# WOMEN'S EXPERIENCE OF TRANSFER FROM COMMUNITY-BASED TO CONSULTANT CARE IN LATE PREGNANCY OR LABOUR

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# CONTENTS

APPENDICES

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# SUMMARY

## Women's experience of transfer from community-based to consultant care in late pregnancy or labour

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*Background*: Women booked for home or GP unit delivery, under the care of their community midwife and GP, are frequently transferred to consultant care. Even obstetrically low risk women may develop complications which necessitate hospital-based intervention. Transfer has been perceived as undesirable and booking policies have been developed to avoid it, but few studies have focused on transfer from either a medical or a maternal view point.

*Objectives*: To describe the community-based obstetric service, focusing on transfer, and to compare it with shared care; to investigate women's experience of transfer.

*Design*: (1) A prospective comparative survey with non-equivalent controls, using ante- and postnatal postal questionnaires; the data were analysed using SPSS. (2) Long interviews 3 to 8 weeks postnatally, which were taped, transcribed and analysed according to grounded theory.

*Setting and subjects*: All 122 women booked for GP unit or home birth in a northern English city in the second half of 1991; 141 controls were drawn from low risk women booking for shared care. The response rates were 82% and 62% respectively. Twelve transferred women were interviewed.

*Main outcome measures*: obstetric intervention and outcome; maternal characteristics, preferences and satisfaction; continuity of care; length of stay; transfer rate and indications.

*Results*: Community-booked women have similar obstetric outcomes to shared care women, but less intervention, better continuity and shorter length of stay. They have higher expectations but are more satisfied with their care. Overall transfer rates (46% in primiparous and 23% in multiparous women) resemble those in other units. Transferred women are especially vulnerable to disappointment, but continuity of care and sensitive debriefing ameliorate it.

*Conclusion*: Transfer does not detract from the overall advantages of community-based maternity care, but for the women it affects, special attention is needed.

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# 1 BACKGROUND

There are few studies about the referral of women from community-based to hospital-based care during pregnancy or labour (henceforth "transfer"). But there is a great deal of relevant information embedded in the literature on community-based maternity care, especially the literature which compares community-based care with the hospital-based service. Within this, there is information about the frequency, the timing and the indications for transfer, its predictability, and its outcome. Such studies provide the background for a survey of the clinical aspects of transfer.

With respect to women's experience of transfer, again there are no directly relevant studies. But there is a wealth of information about the maternal view of pregnancy and childbirth in general, and of complications and medical intervention in particular. This body of literature points to potentially fruitful areas of enquiry both for the (quantitative) survey and the (qualitative) interviews.

An emergent theme of this chapter is the contrast between the medical and the maternal viewpoint. In Section B, I present a review of ways of measuring outcome in maternity care. These range from "hard" obstetric to "soft" maternal data. But ultimately, outcome cannot be subdivided into a rigid hierarchy: any given outcome can always be reconstrued in terms of the opposite viewpoint. The challenge is to research and to present data in a way which allows the viewpoints to interact.

# Section A
# Obstetric aspects of transfer

## Frequency of transfer

Let us look first at frequency: what are typical transfer rates? A paper which acts as a useful benchmark (and one of the few studies which focuses specifically on transfer) is by the Oxford GP obstetrician, Michael Bull (1983). He looked at all the GP unit bookings for the integrated unit in Oxford from 1968 to 1977 and presented data about how many and which women were transferred during pregnancy or labour. The women were all "low risk" at booking, but the series showed that about half the primiparous and almost a quarter of the multiparous women were transferred (giving an overall rate of about 37%). Different patterns emerge in other reviews of community-based systems: an analysis of 594 bookings at the isolated unit in Keynsham showed that 19% were transferred (Garrett *et al* 1987); in the Wormeever study of 7980 women booked with a practice of midwives in the Netherlands, 26% were referred to an obstetrician in pregnancy or labour (Van Alten *et al* 1989); at the "alongside" unit attached to the North Tees General Hospital the rate in 1987 was 45% (Prentice and Walton 1989); in the Bradford study, where both District General Hospitals have integrated GP units, it was 46% (Bryce *et al* 1990).

What leads to this variation? One factor may be the type of unit and its booking policy. In North Tees, a quarter of all women in the area are booked for the GP unit. It provides a "low technology environment" but is adjacent to the consultant unit. Booking is not therefore confined to a tiny low risk (and highly motivated) minority, obstetric interventions in the GP unit are very limited and transfer is easy. By contrast, the Keynsham unit is 15 minutes by ambulance to the nearest specialist unit and some interventions (e.g. forceps under local anaesthetic) are possible within the unit. The pressure to book only very low risk women and not to transfer (especially in labour) would seem stronger. In a study from New Zealand, where the contrast between urban (alongside or integrated) and rural (isolated) units would be more marked than in Britain, this pattern seems to be confirmed (Tilyard *et al* 1988). The rural practitioners referred more women antenatally and fewer women in labour, than their urban colleagues, particularly if they had case loads of more than 20 deliveries a year.

However, Smith and Jewell's (1991) paper on the contribution of GPs to hospital intrapartum care belies such a simplistic explanation, at least in England and Wales. They found that transfer rates were independent of the type of unit (alongside, integrated or isolated) and of its caseload. The similarity between types of unit obscures an interesting finding: the range of rates within each type is huge, from just over 13% to nearly 50%. The authors do not highlight or explain this, but in their discussion they say they believe that "units differ from each other in terms of general practitioners' involvement and commitment".

The Wormeever study (Van Alten *et al* 1989) certainly suggests that factors other than geography and unit caseload may be responsible: 92% of primiparous and 79% of multiparous women in the catchment area book with the midwives. The majority of deliveries take place at home or in a maternity unit – not alongside or inside a hospital. So a relatively unselected group are delivering in "isolated" circumstances. Yet the transfer rate is low (26% in that study). In the Netherlands the maternity services are organised on the presumption of normality: 43% of deliveries are conducted by independent midwives, 14% by GPs and under half by obstetricians (Oppenheimer 1993). About a third take place at home (Treffers *et al* 1990). Could it be that a different philosophy of maternity care leads to different patterns of transfer?

## Predicting transfer

Returning to Bull's 1983 study we see another obvious influence on transfer rates: primiparous women were twice as likely as multiparous women to be transferred. So the overall rate for a given unit will depend heavily on the mix of parities in the women booked. Bull went on to explore other maternal risk factors by looking more closely at primiparous women, in whom transfer (often during labour itself) was so common. A normal medical and obstetric history was assumed, but given this, he noted that women under 150 cm in height were much more likely to have a Caesarean section; and he showed that the chance of a normal delivery was lower in older women (it fell from 90% in those under 19 to 70% in those over 35 years). He does not present data on other possible risk factors, but suggests that marital status, smoking and social class are likely to act together in a multifactorial way. Bull's paper is now 10 years old, but these statements about risk prediction still hold good.

In 1988 Bull collaborated on another paper specifically about risk prediction (Reynolds *et al* 1988). The authors used the Oxford Obstetric Data System to analyse booking criteria in 5730 women booked for delivery in the GP unit between 1978 and 1984. All the women were already "low risk" in that they had normal medical and obstetric histories, were less than 30 years of age (primiparous) or 35 (multiparous), and were taller than 152 cm. Factors associated with antenatal transfer in both primiparous and multiparous women were smoking, obesity and social class. Factors associated with intrapartum transfer, also in both groups, were maternal stature and marital status. But the effect of applying these criteria to exclude "at risk" women would be small: primiparous women with no adverse factors (i.e. weighing less than 71 kg, measuring more than 156 cm, aged between 20 and 34, non-smoking and married to a men in employment) would have an antenatal transfer rate of 24.8% and an intrapartum rate of 27.7%. The figures for all primiparous women would be only slightly higher at 30.1% and 29.6% respectively.

In discussing their findings, Reynolds *et al* pose the question "What does risk prediction do? Does it predict outcome?". The traditional assessment of risk sifts out those women more likely to have a Caesarean section, but does not predict those likely to be transferred. These traditional criteria were originally proposed in the Cranbrook Committee report (Ministry of Health 1959), based on the findings of the maternal mortality report of 1952–54 (Standing Maternity and Midwifery Advisory Committee 1958). Reynolds *et al* recommend that the criteria be revised – but point out that even if they included factors such as social class, weight and smoking, transfer rates would only be slightly reduced.

This discussion begs a more fundamental question: "What is risk prediction for?" In other words, why should we try to avoid transfer – or indeed any other endpoint? In order to answer this, we have to use a conceptual framework which balances any disadvantages of transferring (some) women against the overall advantages of booking (any) women for community-based care. And we have to choose meaningful and suitably sensitive outcome measures. This takes us into the debate about "where to be born" (Campbell and MacFarlane 1987), and the relative importance of different kinds of outcome.

## Assessing the importance of transfer

Barry (1980) gives a useful overview of the issues involved in comparing systems of maternity care and pays specific attention to the place of transfer in the argument. He concentrates on "home" (as opposed to GP unit) versus "hospital", and of course much evidence has been amassed since his article – but the arguments still hold good. His main points are, firstly, that a few very high risk women can skew the overall outcome for a given system. Particular attention must be paid to the way these women are ascribed to one system or another. Secondly he argues that hospitalisation does not necessarily improve outcome, even for high risk women. And thirdly he argues for an assessment of the particular conditions requiring transfer and whether the absence of immediate hospital intervention would have altered the outcome.

Barry quotes Butler and Bonham's *Perinatal Mortality* (1963). They compared perinatal mortality ratios according to the site of booking and transfer to other units. Mortality ratios were very high in women transferred from home or GP unit to hospital (336 and 300 respectively, where 100 is the overall mortality rate). But they were very low in women actually delivering at home or in a GP unit (49 and 55 respectively). The percentages needing transfer were small (5.5% from home and 1.6% from GP units) so that the very high mortalities were outweighed in the overall figures. Thus the overall outcomes for home and GP unit are good. The focus on the intended place of delivery is echoed by Campbell *et al* (1984). They surveyed all 8856 births occurring at home in England and Wales during 1979 and showed a 50-fold variation between births booked for home and those not booked at all. They concluded that the poor outcome for the small percentage of unbooked women delivering at home should not be included in statistics about the overall safety of home birth. The outcome for women transferred from home to hospital during labour, however, was not considered.

This line of reasoning is now well accepted: that the merits of a given system of maternity care should be assessed according to the outcome of all the women booked for it – including the eventual outcome of those transferred, but excluding unbooked women. This is correct in a pragmatic way: it will answer the question – what is the outcome for a given population when they are booked for community-based care according to these risk criteria and with this proportion of transfers? But it will not answer the question – what would the difference in outcome be if women with equivalent risk criteria were booked for community-based or hospital care? In the absence of a controlled trial, various attempts have been made to compare like with like. The most radical interpretations are by Tew (1985).

Proponents of the relative safety of hospital birth have argued that the higher perinatal mortality rate in hospital is due to the greater number of high pre-delivery risk births. This would arise because of selection and transfer policies. Tew set out to overcome this bias by standardising for different antenatal risk factors. The unfavourable gap between hospital and home/GP unit deliveries remained wide. She argues that obstetric management for high risk cases does not necessarily improve the outcome. This leads us to Barry's second line of argument – that hospital intervention is not necessarily helpful. He quotes the *Confidential Enquiries into Maternal Deaths* (Department of Health and Social Security 1975) to show that errors (usually of commission) occur in hospital, and believes there is evidence that interference may actually increase the risks, or at least fail to decrease them. Since 1980, the possibilities for obstetric intervention have burgeoned (although some procedures such as induction have become less fashionable) and there is mounting evidence for the iatrogenic nature of much obstetric outcome (Enkin *et al* 1989).

## Indications for transfer

Barry's third plea is to assess the reasons for transfer. This applies at the level of statistical comparisons: "the relevant factor is the condition necessitating transfer ... the need [is] for a comparison with a controlled series with a similar condition arising in hospital, and the frequencies with which these arise in home- and hospital-booked cases, with similar risk factors". But assessing the reasons for transfer is also fruitful at the level of clinical logic: "if a complication can be coped with adequately at or from home, this demolishes the argument that its occurrence is a noteworthy factor". The converse is also true – if hospital intervention would not – or could not – have altered the outcome, the risk of transfer for that condition is irrelevant. There have been very few studies which yield this kind of detailed information – information which would provide the basis for statistical analyses of the true impact of transfer on outcome.

There are some clues in the descriptive surveys from various units (Bull 1983, Garrett *et al* 1987, Prentice and Walton 1989, Bryce *et al* 1990, Sangala *et al* 1990). Transfer rate is often broken down into antepartum and intrapartum rates. It is hard to imagine that appropriate transfer in the antenatal period can affect safety – the time lapse due to referral and physical movement from community to hospital is unimportant for problems which pose no immediate risk. Where unforeseen complications do arise (e.g. antepartum haemorrhage) the woman would be no better off if she had booked for consultant care – she would still not have been in hospital when the emergency arose. This begs the question as to whether more skilled care (i.e. consultant-led) could have foreseen or even prevented the condition – i.e. whether the transfer was appropriate. The Bradford paper (Bryce *et al* 1990) tries to address this, by listing indications and assessing whether they were predictable and/or preventable. Unfortunately the authors do not explain how they arrived at their assessment, and from the raw list of indications it is hard to see how they judged that more than a quarter of antenatal transfers were predictable or preventable.

The reasons for intrapartum transfer are perhaps more likely to yield information about potential danger: the time-scale for effective life-saving intervention in labour may be minutes and the sometimes lengthy process of referral and physical removal could be important. Of course there are gradations of urgency even within the intrapartum period: there are obvious differences between first, second and third stages. And Tyson (1991), in a detailed survey of midwife-attended home births in Toronto, even distinguishes between the "latent" and "active" phases of the first stage of labour. Comparisons are difficult because indications are couched in different terms in every paper (and a given indication is often assigned to different phases of pregnancy or labour!) But it is possible to give an overview of the commonest reasons in the Newcastle, Keynsham and Bradford studies (Prentice and Walton 1989, Garrett *et al* 1987, Bryce *et al* 1990). These were: delay in first stage (requiring augmentation), suspected foetal distress (requiring monitoring), raised blood pressure. Emergency situations such as premature labour, undiagnosed breech, cord prolapse, delay in second stage, retained placenta, postpartum haemorrhage were less common. It is frustrating that the analyses go no further – what difficulties were encountered when these complications arose in the community? A paper from Australia (Molloy 1989) describes the practical management of obstetric emergencies – including early recognition of the need for transfer – but the geographical situation (rural isolation) is very different from most of England and Wales. As Bull (1983) points out transfer must be viewed in the context that 75 per cent of the British population live in conurbations.

If we are looking for detail about how transfer may be detrimental, the obvious approach is to analyse those cases in which the outcome was poor. One source of this kind of detailed clinical information are the *Confidential Enquiries into Maternal Deaths*. The latest (Department of Health 1994) found evidence of substandard care in half the cases – but highlighted failures by hospital rather than community-based staff, and did not find that community-booking or transfer made a significant contribution (Kierse 1994). A similar system for confidential enquiries into stillbirths and deaths in infancy (CESDI) has now been set up (Department of Health 1992) and may contribute to the debate about community-booking and transfer.

Some studies do volunteer "inquiry" style information about cases with poor outcome – even if it as an appendix to the main body of results. A good example is the *Know Your Midwife* report (Flint and Poulengeris 1986). This gives an insight into whether complications were predictable, preventable or salvageable in that or any other system of care. In some cases, this information reaches the public domain in the correspondence following a controversial publication. An example was the Bradford paper (Bryce *et al* 1990). There were no maternal fatalities in the 1289 community-booked women, but ten stillbirths and three early neonatal deaths. The reasons for these were described in a reply to criticisms of the Bradford paper (Clayton *et al* 1990). Two foetuses had congenital abnormalities; one was born prematurely at 31 weeks and died. There was one accidental haemorrhage and the remaining (nine) deaths were due to intrauterine asphyxia. One of these nine had severe growth retardation and two were probably "appreciably overdue". We may "discount" the congenital abnormalities from the assessment (although some would argue for outcome measures which embrace the management of prenatal diagnoses – see below). We are not told if the baby with severe growth retardation was less than 2500g in weight: some studies also exclude very small babies when assessing perinatal care. For the rest, we have no idea how the complications presented or even whether they were already under hospital care.

Another insight into the actual reasons for poor outcome after transfer comes from a study of perinatal mortality amongst women booked for isolated maternity units around Bath (Sangala *et al* 1990). This includes details of the cause of death (but not, unfortunately, the indication for transfer) in each case. This also highlighted asphyxia – antepartum and intrapartum – as a frequent factor. Another leading cause was antepartum haemorrhage (which could, of course, have led to deaths even if the women were booked for consultant care if they lived some distance from Bath). As before, more clinical information is needed to make a judgement about the role of transfer in these deaths.

# Section B
# Measuring outcome in maternity care

The discussion so far has quoted a variety of outcome measures to compare systems of maternity care and to describe the impact of transfer. But we cannot judge a given system or the importance of transfer unless we are clear about the usefulness and meaning of these measures: what are our terms of reference? It may be helpful at this point to describe the difficulties which have led to such a plethora of measures, none of which are universally applicable or acceptable. In summary these difficulties are:

1. The minuteness of variation in truly "hard" outcomes makes it difficult to demonstrate statistically significant differences between systems of care in those terms.
2. Many outcome measures actually describe "process" rather than "endpoint" and are capable of further resolution. Difficulties arise when the status of the measure is not acknowledged.
3. There is a dichotomy between "maternal" and "medical" viewpoints. Maternally important consequences (good or bad) may flow from medically desirable outcomes and *vice versa* – but it is difficult to find measures which reflect both points of view simultaneously.

