the kitchen table. Haya and her children eat together as a Saudi family. After lunch, the girls clear up the table and kitchen before going to their rooms to provide some support for Haya in cleaning work before studying time. Since Haya struggle to do all the housework alone, she distributes the cleaning and house chores among the girls (from Dima, Dalia, Jood and to Nada). During this time, Haya takes Faisal to have a nap with her in her room until Asr prayer time while the others study in their rooms. Nawaf takes some papers and crayons from his small bag to draw and paint, pretends to be a student like his sisters doing homework in Jood and Nada's room. Saudi national education starts at the age of 6 and the kindergarten (3-5 years old) is not part of the official education ladder. This means that if the family can't afford private nursery or/and kindergartens, the child will be at home with their mother or at grandmother's house with their nanny until school age, especially if the mother is a worker.</p> <p>Sometimes after lunch Haya will take the children for their dental appointments but she struggles when Rakan cannot be excused from his work, and she also needs permission to remove the child from school. Rakan refuses to allow Haya to take a Taxi with the children especially for a long journey, and it takes 45minutes to get to the dental clinic. Frequently, her daughter Dima will go with her and give her support in caring for the other children at the dental clinic by staying with them in the waiting area. Haya can then concentrate on one child and take them for their appointments. Haya takes her children to the dental clinic when they complain of pain. She will then ask Rakan to arrange absence from his work. Dental visits are often difficult for her because of the transport, or lack of it, the issues with finding someone to look after the other children and with obtaining permission for school absences.</p> <p>At Asr prayer call, Haya wakes, washes, and prays and then all the children pray in their rooms. Haya takes Faisal</p>	<p>Mother's position in Saudi family</p> <p>Mother's responsibility</p> <p>Commensality</p> <p>Sibling support in house chores responsibility</p> <p>Structure Saudi life with prayer time</p> <p>Lack of support before age of 6</p> <p>Access to care</p> <p>Father work(barrier)</p> <p>School excuse</p> <p>Accessibility(barrier)</p> <p>Child sitting</p> <p>Extended family support in child sitting (sibling)</p> <p>Father's role</p> <p>Structure of Saudi life with</p>
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<p>and Nawaf to their room to play computer or video games, or watch TV and leaves a fruit snack with them. Between Asr prayers and Maghreb prayer call, Haya supervises Dima and Dalia's studying in their room and also revises with Jood and Nada in their room.</p>	<p>prayer time Eating habits and mother's agency Educational progress</p>
<p>At sunset, Maghreb prayer time begins, the children have almost finished studying. All pray in their rooms and Haya will enter the kitchen to prepare the Arabic coffee after supervising her children's studying. She brings the coffee to the living room on a tray with a dish of dates and 3 small cups for her, Dima and Dalia because drinking coffee is not allowed for the younger children. Haya, Dina or Dalia will telephone the local shop to bring/deliver some sweets to have with the coffee, because in Saudi Arabia the local shop has a free quick delivery service for houses in residential areas. Haya may also order her necessary kitchen needs from the shop if Rakan is still at work. The shop's delivery man will bring the sweets, ring the bell and put the bag at the front door of the house and Rakan will pay the shop later on his way home from work. Saudi families live in comfortable private houses surrounded by high walls to enable women to sit in privacy, so no one can see inside the house. Haya sends one of the children to bring the bag in and she will distribute one piece of sweet for each of her children. All sit together around Haya, the girls chatting with Haya and laughing while some of the children watch TV until Isha prayer call. Haya repeatedly asks the kids to go to the toilet in order to brush their teeth after having sweets. Then all the family wash and perform Isha prayers in their rooms.</p>	<p>Structure Saudi life with prayer time Eating habit and mother's agency Arabic coffee is part of Saudi culture Child/mother relationship(other agents) Sweety culture Privacy of Saudi houses Mother's agency and sweet Family time Mother's agency and brushing</p>
<p>After Isha prayer, Haya will enter the kitchen, ask Dima to help her in the dinner preparation, and Dalia to look after Faisal and the others who are watching TV or playing together in the living room. Haya involves her daughters to teach them the responsibility of running a big house with her, and as a practice for their roles as mothers of future families. Sometimes, Haya is busy with house chores or is too tired to cook the dinner. So she will call Rakan to bring the dinner in with him when he returns early so they can eat together. Restaurants are everywhere in the larger cities in Saudi Arabia and they provide</p>	<p>Structure of Saudi life with prayer time Sibling support in food preparation Daughter's role Father's support Commensality</p>

<p>various fresh foods, from western style fish and chips to typical traditional Arabian food all day long.</p> <p>Sometimes Rakan gets home after Isha prayer time because he works long shifts. By the time he arrives home, the children may already have eaten and be in bed. This is unusual for Saudi families because family is a respected and expected part of Saudi life. This means that a husband and father has to be with his wife and kids as a family unit at some part of the day.</p> <p>After Dinner, Dima and Dalia will clean the table, wash the dishes, clean the kitchen, and then both go with Jood and Nada to brush their teeth, and iron their own uniforms to provide some support for Haya. Then, they both retire to sleep in their room. Haya takes Nawaf and Faisal to brush their teeth, putting on pyjamas and gets them in their beds. Then, she goes to iron a pile of children’s clothes starting with Jood and Nada’s uniforms in the living room since Rakan takes his clothes to the laundry to wash his thobes (traditional Arabian long clothing for men and usually white in colour)and his Guhtra in order to support Haya. She is ironing when Rakan arrives home on his late nights. Haya will present coffee or dinner for him and they will eat together if she has not already eaten with her children. Then, Haya checks the kitchen is clean and gives Rakan the house and food shopping lists for the next day. Haya has had no spare time to herself throughout the day and she frequently retires exhausted to bed.</p>	<p>Structure of Saudi life with prayer time</p> <p>Saudi family relationship</p> <p>Family time</p> <p>Sibling support</p> <p>Sibling involvement in daily practices</p> <p>Youngest children responsibility</p> <p>Father support</p> <p>Other responsibility</p> <p>Wife’s role</p> <p>Commensality</p> <p>Father’s role</p>
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Huda's story	
<p>Huda is a 45 year old, She is amother of four; Lina who is 23years old, Sarais 21, Talais 15 and a boy called Rayan who is 10years old. Huda, her husband Sultan and their children own a house in the centre of Riyadh, the capital of Saudi Arabia. They don't share their house with an extended family which is still the tradition in some Saudi households. Huda works as a supervisor in the Ministry of Education in Riyadh. Sultan is a member of staff in the King Saud University, as tradition goes, Sultan is responsible for all expenses, transportation and he oversees all family related issues. Huda has the responsibility of managing the day to day activities with her children at home. Sultan provides a maid who helps Huda with the house-work, cleaning, washing and ironing, food cooking and preparation. Sultan provides two house drivers as well and they share the task of taking the whole family to and from shopping or work destinations. This includes daily trips to get Huda to and from the Ministry, Lina and Sara's transportation to and from their all-girl universities (King Saud University & Princess Noura's University), Tala to and from her all-girl school, and Rayan to and from his all-boy school.</p> <p>The drivers handle all hospital appointments, shopping and any other visits Huda or her girls may need to make during the day because women are not allowed to drive under Saudi Law. Huda's day revolves around her work, supervising her four children and monitoring her house staff. She rises at 5 am washes and then performs Fajr prayers before she starts her day. She then wakes Tala and Rayan for their schools then everyone will dress and have their breakfast in the downstairs living room. This room is a highly important space in the Saudi house because it hosts all the gatherings. These can be repetitive during the days especially at meal times. When extended family call the gatherings can be large and the only difference in modern times is that the family gathers around huge tables now for their meals, instead of low level cushions and tables which would have been arranged around the room in a large square.</p> <p>The Saudi University academic day starts at 9 am while</p>	<p>"Own home" separate house</p> <p>Mother of 4 children</p> <p>Father's role</p> <p>Huda's role</p> <p>Extra resources</p> <p>Father's role</p> <p>Extra resources</p> <p>Extra resources</p> <p>Mother's role</p> <p>Structure Saudi life with prayer time</p> <p>Commensality</p>