These difficulties run through all attempts to make definitive judgements about systems of care or about elements within those systems, such as transfer. The following sections present the spectrum of outcome measures and illustrate the difficulties described.

## "Hard" outcomes: maternal and perinatal mortality

The national maternal mortality rate is now 10 per 100,000 pregnancies; perinatal mortality is less than 10 per 1000 births. Death of mother or baby is undesirable by anyone's standards (though salvaging very small, very sick or congenitally handicapped babies has been questioned) but when the "baseline" risk is so slight any difference between systems of care becomes marginal. Mortality is a clear-cut outcome of unquestionable importance, but, being rare, it is hard to prove benefit in these terms – the numbers needed for statistical significance are too large. For instance, it has been calculated that 704,000 low risk women would be needed for a study to have an 80% chance of detecting a 5% difference in perinatal mortality (Lilford 1987).

Even the supposedly "hard" outcome of perinatal mortality can be subjected to deeper analysis. Very small or congenitally abnormal babies are likely to perish (Chalmers 1979). These deaths have social or biological origins and are not susceptible to (perinatal) obstetric intervention: crude perinatal mortality rates are therefore a poor outcome measure for assessing the quality of perinatal care. Over recent years there has been a tendency to quote perinatal mortality rates after adjusting for or excluding congenitally abnormal and small (less than 2500 gram) babies (Black 1982, Sangala *et al* 1990). Another problem arises as antenatal diagnosis improves. If abnormal babies are detected and aborted before 28 weeks the (crude) perinatal mortality rate falls because abnormal babies have been "lost" before birth. Bucher and Schmidt (1993) argue that "live birth rate" (i.e. live births per pregnancy) should be used to assess the whole package of antenatal care. This raises the debate about whether it is preferable to have a late termination or give birth to an abnormal baby – and shows that perinatal mortality may not be such a "hard" outcome after all. When maternal perspectives are taken into account new "endpoints" arise.

This disjunction between "hard" outcomes and maternal perspectives is illustrated in two of the papers already quoted: Black (1982) provides a careful review of perinatal mortality rates in different parts of the (then) Oxfordshire Area Health Authority – one with a high rate of GP unit bookings and the other with a predominantly centralised system. He uses epidemiological data to refine the crude rates and concludes that "the chances of a safe outcome irrespective of birthweight would improve from 992 per thousand (in the GP unit-dominated area) to 993.5 per thousand (in the consultant unit area)". These differences are small and as Black himself says "While the decision maker's approach to risk is to try to gain any improvement however small, it may be that customers perceive risk reduction rather differently ... Many women may consider such an advantage insignificant compared with the disadvantages of a delivery in a centralised consultant unit." (p. 284).

The second example is the study by Sangala *et al* (1990) of perinatal mortality among normally-formed, singleton babies weighing over 2500 grams in the Bath Health District. She compared outcome according to the intended place of delivery (isolated GP unit, integrated unit or consultant unit). The study has been strongly criticised because of the way subjects were retrospectively assigned to intended place of delivery and because the groups were not necessarily comparable in terms of risk factors. Setting aside these criticisms, the paper shows that "a woman entering an isolated unit in Bath district during 1984–7 had a chance of 998.5 in 1000 of leaving hospital with a live child and a woman entering a specialist unit had a chance of 999.4 in 1000. Given this information would women living in rural areas decide to travel to Bath?" (Young 1990).

Thus we see that even if the marginal differences in "hard" outcomes are statistically significant, using them for decision making in the real world is not easy.

## Morbidity

So less drastic but more common endpoints – i.e. types of morbidity – have been explored.

But now the second difficulty predominates: what are true "endpoints" and what are "process" outcomes? Take for example mode of delivery, which can be simplified into three broad categories – normal vaginal delivery, operative vaginal delivery and Caesarean section. It would be generally agreed that a system of care which led to a higher proportion of vaginal deliveries (a process outcome) was preferable. But if it also had a higher perinatal mortality rate (an endpoint outcome) further questions would be asked: How important are the reasons for preferring normal vaginal delivery? Does the financial cost and maternal morbidity of operative (especially Caesarean) deliveries outweigh the loss of babies' lives? This is a hypothetical example – in fact there is currently a debate about whether Caesarean section for certain indications does improve perinatal outcome (Treffers and Pel 1993). But it shows how outcomes cannot be assumed to be "good" or "bad" until they have been further resolved into tangible consequences.

Bearing these difficulties in mind, the following is a list of different kinds of morbidity and provides a "menu" of possible outcome measures. Some are suited to comparing overall systems of care, some to elements within those systems. The greatest variability, and hence sensitivity, is found in the more "minor" (less invasive/softer) measures. Thus the focus and sample size will be crucial in the choice of measure for a given study, including the present one.

## Maternal morbidity

### Mode of delivery

Caesarean
forceps/Ventouse extraction
“non-operative live delivery”

### Perinatal complications

retained placenta
haemorrhage

### Management of labour

length of labour/timing of admission
induction/augmentation
epidural/other analgesia
episiotomy/tears/suturing

### Postnatal complications

postnatal depression
emotional well-being (anxiety/depression)
anxiety re baby
use of health services
breast feeding

## Neonatal outcome

### Inborn

weight
congenital abnormalities

### Perinatal complications

resuscitation
APGAR score

### Neonatal complications

“irritability”/fits
jaundice
need for Special Care Baby Unit

### Long-term

minor illnesses (reported to carers)
developmental milestones

The following discussion is not an exhaustive review of the value of each outcome measure, but uses key examples from the literature to demonstrate their scope in assessing care.

Klein *et al* (1983) used the Oxford Obstetric Data System to compare low risk women booked for shared (consultant) care and the integrated GP unit. The numbers involved were 248 GP unit women and 1188 shared care women. The authors were able to demonstrate statistically significant differences in: the mode of delivery (emergency Caesarean section and forceps); the use of other obstetrical procedures (induction and epidural); and neonatal outcomes (intubation rates and admission to the Special Care Baby Unit). The last only applied in multiparous women.

The authors went on to look at the case records (not just the computer tape) of four groups of 63 nulliparae and multiparae booked for shared care or GP unit. The definition of "low risk" was narrowed so that only women who *could have been cared for in the GP unit throughout labour* were included. Women having induction or Caesarean section were excluded. This allowed a more detailed focus on minor variations in the management of labour and delivery and in neonatal outcome. They found differences in the timing of admission, length of first and second stages, use of augmentation (but not forceps) and the use of epidural and Pethidine (but not Entonox). With regard to neonatal outcome, electronic foetal monitoring was used more frequently in shared care women and intrapartum foetal distress was diagnosed twice as often. Intubation was also more common (but in this study the difference was statistically significant only in nulliparous women). An Apgar score of less than 6 was also commoner in nulliparous shared care women.

Thus with moderate sample sizes (248 and 126 GP unit women respectively for the two parts of the study) it was possible to demonstrate differences in maternal and neonatal morbidity. The authors make their case for expanding the role of community-based midwives in the care of low risk women entirely in terms of such "hard" obstetric outcomes (i.e. readily quantifiable morbidity). There is glancing reference to the use of resources (early or unnecessary admissions to hospital of shared care women who could not be assessed at home first) but no mention of women's preferences or satisfaction.

The *Know Your Midwife* (KYM) report (Flint and Poulengeris 1986) includes similar outcome measures as well as presenting data about maternal satisfaction.

One thousand women were randomly allocated to either conventional consultant-led care or a small team of midwives who would see them through all stages of pregnancy, labour and postpartum. As in the study by Klein *et al*, there were differences in all aspects of obstetric management and outcome, although many were non-significant. Using larger numbers (approximately 500 in each group) and a prospective design, it was possible to look at the procedures in considerable detail. For instance, electronic foetal monitoring was broken down to "belt" or "clip" devices and the duration of monitoring was given. Dosages and combinations of analgesia – rather than simple use or non-use of Pethidine/epidural – were recorded. Perineal trauma was subdivided into tears and episiotomies.†

An additional feature of the KYM study is that it goes on to relate obstetric outcome to maternal satisfaction, making links between "hard" and "soft" outcomes and medical/maternal perspectives. For instance, the mode of delivery (normal, instrumental or Caesarean) is strongly associated with whether women remember their labour as having been "wonderful/enjoyable" or "not enjoyable/dreadful"; and satisfaction with pain relief *decreased* with the amount of analgesia received, the least satisfactory intervention being Pethidine plus epidural. These links are explored in more depth in studies of "soft outcomes" (considered below) which specifically set out to discover what influences women's satisfaction. They are mentioned here to illustrate, once again, the difficulty of defining meaningful endpoints: why does a high Caesarean/epidural/induction rate matter?

Let us turn now to neonatal outcome, the well-being of the baby. It too is susceptible to progressive redefinition. In this case the issue is not so much translating given outcome measures into meaningful terms of the subject's experience (though writers like Leboyer (1975) have argued for the feelings of the newborn child) but of deciding whether measures which reflect the "quality" of perinatal care have genuine predictive value for the eventual health of the child.

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† Given the numbers and the degree of detail, it is surprising that the differences between the groups are not at least as big as in Klein *et al*'s study. Perhaps community midwives accountable to GPs (the Oxford situation) provided a more distinctly "low tech" approach than a hospital based team accountable to consultants (the KYM situation). The full account of the KYM report certainly hints at several ways in which the KYM team were brought into line with hospital policies. Or perhaps the absence of random allocation in Klein *et al*'s study meant that the groups were actually different in ways not anticipated in the matching.

A good example of this is the APGAR scoring system. It was originally developed by Apgar (1953) as a way of assessing birth asphyxia. Over the next 15 years, studies tried to relate Apgar scores at one, five, ten or even fifteen minutes to neonatal death and neuro-developmental disorders (Stewart 1992). On the whole, only very low scores persisting for longer times are predictive. Another difficulty is the subjective nature of the ten-point scale: the birth attendant (or sometimes a paediatrician in "at risk" deliveries) awards nought, one or two points for each of five features of a rapid examination (appearance, pulse rate, gasping, muscle tone or activity, and reflex response to a pharyngeal catheter). But, because it is believed to reflect intrapartum asphyxia and as it is used and recorded routinely at all births, it is tempting to include the Apgar score as a measure of the quality of obstetric care. It appears in most studies which present detailed information about the course of labour and delivery – especially studies which base their findings on hospital notes.

A more accurate reflection of the baby's condition is whether and what kind of resuscitation is administered (although this will depend to some extent on local and individual practice). "Harder" still, but of course less common and less likely to be significant except in large studies, is admission to the Special Care Baby Unit (SCBU). Klein *et al* (1983) and Flint and Poulengeris (1986) use all these measures and demonstrate better outcomes in the study groups. Oakley (1992), in her study of the effects of social support in pregnancy, found a reduction in the use of invasive methods of resuscitation and length of time in SCBU for babies of women who had received support in pregnancy. She was looking at a group of high-risk mothers (they had all previously had low birth weight babies) so that the occurrence of such interventions was likely to be high and significant differences to be found. Eight percent of 226 "control" babies required intubation as opposed to five per cent of 230 "intervention" babies. Fifteen percent of both groups were admitted to the neonatal unit, but the intervention group required less ventilation and less oxygen.

Another measure of the baby's well-being is the occurrence of neonatal fits. This has been used by Dennis and Chalmers (1982) as a specific indicator for the quality of perinatal care, and by MacDonald *et al* (1985) as an outcome measure in their randomised control trial of intrapartum foetal heart rate monitoring versus intermittent auscultation. The latter study involved nearly 13,000 women. Interestingly, although there were slight differences in the Caesarean section and forceps rates between the groups, there were no apparent differences in low Apgar scores, need for resuscitation and admission to SCBU. But cases of neonatal seizures were twice as frequent in the intermittent auscultation group, and after one year three babies in each group had definite neurological abnormalities. Thus it seems that neonatal seizure rate can reflect differences between different obstetric management policies, but the numbers required to produce statistically significant differences are huge. As far as its predictive value – i.e. as a marker for the future health of the baby – is concerned, there was no difference in the number of babies whose fits led to long-term sequelae. Intermittent auscultation may have been associated with more neonatal fits, but fits themselves may not be associated with permanent damage.

Another important consideration when using neonatal well-being as an outcome measure is the influence of prior biological/social factors and of the different stages of obstetric care – preconceptual, antenatal and intrapartum. Just as women must be matched or randomised before drawing conclusions about the effects of care, so must their babies. Different outcome measures are more or less susceptible to prior factors and to particular stages of care. Oakley (1992) gives an extensive review of the difficulties surrounding the measurement and meaning of another commonly used outcome measure: birthweight. Low birthweight has many causes and many effects – which makes it at once valuable and complex, or even uninterpretable.

Finally, neonatal outcomes are inextricably bound up with maternal postnatal complications. High risk pregnancies and complicated labours often result in both neonatal and maternal morbidity; sick babies are a source of anxiety and even ill health in their mothers – and anxious or ill mothers are less able to care for their babies and hence to compensate for suboptimal neonatal outcomes. The idea of "bonding" and the impact of the immediate interaction between mother and baby on their future relationship and behaviour was expounded by Klauss and Kennell (1976). It has been taken up and incorporated into many studies of maternity care (for example, Flint and Poulengeris 1986, Oakley 1980 and 1992, Green *et al* 1988). Questions about the mother's attitude to her baby and her perception of its health reflect a subtle mixture of both their states.

### "Soft" (maternal) outcomes

Maternal outcomes other than mortality and physical morbidity are often referred to as "soft". This is not a well-defined area and includes the clinical entity of postnatal depression, various scaled measures of psychological well-being, elements of maternal behaviour (feelings about the baby and motherhood, breast feeding) and aspects of "satisfaction". Some measures derive from a view of the woman as patient; some assess her capabilities as a mother; some locate her as "consumer" of obstetric services. They all incorporate, to a greater or lesser degree, the results of work exploring women's subjective experience of pregnancy, childbirth and motherhood – i.e. they reflect a "maternal" rather than a "medical" assessment of outcome.

This brings us to the third "difficulty" relating to the choice of outcome measures: the interaction of the "maternal" and "medical" viewpoints. Over the last 25 years there has been a burgeoning feminist analysis of maternity care as well as a consumer movement which demands that medical services be assessed in terms not only of their clinical "success", but also of their acceptability to the patient. One can see this pattern in academic research, and in the procession of government-sponsored surveys, reports and recommendations about maternity care, culminating in *Changing Childbirth* (Expert Maternity Group 1993). But there has been a parallel growth in the available technology and consequent medicalisation of birth. All too often – both in research and in the clinical or social setting – these viewpoints are seen as two "competing paradigms" (Comaroff 1977).

MacIntyre (1977) gives a useful review of the sociological research issues (which tend to focus on the maternal viewpoint) and argues that sociologists should carefully define what they can offer to the debate (e.g. about place of confinement or active management of labour). They should include the "perspective of the providers" in their analyses and "attempt to understand the difficulties and complexities of the obstetrician's task". In other words, they should separate themselves from, and respect, the medical viewpoint in order to demonstrate the value of their own discipline.

Graham and Oakley (1981) focus on the practical consequences of "competing ideologies of reproduction". They raise the question of how quality of care should be assessed and how it is ensured (who controls it?). They quote from observational studies (with a firmly maternal viewpoint) to show how the medical model of pregnancy prevails. They recommend measures to redress the balance, for instance in the education of doctors and mothers, and in the organisation of clinics and place of delivery. There is little doubt that they see the two viewpoints as opposed and consider the maternal viewpoint to be "correct".

There is another difficulty which runs in parallel with the opposition between maternal and medical viewpoints, namely the problem of converting highly individual subjective experience into aggregated objective measures. Medical outcomes (and inputs) can be readily reduced to numbers; maternal experiences are harder to quantify. But if the interaction between the two areas is to be explored, maternal (soft) outcomes need to be converted into quantifiable (hard) measures. Ten years after her work with Graham, Oakley carried out a piece of research which spanned the maternal and medical viewpoints and which combined both methodological approaches – quantitative and qualitative (Oakley *et al* 1990a). The study used "hard" and "soft" outcomes to measure the effect of a "soft" input (social support in pregnancy). In her account of this work, "The natural history of a research project" Oakley says that the dichotomy between qualitative and quantitative methods could be reframed as a dialectical relationship (Oakley 1992). The individual ("soft", maternal) and the aggregate ("hard", medical) data stand as "equal participants in a conversation".

In summary, then, the questions facing the researcher with an interest in both the medical and the maternal perspectives are the following: What aspects of maternal outcome can be shown to result from obstetric complications or interventions? How can these be quantified? The remainder of this section is a review of such maternal outcome measures, knowledge of which influenced the construction of the questionnaire for the present study.

The "hardest" of the maternal outcomes (being a medically recognised entity) is *postnatal depression.* Richards (1990) provides a useful review. In 17 studies reported in the previous decade, nine different rating scales were used to identify women with depression. Not surprisingly, the prevalence of depression in the studies varied enormously (from 5.2% to 22.0%). Richards goes on to discuss the possible causes of postnatal depression from which it is clear that obstetric and perinatal events are at most "vulnerability factors". In 10 studies which included them, only two (Kumar and Robson 1984 and O'Hara *et al* 1984), showed that obstetric complications increased the risk of postnatal depression. Previous mental health and social circumstances were much more important influences. Thus postnatal depression *per se* is probably not a particularly useful outcome measure for exploring women's responses to complications in labour.