<p>the Saudi school day starts at 7am. Therefore you may not see the whole family in the breakfast table but they will gather around that same table for all the other meals.</p>	<p>Commensality</p>
<p>When Huda's children were on a bottle, she would finish off each feed with fresh water before the children went to sleep. As they grew older and their teeth erupted, Sultan supported Huda and introduced toothbrushes to his children. Sultan would personally participate in teaching them to clean their teeth, starting at the age of two until they were four. As they grew older, Sultan would take them to the chemist to choose their toothbrushes by themselves and encourage them to read the labels and explain the difference toothpastes to them, their favourite will normally be a strawberry flavoured one. Huda needed braces when she was younger and her dentist provided her with a poster explaining brushing techniques. She kept the poster and has hung it in her children's bathroom to train Lina and Sarah how to brush. The bathroom in a Saudi household will not differ much from any western one, except there will always be a hose by the toilet seat. The reason for that is water is essential part of Muslims washing after using the toilet and before prayers. Those specific hygiene standards are taken very seriously in Islam.</p>	<p>Oral health practices and mother's agency</p> <p>Father's role in daily practices (facilitator)</p> <p>Children's agency</p> <p>Mother's agency and daily practices</p> <p>Washing with water is part of Saudi daily practices</p>
<p>After the children had reached the age of 4, Huda demonstrated brushing for them using the poster instructions to reinforce her teaching. She encouraged the children to look at the poster and follow the instructions. While brushing with them every day she made sure that they used the correct amount of toothpaste and that they did not swallow it. Huda encouraged her children to brush all the tooth surfaces and surface of the tongue as well. She made sure they rinsed with water after brushing. The children do this with ease because they are trained to rinse their mouths for Wudu (washing body parts in order to perform prayer).</p>	<p>Oral health practices and mother's agency</p> <p>Supervision</p> <p>Washing body part is part of Saudi daily practices</p>
<p>After the age of nine, Huda considers them independent enough to continue unsupervised and considers her role to only remind them orally. They brush twice daily but they occasionally brush a third time after having sweets. Huda's girls use floss twice a day and mouth rinse if the dentist recommends it during their regular check-ups.</p>	<p>Mother's agency and oral health</p> <p>Children's agency</p>

<p>Rayan does not use floss properly and need Huda's help some times, but he sometimes uses Miswak, copying the adults especially after prayers.</p>	<p>Islamic oral health practices</p>
<p>Huda, Tala and Rayan leave at 6:15 am. Then, the other girls (Lina and Sara) have their breakfast before going to their universities with the second driver at 7:30a.m, if they run out of time the girls sometimes ask the maid to prepare sandwiches to go and have them in the car during the one-hour journey. Sultan takes his breakfast with the girls and heads to his work at 7:30 his workday starts at 8:00 similar to most of the Saudi government's institutions.</p>	<p>Children's agency</p> <p>Extra resources</p> <p>Commensality</p>
<p>They go about their work and studying until afternoon. Normally there will be two breaks during that time. One is assigned for Dhuh prayers. By law, all public and work buildings will have separate prayer rooms. In Islam, men and women can pray in the same room but those spaces are assigned to give more comfort and privacy to women. All praying areas will have washing rooms that consists of many low designed sinks for washing hands and feet.</p>	<p>Structure Saudi life with prayer time</p> <p>Segregated society</p>
<p>At 1:30 pm a driver will pick up Rayan and Tala where they will have lunch in the downstairs living-room and do their homework in their rooms until Huda is back. The other driver will pick up Huda to take her home at 2:00pm. She sometimes picks up Lina on her way if she has finished at university. Sara's university is near the King Khalid International Airport in the far North of Riyadh, and it normally takes her about an hour to get home. When everyone is home the all gather around the living room table. Some have their lunch, others talk about their day. That gathering lasts until the Asr prayer call.</p>	<p>Daily washing practices</p> <p>Commensality</p> <p>Extra resources</p> <p>Commensality</p> <p>Structure Saudi life with prayer time</p>
<p>Until they reach the age of 18, or marry, Huda takes her children to the dental clinic every 6months. They go to the King Faisal Specialist hospital and the Research Centre's dental clinics because Sultan used to work there and he has a good relationship with the dental staff. When Sultan changed his work, Huda went to private clinics for a while, then he got a job at King Saud University, therefore the family gained further access to the King Khalid University hospital's staff dental clinics. Only Rayan's follow up was done there, The girls continue going to the private clinics for their braces and cosmetic work such as</p>	<p>Access to care</p> <p>Access to care</p> <p>Children's agency and dental visit</p>