Particular *"psychological well-being"* scales (McDowell and Newell 1987) may, however, be more sensitive for the purpose. (There is, of course, overlap between "psychological measures" and "postnatal depression" – see, for instance, Elliott *et al* (1984).) No measures have emerged as well validated, widely applicable, instruments in this context: and there is a tendency to use extracts, modifications or combinations of existing scales. The following four studies are emphasised because they attempted, like the present study, to look at both obstetric factors and maternal well-being.

Oakley (1980) interviewed 58 married primiparous women during the fieldwork for *Women Confined*. She measured "mental health" according to a combination of four factors – postnatal "blues" (transient low mood within a few days of delivery); anxiety (i.e. about the baby); depressed mood (fluctuating feelings of depression); and depression itself. None of these corresponded exactly to any pre-existing tests, but she was able to show in a semi-quantitative way that poor postnatal mental health correlated with obstetric intervention. In contrast, Ball (1987) in a very detailed study of women's reactions to motherhood used established "emotional well-being" scores described by, among others, Kumar and Robson (1984). She used a more statistically rigorous approach than Oakley and was unable to show that the type of delivery affected emotional well-being. Similarly, Flint and Poulengeris (1986) used a well-established instrument, the General Health Questionnaire (Goldberg 1978), alongside their six-week postnatal questionnaire. They did not find significant differences between women booked with the *Know Your Midwife* team and controls, or any correlation between high scorers and intrapartum events. Neither did using different thresholds or particular scales within the GHQ reveal such interactions. Finally, Green *et al* (1988), in a study of approximately 800 women which covered expectations, experiences (objective and subjective) and opinions, chose to use a modified version of the Edinburgh Postnatal Depression Scale (Cox *et al* 1987) to measure "emotional well-being". They deleted four of the original 10 items and added two of their own. They found that emotional well-being defined in this way reflected women's social circumstances and bore little relation to intrapartum events.

On balance, it seems that postnatal psychological well-being does not vary significantly as a result different intrapartum experiences. This is disappointing as maternal well-being might, in turn, predict maternal behaviour and longer-term consequences for both mother and baby. But it is not surprising when one considers the other factors operating – the mother's personality and past mental health, her social and emotional support systems, and the broader package of care before and after the delivery itself.

Many studies, including the four described above, include measures of *maternal behaviour* – such as attitude to and anxiety about the baby, "adjustment to motherhood", breastfeeding and the use of health services. The precise questions used and the findings of any relationship with maternity care and/or late complications are even less consistent than for psychological well-being. What is interesting is the way that these items of maternal outcome are tied into the raft of other measures in a given study. In *Great Expectations* Green *et al* (1988) used "description of the baby" (literally asking women to circle adjectives about their baby) as one of four "psychological outcome variables" which were then correlated to maternal expectations and aspects of care. In *Women Confined* Oakley (1980) used features such as bonding and breastfeeding to build up a sociological picture of the way women adjust to motherhood; ten years later, in a study intended to show the obstetric effects (namely improved birthweight) of a "soft" intervention (social support in pregnancy), Oakley listed breastfeeding, problems with the infant and health service use under "postnatal health of the baby". In order to impress obstetricians and policy makers it is important to show that maternity care ultimately improves the baby's health and reduces the demand for subsequent health care. Maternal outcome is emphasised as a predictor for other events.

But running through these studies – and many others in the field – is a focus on maternal outcome for its own sake: they set out to measure *maternal satisfaction* with the experience of pregnancy and labour. Women's satisfaction is increasingly seen as a valid concern, whether or not it implies long-term medical/resource consequences for them, their family or the health service. And clear links *have* been established between obstetric factors and maternal satisfaction.

Satisfaction is a broad concept and must be refined according to the particular aims of the study. Thus Mason (1989) has produced a survey manual for the express purpose of assisting health authorities to monitor the views of users of maternity services. It asks the respondent to rate satisfaction with all stages and aspects of antenatal, intrapartum and postpartum care and generates data about the organisation and *acceptability of the service*. Flint and Poulengeris (1986) were also concerned to demonstrate the acceptability of a particular style of maternity care (the *Know Your Midwife* scheme) and in some respects their study is a comparative consumer survey. But rather than simply asking about satisfaction with the service, they explored women's *satisfaction with their experience.* This might seem positively to complicate the issue: women's experience and their satisfaction with it is dependent on their individual history, not just on the care received. This, though, is precisely the point – "good" care must surely improve women's overall experience and it is only by measuring the latter that we gain meaningful insights into true quality of care.

Three elements of experiential satisfaction emerge as particularly useful and sensitive measures: sense of control; satisfaction with pain relief; and satisfaction with explanations from carers. These are discussed below and were the main measures in the present study.

The first, *sense of control*, was emphasised by Oakley (1980) in *Women Confined.* She asked women "Would you say you felt in control of yourself and what was going on during labour?" A lack of control seemed to be associated with multiple obstetric interventions (especially epidural anaesthesia and instrumental delivery) and with depression and poor adjustment to motherhood. This idea was not entirely new: previous studies had painted a picture of "bad" experiences stemming from lack of understanding and being overwhelmed by medicalisation (e.g. Hubert 1974, Kitzinger 1978). And there was a firmly established tradition of preparation classes for childbirth – presumably based on the belief that better knowledge would give a degree of control over events. But Oakley's work provided a theoretical framework for using "sense of control" as a key outcome measure.

"Sense of control" also appears in the other studies described above: the *Know Your Midwife* report (Flint and Poulengeris 1986) and *Great Expectations* (Green *et al* 1988). In the former there was a highly significant difference in the degree of control during labour reported by KYM and control mothers. In the latter study, sense of control was subdivided into "internal" and "external" aspects (i.e. control over self and control over what was done). Both aspects were strongly related to all of four "satisfaction factors" derived from the gamut of "psychological well-being" questions.

The second element is *satisfaction with pain relief.* It might seem self evident that lack of pain, or good pain relief, would be a marker of satisfaction and a reliable outcome measure. It is certainly asked about, for example by Flint and

Poulengeris (1986) and by Green *et al* (1988). But the results are unexpected: in the former study, KYM and control women were equally satisfied with their pain relief although KYM women received significantly less analgesia. In the latter study, finding labour more *or* less painful than expected, being dissatisfied with their response to pain and using more analgesia were all associated with lower "fulfilment" in labour – i.e. the way pain was *perceived and handled* was more important than the level of pain itself. Norr *et al* (1977) provide a theoretical explanation for these findings in a paper which explores the relationship between pain and enjoyment in childbirth. They suggest that greater use of analgesia/anaesthesia leads to reduced sensitivity (to the woman's own body and to her surroundings) so she is less able to participate and hence experiences less enjoyment. Thus satisfaction with pain relief cannot be taken at face value as a proxy for overall satisfaction – but it provides interesting insight into how other factors within care compensate for physical pain.

The third and final element is *satisfaction with care.* Within this, good communication is a logical starting point. If carers communicate well, they are more likely to understand and to respond to the needs of the patient. The connections between patient satisfaction and communication are explored by Ley (1988). Though he is not writing specifically about maternity care, the same principles apply. Turning once again to those studies which explore maternal satisfaction, questions about care are often framed in terms of satisfaction with explanations: "Did staff always explain what they were doing? Were choices always explained?" In the *Know Your Midwife* study (Flint and Poulengeris 1986) these were highly discerning questions with significant differences between the study and control groups. In *Great Expectations* (Green *et al* 1988), questions about being kept informed, being given complete and accurate information and being involved in decision making were analysed as aspects of "external control" and found to be strongly associated with fulfilment in labour. The authors make the point that women are affected not so much by *what* is done to them as by *how* it is done – i.e. the attitude of the staff is all-important. Mason's (1989) survey manual also proposes questions about the quality of explanations as a way of gauging satisfaction with care.

I will finish this section with some cautions about the use and interpretation of these measures of maternal satisfaction. Care is needed because the measures may be influenced by the woman's present state of mind. Several studies have found that women's reports change over time – data collected within a few days of delivery differ from data collected after a month or more (Elliott (1984), Flint and Poulengeris (1986), Woollett (1983)). Presumably women "remember" their experiences in a better or worse light according to their current situation. Generally they feel positive after the safe delivery of a healthy child (Riley 1977) and may therefore appear falsely satisfied. Also, women tend to be "loyal" to their own birth experience (Shearer 1983) which would also raise their satisfaction scores.

Above all, women's satisfaction with their experience of labour is the result of a complex interaction of many factors: their social and psychological background, their specific expectations and preparation for childbirth and motherhood, any medical or obstetric complications and, finally, the style of maternity care. Finding outcome measures to demonstrate the interactions between any or all of these is extremely difficult.

# Section C
# Ameliorating the effect of complications: information and continuity of care

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Transfer from community-based to consultant care arises when there is a complication of pregnancy or labour which requires medical (obstetric) intervention. If pregnancy and childbirth are considered to be normal (physiological) events, then complications are deviations from the normal, equivalent to illness. In the absence of studies into the psychological and social aspects of transfer, studies into the effects of obstetric complications, and of illness in general, are relevant. The above review of outcome measures will have made it clear that complications and interventions do have an adverse effect on women. The main focus of this section is to show how, if transfer is a threat to well-being, aspects of care might ameliorate its effects.

Let us for a moment emphasise the evidence about women's dissatisfaction with various interventions. Cartwright (1979) has written extensively about the experience of induction; Kitzinger (1987) has written about epidural anaesthesia and episiotomy (Kitzinger and Walters 1981). Other writers have amalgamated individual interventions into "technology scores" in order to study the relationship between increasing intervention and maternal outcome. Oakley's (1980) system consists of 15 possible items each contributing between 1 and 10 points to a 28 point total. She showed that women with medium or high scores were more likely to be depressed and to have negative feelings about the baby. Elliott *et al* (1984) based their technology score on Oakley's, but were unable to show a relationship between obstetric complications and subsequent anxiety or depression. (Depression is, of course, a "harder" outcome than dissatisfaction.) Norr *et al* (1977) looked in great detail at normal deliveries: there were no major complications as such, but even within the course of a "normal" labour there were variations in the length and difficulty of each stage and the analgesia used, which the authors were able to relate to maternal perceptions of pain and enjoyment. Green *et al* (1988) detailed a range of interventions in "normal" and "complicated" labours and found, interestingly enough, that minor interventions produced more dissatisfaction than major ones.

One only has to scratch the surface of these studies to realise that the relationship between obstetric intervention and subsequent maternal dissatisfaction (or depression) is complex. Just as Norr *et al* (1977) put forward the idea that greater analgesia might lead to reduced participation and therefore less enjoyment, so other writers have explained women's reactions to intervention in terms of its acceptability. Thus Elliott *et al* (1984) found that ratings of the management of and preparation for labour made some weeks after birth *did* relate to later depression and anxiety scores although complications in labour did not. They suggest (page 30) that "(maybe) technology *per se* does not have a universal unidirectional effect on postnatal mood but rather it depends on how that technology was perceived. Replication studies would need to include ratings by both a qualified independent rater and the patient herself as to whether the technological intervention was perceived as life saving (and therefore 'good') or for trivial evidence (and therefore interfering or 'bad')".

Green *et al* (1988) explore the idea of acceptability in terms of choice and control: they found that emotional well-being was related to satisfaction with having/not having interventions. Thus, they say (Chapter 8, page 26) "the context in which the decisions about interventions are made is seen to be highly important since it is women's perceptions of the necessity or the 'rightness' of intervention which seems to be critical to their emotional well being rather than the experience of the interventions *per se*".

This concept – that the acceptability of intervention is more important than intervention itself – helps to explain anomalous findings throughout the literature. Ball (1987), for instance, found that women who had been induced had high emotional well-being scores; Woollett *et al* (1983) interviewed 50 East London women about their experiences and found that, in contrast to other studies, they were satisfied with interventions including epidural and induction. The authors go on to explain that these women saw medical involvement in a positive way (being an advance on the bad old, pre-NHS days). Even these women, however, complained when they were kept uninformed or when there were seemingly arbitrary changes in medical procedures.

The idea of acceptability leads into an understanding of how care can ameliorate the impact of complications. As Norr *et al* (1977) put it "labour in a supportive setting may be clinically no different from those in an unsupportive setting, but the women's own feelings about their experiences will differ greatly".

What kind of care fosters choice, control and ultimately a sense of acceptance? Can we unpack the constituents of the "supportive" setting?

The elements which have had most attention in the literature are the giving of adequate information and continuity of care.

The effects of providing *information* has been thoroughly researched in the context of preparing for a different kind of crisis, namely surgery. Newman (1984) reviews this work and explains how different types of psychological intervention – including prior information – may alter outcome, particularly the level of anxiety. He emphasises the importance of prior personality and its interaction with any intervention. In the context of maternity care, most of the research centres on the effect of childbirth preparation classes. Green *et al* (1988) provide a useful review of the literature. They point out that it is difficult to draw conclusions because much of the work is done on small non-random samples of middle-class, well-educated women. Women attending classes may be differently motivated from those who do not and few studies successfully allow for this. Also, there is an enormous variation in the sort of information/instruction offered and in the outcome measures studied. Green *et al* cautiously conclude, however, that childbirth preparation does have a beneficial effect on use of analgesia, perception of pain, sense of control and overall satisfaction with labour. It may also reduce the use of interventions – but there is no information on how "being prepared" affects women's reactions to interventions if they do occur.

Another approach to the question of how adequate information may affect women's experience is to look at what happens during labour itself. Kirkham's (1987) work, an observational study of the way midwives care for women during labour, makes it very clear that giving adequate information to women is crucial to their well-being in labour. It was possible for midwives to be kind and non-specifically supportive without giving women the information they needed to understand what was happening to them. In summary, although there is little direct evidence, it does seem likely that providing information before and during complications may ameliorate their effects.

Let us turn to continuity, which has received a great deal of publicity in recent years. While there are several studies which look at overall outcomes in systems of care with a high level of continuity (Flint and Poulengeris 1986, Watson 1990) there are few which try to make specific associations between continuity of care itself and maternal satisfaction. An exception to this is the oft-quoted work of O'Brien and Smith (1981). They compared various aspects of satisfaction with antenatal care between hospital and GP clinics and also showed that the number of different carers seen at the hospital was far higher than at the GPs. It cannot be assumed, of course, that continuity was the only difference in the style of care. Lee (1993) provides a good review of the literature – much of it from the field of family medicine rather than maternity care – and concludes by quoting the Institute of Manpower Services: "there is a lack of concrete evidence about the importance of continuity of carer ... [and no research] into the *meaning* for mothers and midwives of 'continuity of carer'". In her own study, Lee found higher satisfaction ratings among mothers who were attended in labour by a midwife they had met before. Even this does not touch on the possible benefits of continuity in the particular circumstance of complications in labour.

The qualitative part of the present study (the interviews with transferred women) explores how explanations and continuity of care affect the experience of transfer. Chapter 7 (Discussion) puts the findings in the context of literature about the psychological needs of people in crisis and the theoritical basis of good care.

# 2 THE RESEARCH QUESTION

The aims of the study were two-fold: to describe the community-based obstetric service in the city and to focus on transfer from community-based to consultant care during pregnancy or labour. The author wanted to compare the community-based service with the more standard shared care arrangements; and she wanted her assessment of the service, especially with respect to transfer, to encompass the maternal as well as the medical viewpoint.

Hence three research questions were identified:

1. **What are the characteristics of community-based obstetric care and how does it differ from shared care?**
2. **How do women report their experience of transfer from community-based to consultant care?**
3. **Is the experience of transfer following complications more satisfactory than the experience of complications under shared care alone?**

The first question must of course be broken down into more precise objectives. These reflect the sorts of issues commonly explored in health surveys (Cartwright 1983) and the areas of interest and contention around maternity care as set out in Chapter 1. They also reflect the sample size that could reasonably be studied given the time and resources available. As Abramson (1990) puts it, "With such-and-such sample size (determined by practical considerations) about what variables and about what associations can I expect to get useful findings?" The following objectives were identified.

- To describe the organisation of the service in terms of the number and pattern of home birth and GP unit bookings, and to set this in the context of the standard pattern of shared care in the city.

- To describe the users of the community-based service and to compare them with users of shared care in terms of:
  - age, parity and social characteristics
  - expectations about the birth.

- To describe the style and effects of community-based care and to compare them with shared care in terms of:
  obstetric intervention (aspects of management)
  obstetric outcome (mode of delivery)
  length of hospital stay
  continuity of care
  postnatal anxiety and depression scores.

- To describe the pattern of transfer form community based to consultant care in terms of:
  overall rate
  timing
  indications
  outcome.

- To compare the acceptability of care in the two systems in terms of:
  satisfaction with overall care
  satisfaction with pain relief
  sense of control in labour.

The second research question was purposely open-ended: the objective was to explore the subject of transfer from the woman's point of view. Chapter 3 (Methodology) describes how the question was operationalised using a naturalistic (qualitative) approach. In essence, rather than developing a tightly-defined hypothesis and putting it to the test, the research question is progressively opened up so that new data are "discovered" rather than "proved".

The third question does imply a hypothesis and requires careful definition of the concepts involved, so that the relationships between them can be explored. The hypothesis was that transfer itself does not affect women's satisfaction with their experience of labour. The literature suggests that women are more dissatisfied with highly technical birth experiences (whether due to management style and/or obstetric accident). The author hoped to show that transfer does not worsen dissatisfaction – indeed she suspected that women might feel more satisfied because they had "had the chance" to give birth naturally and because they were well supported by their community-based carers. The difficulty was in defining "experience" and in finding sensitive measures of "satisfaction". Further details about how these concepts were operationalised and applied in the quasi-experimental setting of highly idiosyncratic cases and non-equivalent controls are given in the final section of Chapter 3 and Appendix 2.

# 3 METHODOLOGY

The study incorporated two approaches: firstly, a survey using documentary sources and postal questionnaires to collect quantitative data and, secondly, a series of long interviews to collect qualitative data. This chapter consists of three sections, namely: accounts of the two methodological approaches and a critique of the overall design, including a discussion of the advantages and disadvantages of using the two methods in combination.

An account of the practical aspects of the design and analysis – the method as opposed to the methodology – is given separately in Chapter 4 (Design). This enables easy reference when assessing the results of the survey. Copies of the data collection schedule, questionnaires, interview schedule and covering letters can be found in Appendix 3.

## Section A
## The quantitative investigation: a comparative survey

The design of the quantitative investigation was a prospective, comparative survey using non-equivalent controls. Let us look at each of these structural elements and then consider instrumentation and validity.

### Surveys: definitions and uses

Cartwright (1983) gives a broad definition of what she means by a survey:

> "Surveys are essentially a research tool by which facts can be ascertained, theories confirmed or refuted, ideas explored and values identified and illuminated."

She quotes Platt (1978) for a definition of the "tool":

> "a technique of data collection, that is systematic and structured questioning, either by interview or questionnaire, of a relatively large number of respondents".

These definitions do not imply any particular design or approach to analysis. Marsh (1982) distinguishes between "surveys" and "experiments", giving the following definition:

> "A survey is an investigation where:
> (a) systematic measurements are made over a series of cases yielding a rectangle of data;
> (b) the variables in the matrix are analysed to see if they show any patterns;
> (c) the subject matter is social."

She is clear that in survey research, causal hypotheses are tested by "drawing inferences from *already existing variance* in populations by a rigorous process of comparison. In practice, one of the major strategies ... is to control for other variables ... that might produce an effect" (my italics). This viewpoint is echoed by Abramson (1990) who defines a survey as a "non-experimental investigation" (an experiment being a study in which the investigator decides which respondents are exposed to – or deprived of – the factor under consideration). He goes on, however, to discuss the place of "quasi-experiments" (Campbell and Cook 1979), the use of controls, and of comparison groups in programme trials. In their textbook on survey methods Moser and Kalton (1979) make a distinction between descriptive and explanatory surveys and show how the latter make use of "experimental designs". Thus survey methodology can be used for description, analysis of causation and to test hypotheses. In the latter cases it may employ quasi-experimental designs, often with controls.

## Testing a hypothesis: the use of controls and matching

The objectives set out in Chapter 2 are expressed as a list of aspects of community-based maternity care to be described and/or compared. If we are to test the hypothesis that there is a difference between community-based and shared care, a control group will have to be drawn from women booking for the latter.

The situation is complicated because some of these "aspects" actually describe the *users* of the service – i.e. pre-existing differences between the cases and controls; other aspects refer to the nature of the service, i.e. they are independent variables; and yet others describe outcome measures such as mode of delivery, obstetric interventions and maternal satisfaction – in other words, dependent variables.

All are of interest simply in terms of describing the community-based service: Who uses it? How is it organised? Does it have particular obstetric practices? Are women satisfied with it? But these questions are sharpened by comparison with shared care: the use of the control group puts the service into a local perspective. The results are also discussed in terms of independent documentary evidence about the local service and with respect to other studies.

The really interesting question, however, is whether the differences in style of care affect the outcome. To address this question, the controls would have to be matched for every factor – apart from the care received – which might affect outcome. (The same effect would be achieved, of course, by setting up a randomised, controlled trial in which respondents were randomly allocated to treatment or control groups. Alternatively, if the sample was large enough it would be possible to use factorial analysis to separate out all the possible different influences on outcome.) In the present study the controls were selected by "group matching" (as opposed to "individual matching"). Chapter 4 (Design) describes in detail the criteria used. The idea was to pick a group which was similar in terms of obstetric risk. The major difference which could not be allowed for was attitude to community booking and all its connotations: obviously many of the community-booked women had positively chosen that option and would have particular attitudes and expectations. Thus the controls are non-equivalent and all the comparisons must be interpreted in that light. Section C of this chapter (a critique of the design) includes a discussion about other ways in which the problem of non-equivalent controls might have been overcome.

## Prospective studies

Abramson (1990) makes a distinction between prospective/retrospective methods of data collection and prospective/retrospective designs. The former refers to whether data were recorded during or before the investigation (and might be better referred to as "prolective"/"retrolective"). The latter refers to the logic of the analysis. In a prospective study, causation is followed from cause to effect: the treatments are known to be different and a difference in outcome is sought. In a retrospective study, variation in outcomes is observed and possible causes for the variation are sought. The present study was both prospective and prolective.

## Instrumentation: the questionnaires

Self-administered (postal) questionnaires have advantages over interviewing for the collection of quantitative data: they are relatively cheap; they are quick and easy to send; "non-contact" is rare (unlike trying to arrange an interview); they are impersonal and so less embarrassing – "difficult" questions may be answered more honestly. The main disadvantages are that only simple questions can be asked; the answers are final (ambiguities cannot be unravelled as they could be in a structured interview); the respondent may consult with others; the questions themselves may influence answers; and non-response can be a major problem.

In practice, questionnaires have been widely and successfully used in studies of maternity care. The factors which are said to improve response rate include the interest of the subject matter to the respondents and the promise that a successful study will produce gains for them or people in a similar situation. These considerations obviously apply to pregnant women being asked about maternity care. Cartwright (1986a) has shown good response rates even with lengthy questionnaires. Variation in response rate is more likely to arise from differences in social class than the content of the questionnaire (Cartwright 1986b).

There is also evidence that the answers are accurate when compared to those obtained by interviewing (Cartwright 1988) or by extracting data from medical records (Martin 1987, Oakley *et al* 1990b). Garcia (1989) gives a useful review of some of this evidence in her introduction to the Office of Population Censuses and Surveys (OPCS) survey manual, itself a blueprint for questionnaires investigating women's experience of maternity care (Mason 1989).

The plethora of studies of maternity care using questionnaires means that it is easy to "borrow" questions from them. This has advantages in that the questions have been piloted and validated already, and that comparisons of findings can be made. The present study used questions copied or derived from the OPCS manual (Mason 1989) and the *Know Your Midwife* report (Flint and Poulengeris 1986). Care needs to be exercised, however, to ensure that "borrowed" questions reflect the concepts under investigation.

The following is not a complete summary of how each "aspect" of the service was converted into quantifiable variables, but it draws out the essential and the controversial features in each area of investigation.

1. **Organisation of the service.** A central feature of the community-based service is the promise of *continuity of care*. This has been defined in terms of the number of carers involved, the presence over a series of encounters of the same carer (Steinwacks 1979), the existence of an "attitudinal contract" between carer and client (Banahan and Banahan 1981). Recently, in the discussions about implementing team midwifery, continuity of *care* (meaning a consistent approach from a team) has been distinguished from continuity of *carer* (King's Fund Centre 1993). The questionnaires allowed for an analysis of the continuing involvement of individual carers, but this proved too complex to interpret. The indicators eventually chosen were number of carers at labour and the presence of a familiar carer at labour and on the first postnatal day.

2. Characteristics of women using the service. Women were assessed in terms of obstetric risk factors (age, parity, height, weight, smoking habits) but also in terms of social background and expectations about labour and maternity care. Cartwright (1983) gives an interesting insight into ways of assessing *social class*. If women are classified using their husband's occupational group they tend to have a higher social class than if they are asked about their own occupation. It has also been suggested that if women of childbearing age are asked about their present or last occupation it will be lower on the scale than the highest calibre job they have ever achieved. Women probably tend to get low grade part-time or temporary jobs if their careers have been disrupted by having a family. In the present study, women were asked about their own last or current work. Information on educational attainment was also sought and did indeed show a slightly different pattern.

3. Effects of care. Chapter 1 (Background) gives an account of the merits and difficulties of measuring aspects of obstetric outcome. It seemed that with the size of this study and the focus on women's experience it was important to concentrate on *obstetric interventions* which interact with maternal morbidity, such as foetal monitoring, analgesia and episiotomy. The *postnatal anxiety and depression score* was collected routinely by the Health Visitors for all mothers in the city. It seemed worthwhile to incorporate an independent and validated measure of maternal outcome. The schedule for the score, which is based on the Edinburgh Depression Score (Cox *et al* 1987), is given in Appendix 3.

4. Acceptability of care. Three aspects of satisfaction were separated out – satisfaction with pain relief, satisfaction with carers and sense of control in labour. Satisfaction with carers was further refined into questions about *communication*, since this seems the crux of a good relationship. *Sense of control* was singled out largely because of the emphasis placed on it by Oakley in her book about women's experiences of childbirth (Oakley 1980). Flint and Poulengeris's (1986) findings also suggested that these might be useful outcome measures: in their comparison of women booked with a team of midwives as opposed to the standard hospital care, they found greater satisfaction with information and greater sense of control in labour in the *Know Your Midwife* scheme women.

The skill of writing successful questionnaires is in combining these questions into a document which is clear and interesting to the respondents. Copies of the antenatal and postnatal questionnaires are given in Appendix 3. It can be seen that the questions were arranged in sections which took the woman through different phases of her experience. There was a covering page with simple instructions (as well as the covering letter). The questionnaire opened with simple factual points. Personal details (age, ethnicity) were left to the end. Most of the questions could be answered by ticking boxes, but there were also a couple of open questions.

A final consideration is the timing of questionnaires. It is clear from many studies (Oakley 1980, Flint and Poulengeris 1986) that women's attitudes are different at a few days and six weeks after the delivery. In the present study postnatal questionnaires were sent at ten to fourteen days. This was largely a pragmatic decision – long enough to track the delivery from the labour ward log, short enough to be able to arrange an interview at around four to six weeks postnatally. It was also hoped to achieve a compromise between fresh memories of actual events and some sort of perspective of the meaning of the whole experience. It is accepted that the responses will be coloured by the woman's state of mind at the time of filling in the questionnaire, which will in turn be affected by the health and behaviour of the baby, the quality of postnatal care and support and her general adjustment to motherhood – as well as by the experience of labour itself.

## Validity and reliability

Validity refers to the "soundness" of the method. It is usually subdivided into "internal" and "external" validity and can be applied at the level of instrumentation or of design. Different texts emphasise different aspects of validity but there is considerable overlap between the checklists they provide.

Let us look first at internal validity with respect to instrumentation. Moser and Kalton (1979) say this means that "a true measure has been made". Shadish *et al* (1991) talk of "construct validity" as being "the accuracy of labels for causes, outcomes and things in between". Abramson (1990) says it is the degree to which the measure reflects the concept. But he goes on to point out that if concepts have been clearly defined in operational terms, the measures are automatically ("by definition") valid. It is this process – of translating the central concepts of a study into relevant measurable variables – that needs to be validated. He then lists ways of appraising internal validity in these terms (Abramson 1990 p.152):

1. Face validity
2. Content validity
3. Consensual validity
4. Criterion validity
5. Predictive validity
6. Construct validity

I will consider each of these with respect to the quantitative aspect of the present study. For *face validity* (or *logical validity*) the point at issue is whether the data collected from documentary sources or the questions on the questionnaires actually yield information relevant to what the researcher wanted to know. For some outcomes this was clearly the case: the occurrence or non-occurrence of certain obstetric interventions is fairly clear cut, and could often be further validated by triangulation – i.e. collecting data using more than one instrument. (Webb (1970) talks of using "multiple methods" and converging data from several classes of data.) Other concepts, such as satisfaction, are vaguer, being made up of a range of components and susceptible to a variety of definitions.

This brings us to Abramson's second point, *content validity*. A composite variable should contain all the relevant components. This ties in with another view of triangulation. Webb (1970) quotes Boring (1953): "Constructs are validated by having more than one operational definition. Many correlating definitions lead to reification." There is another side to this argument, given by Cartwright (1983), that "complex scorings" should be avoided: it is better to "stay close to the data". The present researcher chose to use a range of variables for some of the more complex concepts. The results of the survey show relationships between single key variables. Section C of this chapter describes her attempts to combine these into composite scores for "expectation", "intervention in labour" and "satisfaction".

*Consensual validity* means that a number of experts agree on the validity of a measure. In the present study this applied to certain variables (for instance social class, educational level – although even here there is some disagreement, particularly with regard to women). In others the literature review gave a definite sense of the most "useful" outcome measures – for obstetric morbidity and "soft" outcomes. A good example was the importance of "sense of control" as an indicator for maternal satisfaction with labour. This appeared in Oakley's work (Oakley 1980), was used by Flint and Poulengeris (1986), Green *et al* (1988) and Mason (1989). Once again, triangulation seems to apply. Within the present study, "being in control" featured in women's replies to an open-ended question in the antenatal questionnaire (although it did not appear as a closed question until the postnatal questionnaire). And it also emerged as a (subsidiary) theme in the interview data.

*Criterion validity* means reference to a "gold standard". There were few concepts in the present study which were susceptible to this kind of absolute comparison. This applied not only at the level of individual measures (what is the ultimate measure of maternal satisfaction?), but also to the relationship of those measures with the research question itself (what is a better or a worse outcome? From which point of view – foetal? maternal? medical?)

*Predictive validity* is a way of assessing the value of the measure in terms of its association with future outcomes. Abramson gives the example of minor electrocardiographic abnormalities as measures of coronary heart disease being tested by looking at their relationship to subsequent myocardial infarction. It is hard to see how the outcome measures in the present study could be tested in this way: they refer back to past events which are not even themselves good predictors of future behaviour. Some studies have attempted this sort of prediction: it is thought that a sense of control in labour may make women feel more confident about their role as mother and that as a result they would be less depressed, less anxious about their babies and less likely to use the health services. One could imagine using relatively "hard" measures such as these to verify earlier measures.

This approach ties in to some extent with Abramson's last point – *construct validity*. He quotes the definition given by Carmines and Zeller (1979): it is "the extent to which a particular measure relates to other measures consistent with theoretically derived hypotheses concerning the concepts (or constructs) that are being measured". The present study contains many such interrelated measures – for instance the different ways of looking at women's social background, particular expectations and different measures of satisfaction. The fact that these are correlated with each other and within the different booking groups provides evidence for the validity of each.

Internal validity can also be assessed from the point of view of the design of the study. This is the approach adopted by Campbell and Stanley (1963) with their oft-quoted list of "threats to validity". They point out that the ways subjects are selected, change or drop out during the study and respond to tests, as well as the tests themselves, all affect the validity of the study in the sense that it may be a more or less accurate reflection of how the subjects actually behave in the real world.

Let us turn to external validity, that is the generalisability of the results: to what extent can results be extrapolated to the real world/the general population?

Several factors listed by Campbell and Stanley have some bearing on the present study: there may be a *reaction to testing* – i.e. women who have been exposed to the study or specific ideas in the questionnaires may behave differently from the general population of (non-tested) women. It is certainly possible that asking women about certain procedures would make them more aware of them and perhaps more or less likely to have them. Since the giving of information is such an important aspect of communication and control this should not be underestimated. The *interaction of selection and experimental variables* is also highlighted by Campbell and Stanley. This was also a strong factor in the present study. There is no doubt that selection of the controls, both by design and by the likely characteristics of non-responders, would have made them different from the general population. This was an advantage in the sense that they were more like the cases (with which they were supposed to be matched), but a disadvantage in that the results can be extrapolated to all women in the city only with extreme caution.

## Section B
## The qualitative investigation: interviews

The second question posed in this study (see Chapter 2) was "How do women report their experience of transfer". In a quantitative approach we would attempt to translate this research question into a hypothesis, and proceed to test it by looking at associations between relevant variables. That approach, however, relies on being able to define and operationalise concepts in order to design the study. Only experiences which have already been predicted can be asked about. New knowledge may be discovered in the sense that the relationships between concepts can be explored (and if concepts are broken into their components the resultant patterns may be surprisingly complex). But essentially, a hypothesis can only be proved or disproved. This is entirely appropriate to the subject matter in the sense that there is a great deal of information about the general pattern of women's experience in pregnancy and labour, and it is reasonable to predict what might happen in the particular case of transfer, and to try to prove or disprove that prediction. What a quantitative approach cannot do, however, is to uncover entirely unknown phenomena – to generate new theory.

To do this we must use a different paradigm: the explanation and justification of the qualitative part of the study which follows is based on Lincoln and Guba's (1985) theories of "naturalistic inquiry" and Glaser and Strauss's (1967) "grounded theory".

### The focus of the inquiry

Let us return to our question. This time, we are not seeking to propose a hypothesis, but to determine a "focus" for the enquiry. This may be expressed in terms of a "problem" – which has been generated by the interaction of concepts, empirical data, experiences or other factors (Lincoln and Guba 1985). Problems may be conceptual (a "perplexing or enigmatic state"); they may be action problems (where conflicting factors "render choices moot"); or they may be value problems (where "undesirable consequences" arise). The interacting data which led to this study came from the researcher's first-hand observations (as their general practitioner) of women being transferred, anecdotes from other carers and the negative way in which transfer seemed to be seen in the medical journals (for example Bryce *et al* 1990, Sangala *et al* 1990). It seemed that women booking for community-based delivery had certain hopes and expectations (high ones) about labour and maternity care. If they ran into complications, their labours would be different (worse) and their care disrupted. Might they not feel more distressed than if they hadn't planned anything "special" in the first place? On the other hand, there was a certain feeling from the women and the carers that "at least they had tried". Meanwhile, studies looking into ways of minimising transfer (by excluding women with "high risk" pregnancies from community booking) and criticising those services with a high transfer rate were being published – as though obstetric safety was the only criterion for planning. There seemed to be an assumption that transfer was undesirable. The problem had to do with choices (action) and desirability of outcome (value). Is women's experience of transfer so bad as to suggest it should be avoided at all costs (including not giving them "the chance to try")?