<p>tooth whitening.</p> <p>As Huda climbed up the ladder at work, her job became more demanding. Sometimes she brings work home which she does after dinner. This means she is unable to supervise Rayan's tooth brushing in the same way she did with all her other children. Huda holds herself responsible for Rayan's dental problems and feels guilty. Some days, she takes Rayan to his dental appointments right after work without even having her lunch. She is always worried about missing appointments because of the crowded roads of Riyadh at rush hour.</p> <p>For many years Huda controlled and managed all the children's eating habits and sweet intake at home. She chose what her children ate for their daily meals and what sweets they were allowed to consume.</p> <p>Now that the girls are older, Huda is finding it hard to control her children's diet. The girls start bringing junk food home on their way back from their universities. They will have chocolates, ice-creams and so on. The good thing is that the girls know junk food can make them gain weight and cause tooth decay and appearance is important for a Saudi woman before she marries. In the all-female gatherings mothers and grandmothers will view prospective girls for marriage. Manners, clean and well groomed appearance and good health are important, alongside family position.</p> <p>Huda still feels she has less control now especially over Rayan since he will share junk food with the elder girls without being very much weight sensitive. This adds to Huda's concerns.</p> <p>After the Asr prayers, Huda checks her children; she helps them with their studying when needed. All the children rooms are provided with proper desks to accommodate their studying.</p> <p>Huda, Sara and Lina take a short afternoon nap, at around 5pm. Sultan goes straight from work to the neighbourhood mosque for Magreb Prayers and then arrives home.</p> <p>As their father arrives home, Tala and Rayan finish their</p>	<p>Work's responsibility</p> <p>Mother's agency and access to dental care</p> <p>Mother's agency and eating habits</p> <p>Other agents</p> <p>Children's agency and eating habits (sweet)</p> <p>Mother's agency X child's agency in eating habits</p> <p>Structure Saudi life with prayer time</p> <p>Educational progress</p> <p>Structure Saudi life with prayer time</p>
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<p>homework and they join the family downstairs. The maid has cleared the table and now she prepares to and serves Arabic coffee in the living-room.</p>	<p>Family relationship Extra resources</p>
<p>Arabic coffee is coffee beans lightly roasted and ground at home, it is then flavoured with cardamom and saffron, it is poured and served in special cups called Fenjans. Only enough to fill the bottom of the cup is poured and it should be boiling hot but because only a few centilitres is poured it cools quickly. The coffee will continue to be served a few centilitres at a time until the person has had enough.</p>	<p>Arabic coffee time is part of Saudi routine</p>
<p>The whole family gather for coffee after Maghreb prayers, they will enjoy the Arabic coffee served with sticky dates and small finger bowls of water and lemon to remove the sticky residue.</p>	<p>Commensality</p>
<p>Normally, one of the girls or the youngest boy will pour and serve coffee fenjans while he or she is standing, nowadays dates are accompanied with the girls' various sweets, Rayan helps himself to more even when Huda asks him not to.</p>	<p>Other agents and eating habits Children's agency and sweet</p>
<p>After coffee, Sara and Lina may excuse themselves and go to their rooms to study, or they may ring one of the drivers to take them to the dentist for orthodontic appointments at the private clinic.</p>	<p>Child/parents relationships Children's agency to access care</p>
<p>The rest of the family will remain in the living room chatting and Rayan will always be busy with his iPad. Then, Sultan and Rayan wash and go to the mosque for Isha Prayers while Huda and the girls pray in their rooms upstairs.</p>	<p>Family time Structure Saudi life with prayer time</p>
<p>At 8:30pm the maid serves dinner in the dining table upstairs. After dinner, Tala and Rayan brush their teeth, and go to bed. Huda asks the maid to clear the table and she may follow Rayan to remind him to brush slowly. Sara and Lina will join their parents if they finished their work. The family may watch TV and have some tea or fresh fruit after dinner.</p>	<p>Extra resources Children's agency Mother's agency and daily practices Family relationships</p>
<p>Huda discusses tomorrow's menu with her husband and the girls and instructs the maid how to prepare it, the maid will prepare the grocery list and run it by Huda before</p>	<p>Extra resources</p>