The "focus" or "problem" will define the boundaries of the inquiry. Thus we are interested in the field of experience (in the sense of feelings) and in transfer (as opposed to any other aspect of community-based maternity care). But the problem has been narrowed further still – we are looking at the experience of the women themselves (as opposed to the experience of their partners or carers); and the "problem" has actually been framed as a specific question: Do women's frustrated expectations make transfer so bad an experience that it should not be risked? Surprisingly, the difficulty is in keeping the inquiry *open* enough to pick up genuinely new insights, not in narrowing it down. It is recommended that the inquirer "engage in prior ethnography to provide a springboard and bench mark for the more formal study" and that "tacit knowledge" is an advantage in seeking and interpreting data (Lincoln and Guba 1985). But the disadvantage of too close an association with the subject is the risk of preconceptions clouding the inquiry – including this first step, the setting of boundaries. So even at this stage, there must be a conscious effort to "manufacture distance" (McCracken 1988). This can be done by reviewing the literature, by focusing on incidents which have surprised the researcher, by imagining preconceptions in reverse, by being aware of one's own patterns. These last are the same techniques used in analysing data according to grounded theory (Strauss and Corbin 1990): it seems that defining the boundaries is itself a flexible process which should be subjected to the same rigorous efforts to avoid bias (unacknowledged narrowness) as the inquiry itself.

## The choice of method

We now move on from the theoretical framework to the choice of method for the inquiry. Zelditch (1970) advises considering the type of information which is to be collected and gives a matrix showing the "goodness" of each combination (indicated by the number of ticks in the Table 3.1).

**Table 3.1.** Preferred methods of collection for different data types

| Information type | Method | | |
|---|---|---|---|
| | **Enumeration samples** | **Participant observation** | **Interviews** |
| **Frequency distribution** | ✓✓✓ | | ✓ |
| **Incidents and histories** | | ✓✓✓ | ✓ |
| **Institutionalised norms and statuses** | ✓ | ✓ | ✓✓✓ |

The kind of information we are interested in is the second category, incidents and histories – i.e. individual women's experiences. These are not inseparable from the third category, as experiences (perceptions) are shaped by societal norms. We are therefore directed towards participant observation and interviews as effective ways of gathering information. Interviews were chosen for a combination of practical and theoretical reasons.

First, from a practical point of view, the nature of the incident under investigation would have made participant observation difficult. Labours can start at any time of day or night and last from a few hours to a few days. Only a few will lead to transfer, but there is no way of predicting which. Some transfers take place antenatally and may be organised during a planned antenatal appointment – but the need may arise more suddenly and be dealt with at home or in the surgery. It would have required many and very flexible hours to observe the phenomenon directly. It would probably have been possible to obtain consent from the women and their carers – there are good examples of participant observation of pregnancy and labour (Kirkham 1987, Brooks 1988) although it would have been difficult because of the special wishes of the particular women involved. Above all, it would have been impossible for the researcher herself to be a neutral observer in the local setting. She was known to most of the carers as a general practitioner heavily involved in community obstetrics. This was extremely helpful in negotiating the survey aspects of the study, but would have altered the dynamics of the phenomenon under direct observation. (Some of the same reservations must be applied to interviewing the women, who knew her to be a doctor, although not personally. We will take up the discussion of observer effect and bias later.)

Secondly, from a theoretical point of view, the focus of the inquiry was squarely on women's experience. It would certainly be interesting to look directly at the role of other players and to work out the dynamics of the phenomenon as a whole – but in this study women's perceptions were of central interest. There was a conscious choice to look at transfer through their eyes and to write about it in their words. A problem of the truly "unobtrusive" method is that it cannot tap into the respondents' explanations (Denzin 1970). As it happened, a strong theme to emerge from the data was the importance of explanations: the explanations given to women, the way they were given, and the way they were incorporated into the woman's "story" of her pregnancy and labour. It may be that asking women to tell their own story some weeks after a highly medicalised event would inevitably produce a theory about "illness narratives" (Kleinman 1988). Does this mean that the theoretical framework was perfectly chosen – or that it dictated the findings? The final paragraphs of this section will return to the question of "validity" in qualitative research.

## The interviews

We now move further into the practicalities of the chosen method, with a discussion of interviewing. It has been said that "interviewing is a conversation with a purpose" (Dexter 1970 quoted in Lincoln and Guba 1985). The implication is that interviewing can be developed from "everyday interpersonal skills" – a point emphasised by Coles and Mountford (1988) in their guide to interview surveys. But we must first be clear about the purpose. Lincoln and Guba (1985) take up the latter point and define five possible purposes:

1. Here-and-now constructions of persons, events, activities, feelings, motivations, claims, concerns...
2. Reconstructions of such entities from the past
3. Projections
4. Verification of information from other sources (triangulation)
5. Verification of constructions reached by inquirer (member checking)

In this study, the second purpose was dominant – the interview was used to establish what *had* happened around transfer. However, the total experience, and the *effect* of that experience, was operating in the "here and now": present concerns were also of interest. It could be argued that relying on memories to reconstruct events introduces bias. Women's feeling about labour are known to change significantly during the first weeks of motherhood (Flint and Poulengeris 1986). A balance had to be struck between collecting accurate "reconstructions" of past entities and discovering their distilled effects. If a choice had to be made, the latter was more important. Projections into the future (the third purpose) also help to illuminate phenomena which are actually located in the past: "If you had to choose again, what...?". Inviting a fantasy frees the discussion from the facts. The last two purposes (verification) were of peripheral importance. The face-to-face interview did provide the opportunity to clarify ambiguities in the questionnaires, but the quantitative survey was a parallel rather than a triangulated process. Neither did the design include structured "member checking" – i.e. taking back emergent theory to the respondents for comment. As more interviews were recorded the researcher became aware of key themes – but these were not recycled into the data collecting process in any consistent way. There was a tension between listening to individual stories and developing a unifying theory.

This wish to hear individual stories, and to be open to new information, led to a decision about the *structure* of the interviews. (The terms structured/unstructured are often used: I find this an unhelpful dichotomy as it implies that openness and flexibility do not require rigorous planning: there is a structure of sorts in the most "open" of approaches.) The interviews followed a set pattern of topics: the exact wording of questions was adapted to fit individual stories as they emerged. The first question was completely open, simply inviting the woman to tell her "birth story" uninterrupted. This usually took about 15 minutes. In the second half of the interview she was asked to elaborate on particular events around transfer – especially the role of the various carers and her experience of any interventions. As the study progressed and certain themes emerged, these were more positively sought out. Finally, the woman was asked to express an overall opinion about her experience. Thus the general pattern of the interview was predetermined: there was a standardised preamble, a very open first question, then more specific probes, and one final pre-worded test of opinion. This might be termed "progressive focusing" (Coles and Mountford 1988), though the term is more properly used to describe noting and elaborating on leads (e.g. value judgements) raised by the interviewee. This was another unresolved tension in the interviews – how to gather information about a specific aspect of pregnancy and labour (transfer) whilst remaining open to the women's concerns.

Another area of choice is the relationship between the interviewer and interviewee. Coles and Mountford (1988) write simply about the degree of formality (which has to do with setting as well as attitude). Lincoln and Guba (1985) analyse the possible relationships in terms which suggest the ways they might bias the information gathered. The ideal is probably the "phenomenal" where both interviewer and interviewee are "committed to an empathic search". The dilemma is that interviewer-as-automaton may be neutral in one sense, but will not be able to develop sufficient rapport to gather in-depth information. On the other hand, displaying too much knowledge (interviewer-as-sage), or too much of self (interviewer-as-human-being-in-role) may bias the responses.

A further point, which touches on purpose and relationship, is about what the interview meant to both parties in "real life". One of the findings was the need of women to debrief, and this long interview provided such an opportunity for the women. It was clear that some of them still had a great deal to "unload". On the other hand, the researcher was able to hear women without the responsibilities of being "their" general practitioner. The data this released are the substance of the thesis, and there for all to read. But there is a level of insight, and the concrete reality of having had that experience, which cannot be shared. The experience of doing the interviews has shaped my subsequent practice – and I think it is likely that the experience of being interviewed may have shaped (if only in a small way) the women's subsequent perspective on their transition to motherhood.

It is evident that qualitative research interacts with "real life" in a more immediate, certainly a more personal, way than quantitative methods. Oakley (1980) is oft quoted in this context: she insists that the researcher must 'give of herself' during the interview – it is pointless to pretend absolute neutrality. In her recent study into the effects of social support during pregnancy (Oakley 1992) the dual role of supporter/researcher was integral to the study design. Janet Finch, in her contribution to Bell and Roberts' (1984, p70) book on social research, explores the special vulnerability of women interviewees and the corresponding responsibility of the researcher not to abuse their trust. She uses examples from her work on clergy wives and child carers to demonstrate the real-life gratitude and frankness of her subjects. And she finds herself in an ethical dilemma about how to use such privileged information in a truly non-exploitative way. Feminist writers are not alone in pointing up this interaction. Hammersley and Atkinson (1989) talk of the "research bargain".

## Observer bias

Let us look in more detail at the way "human instrument" introduces bias into data collection: we considered earlier how in participant observation the presence of the observer could influence actual events. Similarly in interviews, the researcher's personal attributes may affect the responses. In this case, the most threatening attribute (to the research process and possibly to the women) was the researcher's professional status and knowledge. If the respondents saw her as a doctor they might tailor their replies according to what they believed a doctor would like to hear. She was also trained and experienced in eliciting certain kinds of data for certain particular (medical) purposes: elements of that approach would be sure to spill over into the research interview.

What strategies can be used to overcome such problems? The first is to disguise the interviewer's true position. Apart from the ethical problems of covert methods, the fact of being a local general practitioner was used to great advantage to gain the cooperation of the carers and access to the respondents (starting with the distribution of the questionnaires). This practical advantage seemed to outweigh other considerations. Another strategy is to create an informal atmosphere and build personal rapport. This was attempted by going to the woman's house, dressing casually, accepting a cup of tea. It is also important to emphasise the purpose and confidentiality of the interview: the contents would only be used anonymously and I was not in communication with the woman's carers.

What of switching out of "doctor mode" and adopting a neutral, enquiring, rather than a helping, problem seeking/solving stance? This actually felt quite easy. The researcher is aware of "being a doctor", e.g. during surgeries or when on call, and of "being herself", e.g. in social situations. She is also aware of when these boundaries are crossed – e.g. in a personal phone call taken during surgery or when a friend asks a "medical" question out of more than academic interest. She could therefore consciously try to remain "herself" for the interviews, whilst calling on the professional technique of suppressing personal opinions. There is no guarantee that this internal perception on the part of the researcher was mirrored in the women's perception of her – or that it would have stood up to external assessment.

The other type of bias introduced by the "human instrument" is in the effect on which data are collected from the total available during any encounter. The preoccupations of the researcher will affect what she sees and hears. The simple remedy for this is careful contemporaneous recording of data. In this study, the interviews were tape-recorded and transcribed in full by an audiotypist. This neutralises the process in one respect – since all spoken words reach the next stage of the inquiry (the analysis). On the other hand, emphases introduced by non-verbal cues, and meanings embedded in that unique encounter of interviewer and respondent at a particular place and time are lost. There is much to be said for taking notes during or immediately after the interview. This certainly aids the analysis, as rudimentary summarising and categorising has already begun. A purely practical point is that respondents often make a revealing last comment after the tape-recorder has been switched off.

These discussions of both types of observer bias – her effect on the respondent and on the data gathering itself – bear hints of a deeper, theoretical problem: there is no absolute neutrality, data cannot be elicited or collected without bias. To some extent it is only because the observer has a viewpoint that anything is seen at all. We will return to this important question in the paragraphs on analysis, and finally in the overview of validity in qualitative research.

## Sampling

The principles of sampling in quantitative and qualitative research are completely different. In the former, subjects are chosen by randomisation or stratification to be representative of a population. In the latter, it is not just the subjects themselves but the data they provide which must be sampled. And the *range* of material, rather than its typicality, is the hallmark of effective sampling. Webb (1970) talks about "restriction" of sampling as being a "threat to validity". Patton (1986) talks about "purposive sampling". Cases or respondents may be chosen because they are:

Extreme or deviant
Typical
Critical
Highly variable
Politically important
Convenient

Patton goes on to describe the process of sampling: it is not the result of a single decision, but an ongoing process. He is referring to the particular setting of Project Evaluation, but the same principles apply in qualitative research generally (and he is quoted extensively in this context by Lincoln and Guba). Thus the initial elements are identified (gatekeepers and informers) and then the sample is expanded until the maximum information is obtained. There should be an orderly emergence, with early elements being analysed so as to inform the selection of subsequent cases. After refining and focusing to the point of saturation, the process is terminated – and the research design should provide for this step.

Strauss and Corbin (1990) talk about "theoretical sampling" and link the process more tightly to analysis. Early decisions about sampling are made in the light of which concepts are of interest. Further samples should represent these concepts and also allow for their relational and variational exploration.

In the present study, an initial decision was made to include women with the widest possible variation of types of transfer and likely reaction to it: the researcher used prior knowledge (from the literature and her own experience) to predict where the extremes would be found. The women interviewed included examples from the following groups:

- highly and minimally educated
- booked for homebirth and GP unit
- transferred before and during labour
- receiving minimal and maximal intervention

This is obviously sampling by type of respondent – although it was hoped that it would generate a range of different experiences. Further refinement in the light of emerging theory could not have been done in terms of *who* was interviewed (nor should it have been, since we are trying to sample concepts rather than respondents) – but it was possible to refine the questions asked so as to sample different types of material. Once again, this interplay of theory and "emergent design" was not fully worked through at the stage of data gathering. To some extent, this could be compensated for at a later stage, by sampling the excessive amount of material after it had been collected – but the potential for refining concepts at source was not fully exploited.

## Analysis

The foregoing discussion has already hinted at the principles of "grounded theory" – the method chosen to analyse the qualitative data. The key elements of the technique are to break down the data into categories, using concepts which arise from it, and then to study relationships between and within the categories in order to make sense of the phenomenon under study. Thus the theory is "grounded" in the data and is discovered through a process of "constant comparison". The seminal book on the subject, The *Discovery of Grounded Theory* (Glaser and Strauss 1967) is widely quoted and the ideas dovetail with the principles of "naturalistic inquiry" as expounded by Lincoln and Guba (1985).

An initial difficulty was in fixing on a degree and type of "unitisation" (Lincoln and Guba 1985) which would generate usable concepts. (The terminology is confusing and I will follow the definitions set out in *Basics of Qualitative Research* (Strauss and Corbin 1990): "concepts" are labels placed on discrete entities; a "category" is a classification of concepts; "coding" is the process of analysing data.) It was easy to break the text into words or short phrases and to group these into simple actions or objects or even feelings – but the categories these produced did not have any meaning with respect to transfer. It was also easy to summarise the story of an individual woman and to see how the dynamics of transfer had affected her. In either case, generalisations were impossible. A suggestion in *Methods from the Margins* (McKenna and Kirby 1989) was helpful in breaking the deadlock: it is the "stories option", whereby each interview is read as a whole and headings inserted. These headings are highlighted and become the categories. In the end I read all the interviews at a single sitting and allowed myself a summary of no more than twelve "issues" (Coles and Mountford 1988) arising from each. The interviews were then trawled in detail to find further examples in each category.

Another difficulty in coding the data was that women's experiences of similar entities were often diametrically different. The idea – from Strauss and Corbin – of describing "dimensions" within categories was helpful. This allowed an assessment of what made components of the experience of transfer good or bad without the need to make premature value judgements.

These processes constitute "open coding" – i.e. the breaking down of data into components. This must be followed by "axial coding", its rearrangement by means of connecting categories in new ways. In practice this was achieved by writing all the categories on a large sheet of paper and literally drawing links between them. This resulted in six groupings which were written up into pieces of prose of about 1500 words each. These were titled as follows:

1. Preparation for transfer: expectation and open-mindedness
2. The process of transfer: readiness and acceptance
3. Debriefing after transfer: developing a story
4. Interaction with the hospital: fear of medicalisation
5. The community midwife and GP: discontinuity and disruption of roles
6. The potential for disappointment

The first four are actually pairs of categories, a relatively concrete entity – phase, place – linked with a feeling or action. To return to our original focus, women's experience, there is an external and an internal aspect: what happened and how she reacted. In the prose, the pairings were presented as a theme (the reaction) with examples arising in particular situations or settings (the phase or place).

The fifth category does not quite fit the same pattern. The "concrete entity" is the community carer, but the abstract corollary refers to the activities of the carer, not the woman. The *whole category* (not just the first part of a pair) constitutes an "external" influence. The effect of that influence is not made explicit in the title. The category was reworked concentrating on the women's reactions, rather than what they said about the activities of the carers, the overt content of the section. It was clear that continuity of care was beneficial in all settings and that the lack of it was often damaging.

Another notable aspect of the fifth category, continuity of care, is that examples arose in all places and phases – i.e. across the spectrum of settings described in the first four categories. It also acted like a "dimension" within the "reaction" category of each pair: continuity tended to foster positive reactions and discontinuity negative reactions. The fifth category, then, seems to describe a process, a mechanism of connecting external and internal experience, influence and effect. It cuts across the other sections.

The sixth category is different again, referring only to feelings. And this category, too, seems to penetrate all the others. It acts rather like a marker for dimensions within the other "reaction" (feeling) categories. It is by no means a conclusion, a statement that the experience of transfer leads inevitably to insuperable disappointment, but a description of the kind of feelings which characterise and connect the negative dimensions of other reactions.

The final step is "selective coding" the process of choosing a core category and linking the others with it to make a single "story". Having compared the categories as above, the fifth and sixth are obvious candidates for this central position. This is on the grounds of their semantic properties rather than the relative importance of their substantive contents. It is easy to see how either could be used to link the other categories. The choice of one or the other is crucial because it will affect the final thrust of the thesis. One focuses on continuity, a relatively practical aspect of the organisation of care; the other focuses on a value judgement about the effect of transfer and might lead to a discussion about what it (transfer) "means" to women. Both conclusions could be discussed in the light of relevant theory (the nature of the caring relationship, the conflicting models of childbirth) and both could lead to practical recommendations – although improving continuity is more concrete than changing societal and professional norms.

The eventual solution was to use the sixth category, "the potential for disappointment", as the opening theme. It sets the scene by describing women's vulnerability with respect to transfer. The first four categories then become "worked illustrations" of this vulnerability and of how it is increased or ameliorated in particular situations. The fifth category, "continuity", then becomes the conclusion – a round up of the way that care affects women's experience.

The result of this "selective coding" is to produce a "story" which addresses in a very direct way the original focus of inquiry, namely:

> "Given the high expectations of women booked for community delivery, is their experience of transfer more distressing than the same complications under a single system of care?"

In one sentence, the answer is,

> "Yes – they are particularly vulnerable by virtue of being transferred, but certain aspects of care, notably continuity, can ameliorate or exacerbate the disappointment experienced."

## Validity and reliability in the qualitative study

The meaning and criteria for validity in naturalistic inquiry are very different from those in the traditional, quantitative approach. Lincoln and Guba (1985) provide an oft-repeated comparison. This is summarised in the following table and will be the basis for my discussion.

**Table 3.2.** Validity in traditional and naturalistic paradigms

| Traditional paradigm | Naturalistic paradigm |
|---|---|
| Internal validity | Credibility |
| External validity | Transferability |
| Reliability | Dependability |
| Objectivity | Confirmability |

The idea of *internal validity* is used in two ways. It can refer to the accuracy with which constructs are defined. As Abramson puts it "how well does [the method] measure the characteristic that the investigator actually wants to measure? It [validity] is equivalent to a marksman's capacity to hit the bull's-eye" (Abramson 1990 p.151). Or it can refer to the statistical validity of tests used to prove correlations between those constructs (Campbell and Cook 1979). In naturalistic theory, the very idea of a single, stable reality is questioned. There are "multiple, constructed realities" and truth value involves demonstrating that these have been adequately investigated. As truth is in the eye of the beholder, we must talk about *credibility*. This may be judged by the constructors of the original multiple realities (i.e. the respondents) or by the consumers (i.e. the reader). The latter situation is particularly important in evaluation theory (Patton 1986) where the research will have been specifically commissioned. Ensuring this kind of credibility has huge implications for design – from negotiating the terms of reference with the stake-holders, to sampling, to member checking, to analysis and presentation. The present study will seem credible to general practitioners and midwives involved in community obstetrics, and to the women themselves, by virtue of the many instances they will recognise. It will be less convincing to obstetricians and policy makers whose terms of reference are different. For them, the perceived validity will depend on the "cogency of the theoretical reasoning" (Mitchell 1983).

*External validity* is the extent to which findings can be applied to other settings. In qualitative research this idea is also turned on its head, because of course truth is not universal. It is replaced by the construct *transferability.* Lincoln and Guba (1985) say it is the task of the investigator to supply "sufficient descriptive data to make similarity judgements possible". In the present study this is supplied by the survey data and by the summarised case histories – but also by the "thick description" in the actual presentation of the qualitative findings.

*Reliability*, to return to the earlier metaphor, would be represented by "a marksman's capacity to hit the same spot each time he fires, irrespective of how close he comes to the bull's-eye" (Abramson 1990 p.139). In other words, how consistent, or repeatable, are the findings? Naturalistic theory rejects this, too: after all, reality is constantly changing. Lincoln and Guba substitute the term *dependability* and discuss ways in which studies might be replicated by teams looking at the same phenomenon.

The final opposing constructs are *objectivity* and *confirmability.* Whereas traditional research attempts to use and to prove that the instruments and methods are neutral, the naturalistic paradigm accepts that there will be bias. Lincoln and Guba offer a series of strategies for enhancing confirmability. These include efforts to minimise bias such as practising value-free note taking, constantly searching for negative instances, peer debriefing, purposeful testing of rival hypotheses. The idea is to get as close to the raw data as possible, but in a way which is constantly checking the breadth of vision. But they also advise documenting the ways in which bias may have occurred, for instance by keeping a reflexive journal. Lincoln and Guba describe the possibility of external audit of a piece of research. Feminist theory is more forthright about the need to make the researcher's personal bias public. Stanley (1990) talks of the researcher being "grounded as an actual person in a concrete setting" and of "focusing on the conditions of production". McKenna and Kirby (1989) advise keeping and coding process data as well as the substantive material.

## Section C
## Quantifying experience and design problems

This section looks at the (failed) attempt to explore the effects of transfer in a quantitative way and at the advantages and disadvantages of combining quantitative (survey) methodology with a qualitative (naturalistic) approach.

### Quantitative analysis of the experience of transfer

One aim of the study (as stated in Chapter 2) was to "focus on transfer". It was hoped that this could be done in both a quantitative and a qualitative way. What was intended by "focusing on transfer"? It should be singled out for description and comparison – and this was done in the sense that rates and indications were surveyed and compared with those in other units. But given the focus of the study as a whole on women's experience of childbirth, it would have been interesting to compare that aspect (the effect on women's experience) of transfer with shared care. Hence the third research question:

> "Is the experience of transfer following complications more satisfactory than the experience of complications under shared care alone?"

Considerable efforts were made to translate this question into concepts capable of statistical analysis and to find ways of meaningfully comparing the booking groups, or sub-populations of those groups. The design envisaged was based on the pattern of possible outcomes for women entering the two systems of care. This is presented in Table 3.3, which also shows the number of cases and controls falling into each outcome cell.

**Table 3.3.** Possible outcomes for community-booked and shared care women

| | Community-booked women (home birth and GP unit) | | | | Shared care women | | |
|---|---|---|---|---|---|---|---|
| | Continuous comm'y care | Transfer to consultant care | | | Continuous consultant care | | |
| | ND | ND | OVD | CS | ND | OVD | CS |
| **Primips** | 18 | 7 | 6 | 3 | 23 | 12 | 6 |
| **Multips** | 50 | 9 | 2 | 3 | 37 | 2 | 3 |

Key: ND = Normal delivery; OVD = Operative vaginal delivery; CS = Caesarean section

Transferred women from the community-booked group would be compared with shared care women (non-transferred, by virtue of being booked for hospital delivery in any case). But the experience of transfer needs to be separated out from other aspects of the delivery: it is known that women who have had a normal vaginal delivery of a healthy child are generally satisfied whatever their care was like, whereas those having Caesarean section (and probably assisted vaginal deliveries too) are less satisfied. Even within the "normal" deliveries there would be different levels of intervention. Furthermore, it was known that community-booked women would have different expectations to the shared care women, so that a highly interventionist experience might be more distressing to them. It was therefore decided to develop composite scores for ***expectation*** and ***outcome*** and to calculate the "gap" between them which would represent (perceived) ***experience***. This would then be correlated with another composite score, for ***satisfaction***.

The problem was that the scoring systems did not produce wide enough variations to generate meaningful scattergrams; the correlation coefficients were too low to make it worth trying to compare interactions with further variables – i.e. to look at differences between transferred and non-transferred women. This was partly due to the very small numbers. As can be seen from Table 3.3, after separating the different modes of delivery (which were not included in the outcome score) and parity (which would have a profound influence on women's actual and perceived experience) the numbers in each cell are very low. Even this level of subdivision is probably inadequate: home birth and GP unit women have been combined. Their expectations, and the impact of transfer would be different. GP unit women will always have expected to be physically in hospital for the delivery itself, so that transfer encompasses only the formal change of responsible carer. Home birth women will have had to adjust to the unexpected change of venue too.

The scoring systems and scatter plots for three subgroups (primiparous women having normal deliveries under shared care or community care, with and without transfer) are shown in Appendix 2. Perhaps the most valuable way of using these data would have been to look more closely at the outliers.

## Combined methodologies

At first sight using more than one method should increase the usefulness of a study. Triangulation is generally held to improve validity (Denzin 1970). In addition, incorporating qualitative aspects into a survey will give insights into the explanations underlying any associations found and may open up new fields of inquiry (Cartwright 1983). These advantages need to be looked at a little more closely.

What does triangulation actually mean? Data are gathered in more than one way to compensate for the bias of a single approach. This can apply to: instrumentation, i.e. using different instruments or kinds of instruments; investigators (who are, in some senses, instruments themselves); sampling techniques; methodologies; and theoretical approaches. Denzin talks of "multiple triangulation" by which he means combining some or all of the above. It seems to me however, that unless there is some convergence with respect to the data themselves, the value of triangulation is lost. To use the metaphor in a literal way, unless the several lines of inquiry cross (triangulate), there is no common point for them jointly to illuminate.

Aspects of this study did make use of triangulation. For instance, within the survey, the open question about expectations in the antenatal questionnaire elaborated on the differences established by the closed (quantitative) assessment. In a further study it would be interesting to try to conceptualise formally and prove some of the subtler differences in attitudes and to look at *why* community-booked women have different expectations. But there was less interaction "between methodologies". The interviews uncovered important aspects of transfer – women's sense of failure and guilt at having dropped out of one system of care, and the way this was exacerbated by discontinuity of care. The quantitative study did not explore these variables, in relation either to overall satisfaction, or to their mutual interaction. In retrospect, it would have been useful to carry out some interviews *before* constructing the questionnaires. And having begun to understand some of the variability *within* transfer (as opposed to contrasting it with non-transfer), it might have been better to abandon the non-equivalent control design and focus more narrowly on community-booked women alone.

Triangulation also worked from the opposite point of view: quantitative data illuminated the qualitative. The survey was an end in itself, but it put the interviews into a well defined context. This is important for readers who wish to extrapolate to other situations and answers the conditions for "transferability" in naturalistic inquiry (Lincoln and Guba 1985).

If we move to more practical considerations, there were also advantages and disadvantages. The survey was helpful in establishing which women were booked for community delivery, seeking their consent, gathering background data, tracking their progress and eventually interviewing a suitably diverse sample. But the content of the questionnaires must surely have given women some preconceptions about the researcher's interests and so biased the interviews. More than this, the survey demanded a very tightly organised structuring of resources and timetables. This frustrated the development of a truly "emergent design" which is the ideal for naturalistic inquiry (Lincoln and Guba 1985). Without the survey, energy could have been put into a much more in-depth exploration of the whole phenomenon of transfer, perhaps interviewing other players (such as partners, carers and managers).

It has to be admitted that the two approaches were never properly reconciled. The researcher was keen to survey a service in which she had been involved, but was also drawn to the ideas and problems around transfer. The study was designed without making a clear assessment of the opportunities for triangulation or the pros and cons of pursuing these different objectives in parallel.

# 4 DESIGN

The basic design of the study was a prospective, comparative survey using non-equivalent controls. Data for recruitment and to track the outcome of pregnancies was gleaned from hospital antenatal records and community midwifery and labour ward ledgers. The bulk of the information was gathered using self-administered postal questionnaires. A selection of women who had been transferred had long, loosely structured, face-to-face interviews which were taped and transcribed.

## The setting

The study took place in a large city in the north of England. There are two obstetric units, one within a general hospital (GH) and the other part of a specialist women's hospital (WH). Both are teaching hospitals and both accept patients from all over the city – although referrals tend to be geographical. WH also takes tertiary referrals from elsewhere in the Region. In 1991 there were almost 7000 hospital-booked deliveries in the city, evenly split between the two units. In the same year, 250 (3.6%) women booked for community obstetric care, that is GP unit or home birth (170 (2.4%) and 80 (1.1%) bookings respectively). These bookings were made through 15 practices, 10 within the catchment area of WH and five within the catchment area of GH. All bookings, whether for GP unit or home birth are notified to the relevant community midwifery office (i.e. at WH or GH) and the woman is allocated a community midwife.

Thus community-based obstetrics in this city is a minority service. The GPs and midwives involved are highly committed to a "low tech," personalised approach. There are liberal booking criteria at both units (at WH there are no "rules" – bookings are made entirely at the GP's discretion). In addition, many of the women have positively sought out the service and are themselves well informed and motivated.

## Selection of cases and controls

The study population consisted of women due to deliver in the six-month period July to December 1991 who were still booked for the GP unit or home birth at 32 weeks gestation.† The bookings were identified through the two community midwifery offices (at GH and WH). The ledgers at these offices provided a very complete sampling frame, as booking with a community midwife (a prerequisite for GP unit or home birth) could be done only through them. All 122 eligible women were invited to take part in the survey.

The controls were women booked for shared care during the same months who, from their obstetric history, *could have been booked for GP unit or home birth.* These women were drawn from the antenatal bookings for one consultant at each of the two units. The notes were checked just prior to their 32 week appointment. A woman was excluded if she:

- was booked for "full" hospital care or the "domino" scheme (GH only)
- lived outside the city (i.e. would normally have gone to a local district general hospital)
- was a patient of a GP known to offer GP unit/home births
- was already in another trial (WH only – a study of isoimmunisation)
- was less than 18 years old at the time of selection
- had an Asian or Arabic name
- had a serious problem in her (non-obstetric) past medical history
- had had a previous caesarean section or stillbirth
- had problems in the current pregnancy which would have needed transfer

The reasoning behind these exclusions was as follows: women booked for full hospital care or for the domino scheme would have more or less hospital contact respectively, and a different perspective from women booked for shared care – the "standard" service; women who lived in the catchment area of a different hospital (i.e. outside the city) must have been referred in for a special reason,

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† Since other studies often use an earlier entry point, it is perhaps worth giving details of the "drop out" rate prior to 32 weeks. The number of women originally notified to the community midwifery offices was 139. Thus 17 (14%) were lost in the intervening weeks. These are accounted for as follows:

| | |
|---|---|
| Obstetric problems (miscarriages 3; anomalies on booking scan 2; transfer before 32 weeks 3) | 9 |
| Actually booked for shared care (1) or midwife-only delivery (3) | 4 |
| Moved out of area | 4 |

either medical or social; women whose GP offered GP unit or home birth and who nevertheless chose hospital delivery might have been particularly negative about community booking. The controls are inevitably less motivated towards community booking than the cases (none of them sought it out!) but at least those who might have been positively avoiding it have been excluded. The fourth exclusion was to avoid women having to cope with being in more than one study at a time. The unit at WH was involved in a controlled trial of prophylaxis against Rhesus isoimmunisation. The criterion for inclusion was being Rhesus negative. Unless antibodies have already developed, this is not a factor in selection for community booking, so exclusion would not have confounded other variables.

The remaining five criteria were chosen to create a control group which reflected some of the demographic and most of the medical and obstetric characteristics of the cases. Few teenagers are booked for community delivery, so a lower age limit was set. Obviously this exclusion hampers any analysis of age differences between cases and controls. Similarly, community booking is rarely offered to women from ethnic minorities (reflecting, in part, the geographical location of the "obstetric" GPs in the city). Excluding these women also avoided the problem of approaching non-English speakers with a written questionnaire geared very firmly to a (white) English speaking clientele.