<p>giving it to the driver.</p> <p>Then, Huda may work on her papers while Lina and Sara watch TV. Sometimes Huda visits her mother and Sultan will visit his mother/or his elder brothers or friends as well. Everyone goes to bed around 11:30.</p>	<p>Saudi extended family relationships</p>
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Appendix (10) (X)

Table (2): Summary of structure of Saudi life for 4 participants vignettes.

Table (2A) : Jawaher's daily structure			
Time	Action	Location	Who with
5:00	Fajer call ↓↓↓↓		
	Praywashing(Wadu) ↓↓↓↓	En-suite bathrooms	
	Fajer prayer	Mother and children	Home
	Washing and dressing Mohamed (disabled child), takes him downstairs	Father at mosque	Mosque groups
	To make the breakfast	Mohamed's room	Mohamed/mum
	Breakfast	Kitchen	Family eating together
5:45	Washing moth and hands, Use Miswak	Dining area	
6:15	Children going to school	Toilet	
8:30/1 1	Jawaher goes to some mornings activities		Children/driver
		Disabled Children's Association	Mum with other mothers
12:00	Duher call ↓↓↓↓		
	Washing ↓↓↓↓	Toilets	
	Duher pray	Home	Mother
	Assist main in lunch preparation	School's mosque	Children
1:00	Children return, wash before eating	Work's mosque	Father
1:30	Lunch	Kitchen	Mum/maid
	Nap	Dining room	
	Mohamed's medical appointments	In their rooms	All family except the Father at work
		Hospitals	Mum/Mohamed
3:15	Asr call ↓↓↓↓		
	Washing ↓↓↓↓	En-suite bathrooms	
	Asr prayer	In their rooms	Mum/children
	Studying time	Work's mosque	Father with men
3:30	Fruit snack	Studying room	Children/mum
	Until sunset		

At sunset	Maghreb call ↓↓↓↓↓		
5:30	Washing ↓↓↓↓↓ Maghreb prayer	En-suite bathrooms In their rooms Local mosque	Mum/children Father with neighbours Mum/maid
6:00	Supervise dinner cooking Arabic coffee time	Kitchen Living room	All family together Children near parents
7:00	Washing hands Dinner Washing and tooth brushing Washing and changing the disabled child (Mohamed)	Dining table in the living room	Mohamed/mum Mum/children
7:30	Isha call ↓↓↓↓↓ Washing ↓↓↓↓↓ Isha prayer	En-suite bathrooms In their rooms Mosque	Father with local neighbours Mum/children
8:00	Read bed time story Children sleep time Mother and father time(coffee/dinner)	Mohamed's room	Children Mother and father Mum/maid
10:00	Food check list Driver supervisions	In their rooms Living room	Father Mother /father
11:30	Dinner Sleeping time	Kitchen Home Dining area	Mother/father

Table (2B): Nawal's daily structure			
Time	Action	Location	Who with
5:00	Fajer call		
	↓↓↓↓↓		
	Pray washing(Wadu)	En-suite bathrooms	
	↓↓↓↓↓	In their rooms	All
	Fajer prayer time	Mosque	Father & Bader
	Children washing process, supervise toothbrushing, Uniform dressing,preparing breakfast	Children's rooms	Mum/children Mum to children
	Breakfast	Kitchen dining table	Children
	Distribute money allowance,		
	Rinse mouth & wash hands,		
	Check final appearance,	Toilet	
	Waiting school bus	House yard	Mum/3daughters
	Bader (son) waiting father to take him to school	Living room	
	Clean the table, wash the dishes before mother in law wakes,cleaning, washing children's stuff,starts preparing the lunch for all the family members	Kitchen	Mum
	Breakfast+ tea time		Mum
Check the lunch frequently	Kitchen table	Mum/mother in law	
12:00	Duher call		
	↓↓↓↓↓		
	Washing	Toilets	Mum/mother in law/sister in law
	↓↓↓↓↓	Home	Children
	Duher pray	School's mosque	Father
		Work's mosque	
	Coffee time	Living room	Mum,/mother in law/sister in law
1:30	Children arrival time with the bus driver with sweet, grandmother provides sweet for		