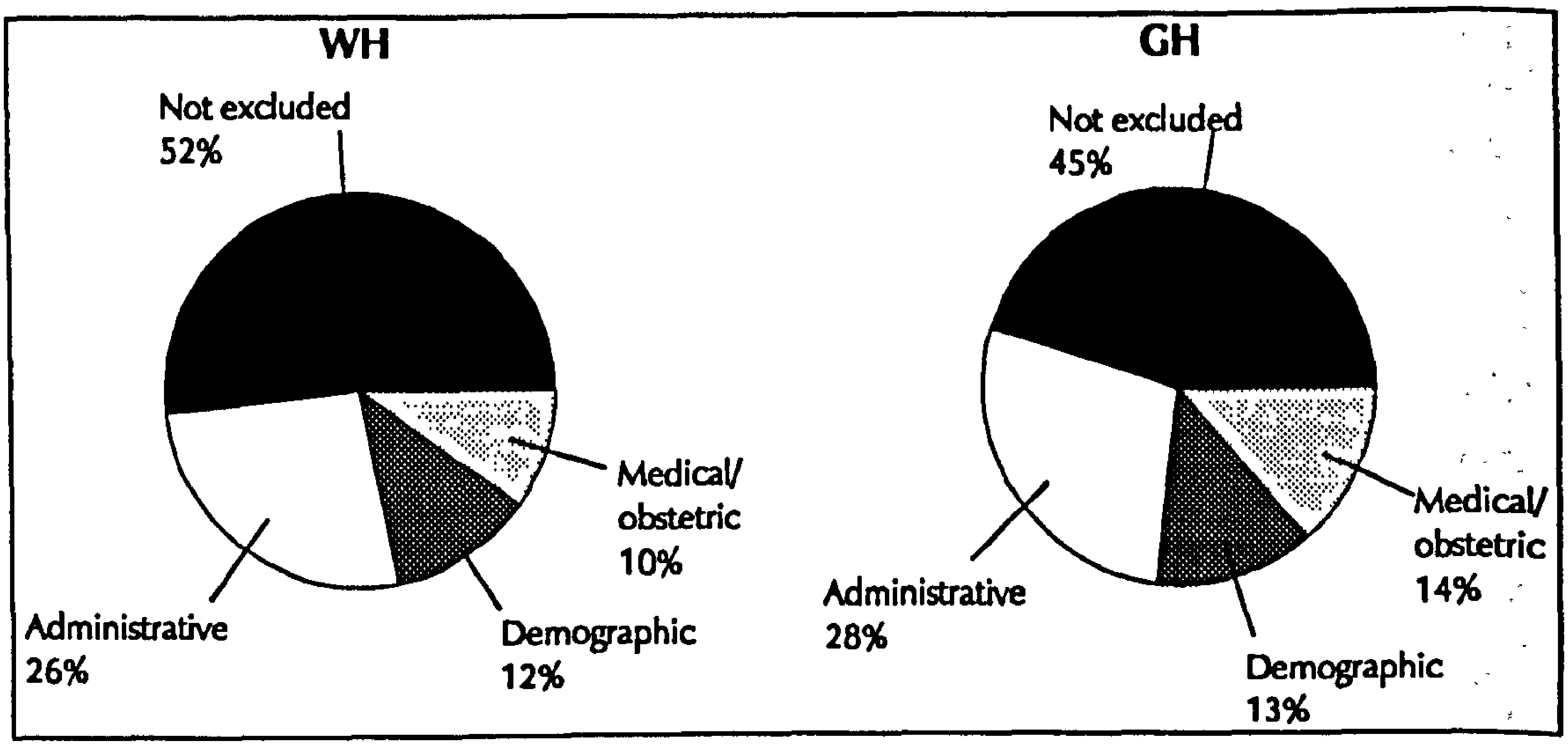
In terms of medical history, the exclusion of women with serious illnesses (e.g. diabetes, kidney disease) was fairly clear-cut. The only reliable obstetric bars to community booking were previous caesarean section, Rhesus isoimmunisation, and a history of late miscarriage or stillbirth. (In fact the latter was not universally applied by GPs making community bookings – the cases included one woman who, having had a previous stillbirth in hospital, specifically requested a home birth. It was felt wise to exclude such women from the controls, however, as they may have been distressed by unnecessary enquiries into their experiences.) Women who had had lesser obstetric complications – such as previous forceps and haemorrhage were not excluded. It is possible that some GPs were excluding women from community booking on these grounds, and that the controls were therefore comparatively "high risk". But actually, these aspects of obstetric history have poor predictive value, and on the whole the community booking policy was known to be very liberal. The final area of exclusion reflects the fact that the study picked up only those women who were still booked for community delivery at 32 weeks gestation. By this time, certain antenatal complications have emerged and some women have been transferred to a consultant (i.e. for shared or even full care). The decision to exclude at 32 weeks was made by the researcher on reviewing the notes. The indications included: twins, intrauterine growth retardation, bleeding, placenta praevia, foetal abnormalities, active genital herpes.

**Table 4.1.** Reasons for exclusion from controls at each unit

| Reasons for exclusion | Number at WH | Number at GH |
|---|---|---|
| **Administrative** | | |
| "obstetric" GP | 19 | 33 |
| full care/domino | 1 | 9 |
| from outside area | 8 | 2 |
| in Rhesus trial | 6 | 0 |
| **Demographic** | | |
| age 18 or less | 7 | 15 |
| Asian/Arabic name | 9 | 5 |
| **Medical** | | |
| epilepsy | 1 | 2 |
| diabetes | 0 | 1 |
| hypertension | 1 | 0 |
| respiratory disease | 1 | 0 |
| hypothyroid | 0 | 1 |
| drug abuse | 0 | 1 |
| **Obstetric (previous)** | | |
| caesarean section | 7 | 9 |
| previous stillbirth | 1 | 0 |
| **Obstetric (current)** | | |
| twins | 1 | 1 |
| active herpes | 1 | 0 |
| abnormality on scan | 0 | 2 |
| placenta praevia | 0 | 1 |
| degenerative fibroid | 0 | 1 |
| stillbirth before 32/40 | 0 | 2 |
| **Total excluded** | 63 | 85 |
| **Total invited** | 67 | 70 |
| **Total notes inspected** | 130 | 155 |

Figure 4.1 and Table 4.1 show the reasons and proportion of exclusions at each unit. It is important to present these in detail in order to see how the community-based service might be extrapolated to shared care women and hence the general population.

**Figure 4.1.** Reasons for exclusion from controls at each unit



## Sampling

The cases were a complete enumeration of all women booked for community delivery in the six-month period (excepting those who had moved or been transferred before 32 weeks gestation – see footnote page 59). This arrangement was chosen for theoretical and pragmatic reasons: in as much as the survey was intended to be a description of the existing service it seemed appropriate to attempt a complete census of bookings. It also maximised the number of cases and data that could be gathered given the available time and resources. Recruitment and tracking of the pregnancies required considerable effort on the part of the midwives, as well as the researcher and her assistant. It seemed wise to concentrate the effort over a short period before enthusiasm waned.

There were more controls to choose from: the aim was to recruit about 100 women, 50 from each unit. At WH there were roughly 60 bookings a month (under the chosen consultant) which, over six months, and after exclusions, would have given about 180 women to approach. This number was reduced by recruiting women due to deliver over part of the period only (October to mid December 1991). As with the cases, recruitment and follow-through required considerable effort and it was more efficient to concentrate this over a short period. By stopping in mid-December, most of the women had delivered by Christmas, which might have distorted patterns of care and response rates. At GH there was an even greater excess of eligible women due to deliver under the chosen consultant in the six-month period. The three months August to October were chosen and a 50% sample was drawn at random. This was actually done by rejecting alternate sets of notes before starting to exclude and should more properly be called "systematic sampling" (Moser and Kalton 1979).

## Response rates

Amongst the cases, antenatal questionnaires were eventually returned by 101 of the 122 eligible women (82%). The 21 "non-responders" were made up of:

7 who declined to be involved in survey
11 who agreed to be in survey but didn't return questionnaire
3 who were not approached for consent by midwife

Amongst the controls, 72% agreed to be involved, but only 62% returned their antenatal questionnaires. (Amongst those who did not agree will have been some who were not approached by the midwife – a breakdown of these figures is not available for the controls.) This overall rate disguises a difference between the units: at WH 82% agreed and 73% responded, at GH the figures were 61% and 51% respectively.

There was a further fall-off in the response rate for the postnatal questionnaires: to 78% for community-booked women and 58% for shared care controls.

These differences – between the two units and between the cases and controls – reflect the motivation and interest of the midwives who sought consent and of the women themselves. It is not surprising that women in receipt of a personal service were happy to take part in a study when invited – albeit on the researcher's behalf – by their "own" midwife. Similarly, the community midwives would have seen the study as a way of highlighting their work and been particularly keen for it to succeed.

Compared to other studies, the response rate is high for a postal questionnaire with just one written reminder. It illustrates again that pregnant women are usually good responders to even quite lengthy questionnaires about their experiences.

## Recruitment and ethical considerations

The names of women due to deliver in the study period were obtained from lists held at the community midwifery offices and in the antenatal clinics of the two units. It was therefore appropriate for the initial approach to women to come from the community or antenatal clinic midwives (although of course the researcher had already had access to identifying and clinical information before the women's permission was sought). This arrangement worked well because the community midwives were in regular contact with their community-booked women, and the clinic midwives saw women as they came for their second hospital appointment. (The two consultants were chosen partly on the grounds that their schedule of hospital visits for women having shared care included a routine appointment at 32 weeks gestation.) It also had the safeguard that if women had had some complication between the researcher checking the notes just prior to 32 weeks and their actual appointment, the midwife could use her discretion about inviting them to join the study.

The community midwives were given a letter of explanation and a consent form to hand to each woman under their care at about 32 weeks gestation. They were asked to return the form with the woman's reply or an explanation of why she had not been approached. (See letters and forms in Appendix 3.) In the hospital antenatal clinic, the relevant letters and form were clipped inside the antenatal notes, to remind midwives to approach the women as they saw them in clinic. Completed consent forms (or explanatory note) were collected in a box in the clinic which the researcher emptied at weekly intervals. Thus only women who had agreed to be in the study were sent antenatal questionnaires at 36 weeks.

Consent for two further elements of the study – to have access to the "Anxiety and Depression" score routinely collected by the Health Visitor a month after delivery, and to be interviewed (a few women only) – was sought in the letter covering the postnatal questionnaire. The women were assured of confidentiality, especially that their individual comments would not reach any of their carers. Their replies could not be anonymous until the stage of analysis, however, as more than one set of data was gathered and reminders were sent if necessary.

The study was approved by the Ethics Committee responsible for the respective units. The main worry expressed was that women who had a very sick baby, or even a stillbirth or neonatal death, would be inadvertently approached. For the shared care women, this was a possibility: the staff (other than one antenatal clinic midwife) were unaware which women were in the study. The only safeguard was that the researcher checked the labour ward ledgers at both units on a weekly basis throughout the study period. Premature deliveries, complicated labours, sick babies (sent to the special care baby unit) and stillbirths could be identified. One of the shared care women did have a stillbirth between giving consent at 32 weeks and the antenatal questionnaire at 36 weeks. For the community-booked women, the deliveries were tracked through the community midwifery offices in the same way. In addition their own midwives were aware of the study and could have alerted the researcher if there was a problem.

## The cycle of data collection

The unit of enquiry was the course of each woman's pregnancy, labour and early puerperium. The bulk of the data was gathered by means of an antenatal and a postnatal questionnaire sent to each case or control. Qualitative aspects of selected women's experiences were documented by means of a long interview. Data were also collected from various documentary sources, to identify suitable cases and controls, to track the pregnancy in order to send the appropriate questionnaires, to establish the mode of delivery and to verify some of the information in the questionnaires. Table 4.2 overleaf summarises the cycle of data collection. It shows the points at which documentary data were collected, what information was sought and the timing of the questionnaires and interviews.

**Table 4.2.** Timing and source of data collection

| Weeks gestation/ postnatal | Community-booked women | Shared care women |
|---|---|---|
| 28 - 32 | Community midwifery office ledger:<br>name, address, age<br>name GP + midwife<br>parity<br>expected date delivery<br>whether home/GP unit | Notes of women due during study period:<br>name, address, age<br>whether "obs" GP<br>parity<br>expected date delivery<br>medical data |
| 32 | Consent form via community midwife | Consent form via antenatal clinic midwife |
| 36 | Antenatal questionnaire | Antenatal questionnaire |
| 38 | Reminder if necessary | Reminder if necessary |
| 40 | Community midwifery office ledger:<br>date/place delivery<br>mode delivery<br>any complications<br>whether transferred | Labour and delivery suite ledger:<br>date delivery<br>mode delivery<br>any complications<br>health of baby |
| 10 - 14 days p.n. | Postnatal questionnaire<br>(with consent for Health Visitor score and request for interview) | Postnatal questionnaire<br>(with consent for Health Visitor score) |
| 4 weeks p.n. | Reminder if necessary | Reminder if necessary |
|  | Health visitor's records<br>(anxiety/depression score) | Health visitor's records<br>(anxiety/depression score) |
| 3 - 7 weeks p.n. | Interview<br>(selected women only) |  |
| 3 months+ | GP records<br>(obstetric care summaries or individual notes)<br>mode delivery<br>complication |  |
|  | Health visitor score accessed | Health visitor score accessed |

## Instrumentation

The antenatal and postnatal questionnaires and the interview schedule are given in Appendix 3. The use and design of these instruments is discussed in detail in Chapter 3 on methodology.

## The pilot study

The survey aspect of the study was piloted by sending out antenatal questionnaires to twelve community booked women. This led to changes in the wording (the effect of complications in labour on possible responses had been overlooked). But it was also useful to dry-run the sampling frame, to test out the organisation (for contacting the women via their community midwife, sending and receiving questionnaires). As far as the interviews were concerned, the researcher had originally planned for these to be carried out by an assistant, but an early trial interview was unsuccessful and the researcher herself carried out the rest. It would certainly have been helpful to carry out and analyse several interviews at a much earlier stage (see Chapter 3, Section C on the design problems of combining quantitative and qualitative methodologies).

The pilot study was not extensive enough, however, really to influence the overall design of the study. Decisions about numbers had been taken in the light of documentary data gathered during preparation of the original protocol. They were also heavily influenced by the short time available, and relative rarity of community booking.

## Statistical analysis

All the quantitative data from the questionnaires and documentary sources were coded and entered onto a data file. It was analysed on a personal computer using SPSS-X (Statistical Package for the Social Sciences). The processes of coding, creating a data file and analysing the data relied heavily on the scheme given by Bryman and Cramer (1990). Additional information about some of the tests was from Swinscow (1983).

Some of the results are purely *descriptive* of the service and the women using it. Frequencies of certain characteristics, events and outcomes are given. In a few instances (for example the age of women booking for community delivery) these descriptions are sharpened by the inclusion of averages and ranges.

But many of the data are *comparative* – i.e. characteristics, events and outcomes are given for the separate booking (or other) subgroups and an attempt is made to see if differences between them are statistically significant. A probability of 5% (0.05) is taken as being significant – i.e. there is a less than one in twenty chance that the difference arose by chance. It should be noted that the level of significance does not denote the strength of an association. Using the computer it is very easy to generate a mass of associations and "hunt the significance" (Cartwright 1983), but the proper way to proceed is by proposing and testing hypotheses.

The situation is complicated because the data were made up of different kinds of variables: categorical (nominal or frequency) and non-categorical (ordinal or interval). The distribution of variables in the populations was usually non-parametric. Comparisons were usually made across two but occasionally three groups. All these factors have to be taken into account when choosing a procedure to test for difference between two variables. The following tests are employed:

*Chi-square.* This is used for samples from two or more unrelated populations when the variables are categorical (nominal or frequency). Its use is limited when the expected frequencies are small. With only two categories (or one degree of freedom) there should be at least five members in each category.

*Binomial test.* This is for similar situations, but can be used when the numbers are small and when the study population is being compared to a expected frequency rather than another actual group.

*Mann-Whitney U test.* This is for comparing two groups of non-parametric data when the variables are ordinal or ranked, as for instance the data about women's opinions which ranged along a scale of three or four ranked points.

*t-test.* This is used to test whether there is a difference in the means of two or more groups. The groups should be parametric and if their variances are similar (F test < 0.05) they are pooled. For three or more groups, a one-way analysis of variance is computed.

## Analysis of responses to open questions

There was one open question in the antenatal questionnaire, and two in the postnatal questionnaire. Only the first of these, "Do you have any other hopes or plans for the birth?" is analysed and presented here.

The women's written comments were typed up and subdivided into sentences or phrases each containing a single idea or statement. Where a sentence contained two ideas but the sense of the whole did not allow it to be split, it was copied twice and one part bracketed in each copy. Each statement was labelled with the woman's identity number. Two letters (HB, GP, WH, GH) prefaced the number and allowed the researcher to know which booking group the woman belonged to – home birth, GP unit, specialist women's hospital or general hospital. (The independent observer who did a separate analysis of the same material was unaware of this categorisation, although she might have guessed.)

The statements were literally cut up and resorted into piles which became categories. The categories were then analysed by booking group. The number of statements from each booking group in a given category was computed and these were sub-categories were ordered and compared. This quantitative organisation of the data was helpful in perusing its content – but understanding the categories involved going back to the individual statements.

The researcher completed her categorisation and wrote up her analysis of the women's "hopes and plans" *before* looking at the independent observer's work. The eventual presentation reflects this process – the two analyses are juxtaposed rather than blended. This is perhaps more longwinded but does give the reader a sense of how the interpretations were verified or questioned.

# 5 RESULTS OF THE SURVEY

## Section A
## Number and pattern of community bookings

This section demonstrates that community obstetrics is a minority service within the city. Only a small percentage of the total births (7000 in 1991) are booked for GP unit or home birth (Table 5.1). Only 15 of the 100 practices in the city offer the service. Of these, six account for over 90% of the bookings (Table 5.2). Not surprisingly, women often change GP in order to get the maternity care of their choice. This is particularly true of women wanting home birth (Table 5.3). The chance of a woman having changed GP to book a home birth is significantly higher than the chance of her having changed to book for the GP unit (Chi square 0.0001).

**Table 5.1.** Number and type of community bookings

| Type of booking | Number of bookings in 6 months (%) | | Projected annual bookings |
|---|---|---|---|
| Home Birth | 48 | (39%) | 96 |
| GP unit | 74 | (61%) | 148 |
| Total | 122 | (100%) | 244 |

**Table 5.2** Practices making community bookings

| Practices | Number of bookings in 6 months (%) | | Number from outside practice |
|---|---|---|---|
| Practice 1 | 41 | (34%) | 13 |
| Practice 2 | 18 | (15%) | 2 |
| Practice 3 | 17 | (14%) | 11 |
| Practice 4 | 16 | (13%) | 8 |
| Practice 5 | 12 | (10%) | 2 |
| Practice 6 | 6 | (5%) | 1 |
| Practices 7–15 | 12 | (10%) | 1 |
| Total | 122 | (100%) | 38* |

Note: *Figure based on 80% response rate for this variable (may be higher)

**Table 5.3** Women changing GP for maternity care

| Whether changed GP | Total bookings in 6 months (%) | | Home birth | GP unit |
|---|---|---|---|---|
| Different GP | 38 | (39%) | 25 | 13 |
| Usual GP | 60 | (61%) | 15 | 45 |
| Total | 98* | (100%) | 40 | 58 |

Note: *Figure based on 80% response rate for this variable (may be higher)

## Section B
## Characteristics of women booking for community delivery

Tables 5.4 and 5.5 set out the pattern of parity and age amongst women booking for community delivery. It can be seen that relatively few primiparous women are booked, particularly for home birth. Women also tend to be older, even when parities are considered separately and taking into account the fact that shared care controls under the age of 18 were excluded. Table 5.6 shows the age distribution amongst primiparous women: there is a high proportion of "elderly primips" (first-time mothers over the age of 30). These tables disguise differences between the two shared care units. Women booked for shared care at WH were older and there was a higher percentage of "elderly primips". Looking at the three groups (i.e. community-booked women, WH-booked women and GH-booked women) there was a significant difference in ages for multiparous, though not for primiparous women (one-way analysis of variance gives F ratio 6.122, probability 0.003). The differences in the proportion of "elderly primips" did not, however, reach significance.