<p>3:15</p> <p>5:30</p>	<p>the children</p> <p>Put the lunch out</p> <p>Waiting Youssuf (father) to join them,</p> <p>Mum ask them to go to the dining room to start</p> <p>Lunch</p> <p>Asks the children to start studying,</p> <p>Clean the kitchen</p> <p>Supervise the children's</p> <p>Studying</p> <p>Short nap(20 mints)</p> <p>Asr call</p> <p>↓↓↓↓↓</p> <p>Washing</p> <p>↓↓↓↓↓</p> <p>Asr prayer</p> <p>Reviewing children homework</p> <p>Finish studying, join family members</p> <p>Maghreb call</p> <p>↓↓↓↓↓</p> <p>Washing</p> <p>↓↓↓↓↓</p> <p>Maghreb prayer</p> <p>Shopping for the household</p> <p>Prepare the children's dinner</p> <p>Sit/chat/watching TV</p> <p>Ask children to have their dinner/Mum</p>	<p>Dining room</p> <p>Children's room</p> <p>Mother's room</p> <p>En-suite bathrooms</p> <p>In their rooms/</p> <p>Local mosque</p> <p>En-suite bathrooms</p> <p>In their rooms</p> <p>Local mosque</p> <p>Kitchen</p> <p>Living room</p>	<p>Mum and sister in law</p> <p>All family</p> <p>Mum/sister in law</p> <p>Mother</p> <p>Children</p> <p>Mother</p> <p>All</p> <p>Father/Bader/neighbours</p> <p>Mother</p> <p>Children</p> <p>All family at home</p> <p>Father/Bader with local neighbours</p> <p>Father</p> <p>Nawal/sister in law</p> <p>All family</p> <p>Mum</p>
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Table (2C) : Haya's daily structure

Time	Action	Location	Who with
5:00	Fajer call		
	↓↓↓↓↓		
	Washing (Wadu)	Private toilet	
	↓↓↓↓↓		
	Fajer prayer time	Mosque	
	Nawaf&Fisal washing process, preparing breakfast		Mum (Haya)
	Washing Jood and Nada, supervising their tooth brushing, washing and dressing		Dima or Dalia(elder girls)
	Washed, dressed, arranged their rooms,		rooms
	Make breakfast	All	Mum
	Breakfast together	Kitchen Around the kitchen's table	All
6:15	Give the money allowance/drive to school		Father (Rakan)
	Cleans the house, cloths washing, house works, prepare lunch		Mum
12:00	Duher call		
	↓↓↓↓↓		
	Washing		
	↓↓↓↓↓		
Duher pray	Toilets	Mum	
1:30	Children return	Home	Children
	wash before eating	School	Father (Rakan)
		Work	
		Community bus	Children
	Put lunch	toilet	Mum
2:00	Lunch		All excluded Father
	Clear up the table and kitchen	Kitchen	Elder girls
	Nap		Mum/Fisal

<p>3:15</p>	<p>Studying</p> <p>Drawing while other are studying</p> <p>wakes with Asr call</p> <p>Asr call</p> <p>↓↓↓↓</p> <p>Washing</p> <p>↓↓↓↓</p> <p>Asr prayer</p> <p>Takes the youngest boys to play with the play station or watching TV and leave a fruit snack with them asking them to be quite while other studying</p> <p>Supervise Dima's and Dalia's studying in their room and revises with Jood and Nada their homework at their room.</p>	<p>Haya's room</p> <p>Girls' rooms</p> <p>Jood's and Nada's room</p> <p>En-suite bathrooms</p> <p>In their rooms</p> <p>and father at</p> <p>Work's mosque</p> <p>Boy's room</p> <p>Girls rooms</p>	<p>All children except Faisal</p> <p>Nawaf/Jood/Nada</p> <p>Faisal and Nawaf</p> <p>Mum/ girls</p>
<p>5:30</p>	<p>Maghreb call</p> <p>↓↓↓↓</p> <p>Washing</p> <p>↓↓↓↓</p> <p>Maghreb prayer</p>	<p>En-suite bathrooms</p> <p>In their rooms</p> <p>except father at local mosque</p>	<p>All excluded Rakan at his work's mosque</p> <p>Children</p> <p>Mum</p>
<p>6:00</p>	<p>Finish studying, join family members</p> <p>Prepare the Arabic coffee</p> <p>Bring/take coffee+ dates</p> <p>Call the local shop to bring/deliver some sweet to have it with the coffee</p> <p>Distribute one piece of sweet for each of her kids</p> <p>Sit together, chatting, laughing, watching</p>	<p>Living room</p> <p>Kitchen</p> <p>Living room</p>	<p>All excluded Father</p> <p>Elder girls</p> <p>Mum/children</p>

	TV until Isha prayer time	Living room	All
	Mum asks the kids to brush their teeth after taking sweet	Toilet	Children
7:30	Isha call ↓ ↓ ↓ ↓		
	Washing ↓ ↓ ↓ ↓	En-suite bathroom	Mum/children
	Isha prayer	In their rooms	Father
	Dinner preparation	Mosque	Mum/Dima (the eldest girl)
	Look after Faisal the youngest while other children playing and watching TV	Kitchen	Dalia the second girl
8:15	Dinner	Living room	
	Clean the table, wash the dishes; clean the kitchen, and then both go with Jood and Nada to brush their teeth, iron their own uniforms,	Kitchen's table	All excluded Father
	Retire to sleep	Kitchen	Dina and Dalia(the elder 2 girls)
9:00	Take the 2 youngest to brush their teeth, putting on pyjama and get them in their beds in order to sleep	En-suite bathroom	
	Iron kid's cloths	In their room	All children
9:30	Rakan arrival	Boy's room	Mum/boys
	Haya will ask him to have some coffee or Dinner		
	Check the kitchen's cleaning after the girls,	Living room	Mum
	Gives Rakan house and food shopping list to bring it tomorrow in his way back	Living room	Mum/Father
11:30	Retire to sleep		Mum
			Mum/Father

Table (2D) : Huda's daily structure			
Time	action	location	Who with
5:00	Fajer call ↓↓↓↓		
	Washing (Wadu) ↓↓↓↓	En-suite bathroom	
	Fajer prayer	Mosque	Father (Sultan)/Rayan
	Wakes Tala and Rayan for their schools.		Mum
	Process of dressing up and going downstairs to have a prepared breakfast	Living room's dining table	Mum/ (Rayan/Tala) the 2school's children
6:15	Calls for the driver and he arrives to take her to work and Tala and Rayan to their schools		Mum/ 2school's children
7:30	Elder university's girls (Sara/Lina) wake, dressed, have breakfast, go university, Sultan join them	Living room's dining table	Father/2 university's girls
12:00	Duher call ↓↓↓↓		All of them
	Washing ↓↓↓↓	In their places	
	Duher pray		
1:30	Arrive to home, have ready lunch Start studying	Living's room table Their rooms	Rayan/Tala(school's children) Separate
2:00	Call the second driver to take her to home, take Lina in her way	Her work	Mum
	Sara returns with the second driver		Sara/driver

3:15	<p>Lunch</p> <p>Clear up the table</p> <p>Supervise Tala and Rayan studying</p> <p>Asr call</p> <p>↓↓↓↓↓</p> <p>Washing</p> <p>↓↓↓↓↓</p> <p>Asr prayer</p> <p>Tell the maid the dinner menu</p> <p>Nap</p> <p>Prepare the Arabic coffee</p> <p>Put it for all family</p> <p>Arrive from his work /goes mosque straightaway</p>	<p>Living's room table</p> <p>In their rooms</p> <p>En-suite bathrooms</p> <p>In their rooms</p> <p>Work mosque</p> <p>Mosque</p> <p>In their rooms</p> <p>Kitchen</p> <p>Downstairs Living room</p>	<p>Mum/2university's girls</p> <p>Maid</p> <p>Mum/school's children</p> <p>Mum/children</p> <p>Father</p> <p>Rayan</p> <p>Mum/maid</p> <p>Mum/2university's girls</p> <p>Maid</p> <p>Maid</p> <p>Father</p>
5:30	<p>Maghreb call</p> <p>↓↓↓↓↓</p> <p>Washing</p> <p>↓↓↓↓↓</p> <p>Maghreb prayer</p> <p>Finish studying, going downstairs</p> <p>Arabic coffee+ dates+ various girl's sweets, chat until Isha call, Rayan busy with his IPad</p> <p>Excuse to continue studying</p>	<p>En-suite bathroom</p> <p>In their rooms</p> <p>Mosque</p> <p>Down stairs living room</p>	<p>All</p> <p>Father/Rayan with neighbours</p> <p>Tala/Rayan(school's children)</p> <p>All</p> <p>Sara/Lina(university's girls)</p>
7:30	<p>Isha call</p> <p>↓↓↓↓↓</p> <p>Washing</p> <p>↓↓↓↓↓</p>	<p>En-suite bathroom</p>	

	Isha prayer	In their rooms	Mum/children
		Mosque	Father/Rayan with neighbours
	Continue Sitting/chatting		All
	Ask maid to bring the dinner	Upstairs living room	Mum/maid
	Dinner	Upstairs' dining table	All
8:30	Ask maid to clean the table, ask the girls about the lunch menu to tell the maid		Mum/maid
	Brush teeth/ then sleep	En-suite bathroom/separate rooms	Tala/Rayan(school's children)
	Ask the maid to bring tea or fresh fruits	Upstairs living room	Mum/maid
	Give the list to the driver to bring all their needs before his sleeping time		Maid/driver
	Stay to work on her papers/ or go to her mother's house	Home/grandmother's house	Mum/Lina and Sara/driver
	Goes to visit his mother/or his elder brothers or friend		Father
11:30	Sleep at the same time	In their rooms	Mum/Father/university's girls

Appendix (11) (XI) Example of oral health programmes in schools



Appendix (12) (XII) Islamic practices

Homes' Prayer's area for the mother, female children and young boy children on the prayer time



The bathroom in a Saudi household with a hose by the toilet seat. The reason for that is water is essential part of Muslims washing after using the toilet and before prayers (wadu). Those specific hygiene standards are taken very seriously in Islam



Appendix (13) (XIII) The privacy of Saudi family

The high wall surrounding the house protecting its privacy like all Saudi homes



Saudi families live in comfortable private houses surrounded by high walls to enable women to sit in privacy, so no one can see inside the house



Appendix (14) (XII)

Agents of their health? Mothers as agents of children's oral health in the kingdom of Saudi Arabia.

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Aim: This study is the first of its kind; it questions the legitimacy of Western conceptualisations of oral health promotion in a culture that differs vastly from the West. It explores the agency of mothers through their daily lives in Saudi Arabia, in relation to their child's oral health, and describes the factors or constraints that shape/impact on a Saudi mother as a facilitator of oral health for her children. The study analyses the extent that a Saudi mother is considered as an oral health agent for her children.

Method: Observations and interviews were conducted with 25 Saudi mothers using qualitative methods; blending ethnography and narrative. Field notes were taken of the researcher's initial impressions and of any occurrences during the interviews. The research took place at the pediatric dental clinic in King Saud University, Riyadh, Saudi Arabia. Interviews were digitally recorded, translated from Arabic to English, and then transcribed into written text.

Preliminary analysis: Initial analysis began before entering the field with the researcher immersing herself into the existing literature. Once entering the field, observations of mothers in clinics and field notes assisted with analysis. The researcher transcribed all the interviews, which assisted because the data was revisited. The stories were then re-read, analysed, and initial themes were produced.

Initial outcomes: Initial main themes are the importance of the mother, dentist and child relationship as a facilitator or inhibitor of oral health. The importance of extended family networks and their impact on the agency of mothers in relation to oral health practices. Of even greater importance were the cultural constraints on a Saudi Arabian mother; for example the issue of travel and accessing professional oral health advice and treatment. Mothers themselves offered suggestions and produced insight into how they may be empowered to improve their child's oral health in Saudi Arabia.