Women booking for community delivery also differed in other ways from shared care women. All respondents were white and all but one spoke English as a first language. The controls had, of course, been chosen to match them in these respects. The list of exclusions in Table 4.1 above shows the true percentage of women from ethnic minorities booking at the two units. Comparisons were made for other characteristics – social class based on the *woman's* latest occupation and educational attainment. These categories were combined to discover the percentage of women who had worked or trained in health (including physiotherapy, occupational health, nursing, midwifery, dentistry and medicine). In Tables 5.7, 5.8 and 5.9, the two shared care units are shown separately. Analysed in this way, there are clear trends for community-booked women to be more highly educated, in more skilled work and to have worked in the field of health. The only significant difference was for educational attainment (Chi square gives 0.0001).

Table 5.10 focuses on women who chose to change GP for maternity care. It can be seen that they tend to be more experienced and/or knowledgeable than women who were offered community-based care automatically. This trend reaches significance only for parity (Chi square 0.048).

**Table 5.4.** Parity of women booking for GP unit, home birth and shared care

| Parity | Home birth | GP unit | Total (%) | | Shared care controls (%) | |
|---|---|---|---|---|---|---|
| Primiparous women | 8 | 31 | 39 | (32%) | 44 | (50%) |
| Multiparous women | 40 | 43 | 83 | (68%) | 44 | (50%) |
| Total | 48 | 74 | 122 | (100%) | 88 | (100%) |

**Table 5.5.** Age of women booking for community delivery and shared care

| Parity | Community-booked women | | | | Shared care |
|---|---|---|---|---|---|
| | Total booked | Mean age (in years) | Standard deviation | Min/Max | Mean age (in years) |
| Primiparous | 35 | 29.2 | 4.7 | 18/38 | 28.3 |
| Multiparous | 66 | 30.6 | 4.6 | 20/39 | 28.0 |

**Table 5.6.** Number of "elderly primips" booking for community/shared care

| Age band | Community-booked women (%) | | Shared care women (%) | |
|---|---|---|---|---|
| 29 or under | 17 | (49%) | 26 | (59%) |
| 30 to 34 | 14 | (40%) | 15 | (34%) |
| 35 or over | 4 | (11%) | 3 | (7%) |
| Total | 35 | (100%) | 44 | (100%) |

**Table 5.7.** Educational attainment of community-booked/shared care women

| Level of education | Comm'y-booked women (%) | | Shared care women | | | |
|---|---|---|---|---|---|---|
| | | | WH | (%) | GH | (%) |
| Nil beyond school | 41 | (41%) | 25 | (50%) | 26 | (68%) |
| Diploma (for skilled work) | 6 | (6%) | 13 | (26%) | 6 | (16%) |
| Professional qualification | 23 | (23%) | 4 | (8%) | 3 | (8%) |
| Degree/further degree | 31 | (31%) | 8 | (16%) | 3 | (8%) |
| Total | 101 | (100%) | 50 | (100%) | 38 | (100%) |

**Table 5.8.** Latest or current work of community-booked/shared care women

| Type of work | Comm'y-booked women (%) | | Shared care women | | | |
|---|---|---|---|---|---|---|
| | | | WH | (%) | GH | (%) |
| Un-/semi-skilled | 12 | (12%) | 7 | (14%) | 4 | (11%) |
| Skilled manual/non-manual | 28 | (29%) | 21 | (43%) | 20 | (54%) |
| Managerial/professional | 57 | (59%) | 21 | (43%) | 13 | (35%) |
| *Total | 97 | (100%) | 49 | (100%) | 37 | (100%) |

Note: * Excludes those who never worked outside home: 4 comm'y-booked, 1 WH and 1 GH.

**Table 5.9.** Tendency for community-booked women to have worked in health

| Whether worked in health | Comm'y-booked women* (%) | | Shared care women | | | |
|---|---|---|---|---|---|---|
| | | | WH | (%) | GH | (%) |
| Work in health | 25 | (25%) | 8 | (16%) | 4 | (11%) |
| Other work | 75 | (75%) | 42 | (84%) | 34 | (90%) |
| Total | 100 | (100%) | 50 | (100%) | 38 | (100%) |

Note: *If "community-booked" is subdivided into home birth/GP unit, the home birth women show an even higher preponderance of work in health (31%)

**Table 5.10.** Characteristics of women who change GP for maternity care

| Characteristic | Changed GP N = 38 | (%) | Same GP N = 60 | (%) |
|---|---|---|---|---|
| Multiparous (second or subsequent baby) | 29 | (76%) | 34 | (57%) |
| Education (professional qualification/degree) | 24 | (63%) | 28 | (46%) |
| Work in health (trained or worked in health) | 12 | (32%) | 13 | (22%) |

## Section C

## Transfer rates and obstetric outcome in community-booked women

In this section parities are given separately as parity has a strong influence on outcome. Table 5.11 gives the transfer rate broken down by timing (i.e. antenatal or intrapartum). Table 5.12 gives the clinical indications for transfer.

The overall transfer rate, 46% in primiparous and 23% in multiparous women, is similar to that found by Bull at the Oxford GP unit (Bull 1983). However, whereas Bull found that antenatal transfers were more common than intrapartum transfers (in the ratio of 2:1) the present study found the opposite. The pattern is significantly different (Binomial test gives significance of 0.0015 and 0.045 for primiparous and multiparous women respectively).

With respect to obstetric outcome in community-booked women (irrespective of whether they were subsequently transferred to consultant care), the numbers are too small to comment on perinatal mortality or morbidity, let alone maternal mortality. But there may be discernible trends in complication and/or intervention rates. Table 5.13 gives a complete list of such outcomes. In Table 5.14 these have been condensed into just two categories: firstly "non-operative live delivery" which includes premature labour (if normal) and episiotomy, and secondly all stillbirths and operative deliveries including manual removal of placenta and repair of third degree tear. This allows comparisons to be made with other studies where the subcategories have been differently defined and with the shared care women in the present study. In the latter case, the difference does not reach statistical significance (Chi square gives 0.068).

The final table in this section (Table 5.15) gives the obstetric outcome after transfer and shows how half the women proceed to non-operative vaginal delivery.

**Table 5.11.** Antenatal and postpartum transfer in community-booked women

| If and when transferred | Number of primiparous women transferred (%) | Number of multiparous women transferred (%) |
|---|---|---|
| Antenatal transfer | 4 | 6 |
| Intrapartum transfer | 13 | 11 |
| Stage transfer unknown | 1 | 2 |
| Total transferred | 18 (46%) | 19 (23%) |
| Not transferred | 21 (54%) | 64 (67%) |
| Total bookings | 39 (100%) | 83 (100%) |
| Ratio ante/intrapartum | 0.31:1 | 0.55:1 |

**Table 5.12.** Reasons for transfer in community-booked women

| Reasons for transfer | Primiparous women | Multiparous women | Total | (%) |
|---|---|---|---|---|
| pre-eclampsia | 1 | 0 | 1 | (9%) |
| postmaturity | 2 | 3 | 5 | (46%) |
| antepartum haemorrhage | 1 | 0 | 1 | (9%) |
| breech presentation | 1 | 1 | 2 | (18%) |
| intrauterine foetal death | 0 | 1 | 1 | (9%) |
| sciatica | 0 | 1 | 1 | (9%) |
| Total antenatal transfers | 5 | 6 | 11 | (100%) |
| premature labour | 0 | 2 | 2 | (9%) |
| fast labour, com. midwife too late | 0 | 1 | 1 | (4%) |
| prolonged rupture of membranes | 2 | 2 | 4 | (17%) |
| meconium | 1 | 0 | 1 | (4%) |
| cord prolapse | 0 | 1 | 1 | (4%) |
| breech presentation | 0 | 1 | 1 | (4%) |
| request for epidural | 1 | 1 | 2 | (9%) |
| delay first stage | 4 | 0 | 4 | (17%) |
| delay second stage | 3 | 1 | 4 | (17%) |
| third degree tear | 0 | 1 | 1 | (4%) |
| retained placenta | 1 | 1 | 2 | (9%) |
| Total intrapartum transfers | 12 | 11 | 23 | (100%) |
| Reason for transfer not known | 1 | 2 | 3 | (100%) |

**Table 5.13.** Obstetric outcome in community-booked women

| Obstetric outcome | Primiparous women (%) | Multiparous women (%) | Total |
|---|---|---|---|
| Normal vaginal delivery | 29 (74%) | 76 (92%) | 105 |
| Manual removal placenta | 1 (3%) | 1 (1%) | 2 |
| Forceps (all types) | 2 (5%) | 1 (1%) | 3 |
| Ventouse extraction | 4 (10%) | 0 (0%) | 4 |
| Elective Caesarean section | 0 (0%) | 1 (1%) | 1 |
| Emergency Caesarean section | 3 (8%) | 2 (2%) | 5 |
| Stillbirth | 0 (0%) | 1 (1%) | 1 |
| Not known | 0 (0%) | 1 (1%) | 1 |
| Total | 39 (100%) | 83 (100%) | 122 |

**Table 5.14.** Non-operative live delivery rate in all groups

| Type of delivery | Primiparous women | | | Multiparous women | | |
|---|---|---|---|---|---|---|
| | Comm'y-booked (%) | Shared care | | Comm'y-booked (%) | Shared care | |
| | | WH (%) | GH (%) | | WH (%) | GH (%) |
| Non-operative live delivery | 29 (74%) | 21 (75%) | 10 (48%) | 76 (93%) | 25 (93%) | 21 (88%) |
| All others | 10 (26%) | 7 (25%) | 11 (52%) | 6 (7%) | 2 (7%) | 3 (12%) |
| Total | 39 | 29 | 21 | 82* | 27 | 24 |

Note: *outcome unknown in one of the 83 multiparous community-booked women

**Table 5.15.** Outcome after transfer form community to consultant care.

| Type of delivery | After antenatal transfer (%) | After intrapartum transfer (%) | Total (%) |
|---|---|---|---|
| Non-operative live delivery | 7 (53%) | 13 (54%) | 20 (54%) |
| Operative vaginal delivery | 1 (8%) | 8 (33%) | 9 (24%) |
| Caesarean section | 3 (23%) | 3 (13%) | 6 (16%) |
| Stillbirth | 1 (8%) | 0 (0%) | 1 (3%) |
| Not known | 1 (8%) | 0 (0%) | 1 (3%) |
| Total | 13 (100%) | 24 (100%) | 37 (100%) |

# Section D

## The style of care: obstetric management, continuity of care, some resource implications

Information was collected about many aspects of *obstetric management*, meaning those interventions which are short of "obstetric outcome" as described in Section C. Aspects of obstetric management show greater variability than obstetric outcome. They point to differences in management style and maternal morbidity and have resource implications. Just two examples are presented here. Table 5.16 shows the epidural rate for all deliveries (excluding only women who had elective Caesarean section). Table 5.17 looks at women who had a normal delivery (including those transferred) when the epidural would have been for pain relief rather than to cover an operative procedure. There was a significant difference between rates in community-booked and shared care women in both situations. The probabilities are shown at the foot of each column.

The second example of a "minor" intervention is the use of episiotomy. Only primiparous women achieving normal deliveries are considered – it is unusual in multiparous women (less than 10%) in either system of care. Its use is almost inevitable with operative vaginal deliveries and irrelevant with Caesarean section. Table 5.18 shows that there are no significant differences between community-booked and shared care women. But if non-transferred women (i.e. those remaining under the care of their community midwife) are compared to shared care women (third column, Table 5.18), there is an obvious trend for a lower episiotomy rate in community-booked women. It does not, however, reach significance (Chi square gives a probability of 0.12).

Another characteristic of community obstetric care is *enhanced continuity*. Two simple concepts are used to measure it – the total number of midwives at the delivery, and the presence of a familiar midwife at key moments. Table 5.19 shows that there is a significant difference in the number of midwives at community-booked and shared care labours, even though transfers and complicated deliveries were not excluded (Mann-Whitney test gives probabilities of 0.05 and 0.005 in primiparous and multiparous women respectively). Table 5.20 sets out likelihood of a woman meeting a familiar midwife during labour and on the first postnatal day in either system of care, including after transfer.

The midwife is the key carer for low risk deliveries, but in practice GPs tend to be more involved than hospital doctors even at normal deliveries. This has implications for continuity of care and resources. Table 5.21 shows the number of doctors attending normal deliveries. There was no significant difference between community-booked and shared care for primiparous or multiparous women.

These features of the service, obstetric management and continuity of care, have implications for resources. Another resource issue is the length of stay in hospital. Table 5.22 shows the percentage of GP unit-booked and shared care women staying one night or less. (Home birth bookings have been omitted, although those who are transferred will contribute to bed use.) There is a significant difference between the systems (Chi square gives a probability of 0.0007 and 0.008 for primiparous and multiparous women respectively). It should be remembered, too, that many of those staying one night or less were GP unit women who actually had the baby at home, or only came into hospital for a few hours. This applied to more than half the primiparous and multiparous women.

**Table 5.16.** Epidural rate in all spontaneous labours for community-booked and shared care women

| Use of epidural | Primiparous women | | Multiparous women | |
|---|---|---|---|---|
| | Community-booked (%) | Shared care (%) | Community-booked (%) | Shared care (%) |
| Had epidural | 8 (25%) | 20 (54%) | 0 (0%) | 6 (16%) |
| No epidural | 24 (75%) | 17 (46%) | 62 (100%) | 31 (84%) |
| Total | 62 (100%) | 37 (100%) | 62 (100%) | 37 (100%) |
| Probabilities | Chi square 0.014 | | Binomial test (two tail) 0.001 | |

**Table 5.17.** Epidural rate in normal deliveries for community-booked and shared care women

| Use of epidural | Primiparous women | | Multiparous women | |
|---|---|---|---|---|
| | Community-booked (%) | Shared care(%) | Community-booked (%) | Shared care (%) |
| Had epidural | 3 (12%) | 10 (40%) | 0 (0%) | 4 (12%) |
| No epidural | 22 (88%) | 15 (60%) | 100 (100%) | 28 (88%) |
| Total | 25 (100%) | 25 (100%) | 100 (100%) | 32 (100%) |
| Probabilities | Binomial test 0.005 | | Binomial test 0.008 | |

**Table 5.18.** Episiotomy rate during normal delivery for community-booked and shared care primiparous women

| Use of episiotomy | Community-booked inc. transfer (%) | Shared care (%) | Community-booked exc. transfer (%) |
|---|---|---|---|
| Had episiotomy | 8 (32%) | 9 (39%) | 3 (17%) |
| No episiotomy | 17 (68%) | 14 (61%) | 15 (83%) |
| Total | 25 (100%) | 23 (100%) | 18 (100%) |
| Probability | | Chi square 0.12 | |

**Table 5.19.** Number of midwives attending delivery (labour, birth and first hour after birth) in community-booked and shared care women

| Number of midwives | Primiparous women | | | | Multiparous women | | | |
|---|---|---|---|---|---|---|---|---|
| | Community-booked (%) | | Shared care (%) | | Community-booked (%) | | Shared care (%) | |
| 1 midwife | 6 | (18%) | 0 | (0%) | 25 | (40%) | 5 | (14%) |
| 2 midwives | 6 | (18%) | 11 | (28%) | 21 | (34%) | 12 | (32%) |
| 3 midwives | 13 | (40%) | 9 | (23%) | 9 | (15%) | 14 | (38%) |
| 4 or more | 8 | (24%) | 20 | (50%) | 7 | (11%) | 6 | (16%) |
| Total | 33 | (100%) | 40 | (100%) | 62 | (100%) | 37 | (100%) |
| Probabilities | Mann-Whitney 0.05 | | | | Mann-Whitney 0.005 | | | |

**Table 5.20.** Community-booked and shared care women being attended in labour or receiving a visit on the first postnatal day by a familiar midwife

| Time of attendance of familiar midwife | Comm'y-booked (all) (%) (N = 96) | | Comm'y-booked (transferred) (%) (N = 27) | | Shared care (%) (N = 79) | |
|---|---|---|---|---|---|---|
| During labour | 74 | (77%) | (not calculated) | | 14 | (18%) |
| First postnatal day | 79 | (82%) | 21 | (78%) | 30 | (38%) |

**Table 5.21.** Number of doctors attending community-booked and shared care women who had normal deliveries.

| Number of doctors | Primiparous women | | | | Multiparous women | | | |
|---|---|---|---|---|---|---|---|---|
| | Community-booked (%) | | Shared care (%) | | Community-booked (%) | | Shared care (%) | |
| No doctor | 1 | (4%) | 3 | (13%) | 9 | (15%) | 11 | (34%) |
| 1 doctor | 16 | (64%) | 9 | (38%) | 41 | (70%) | 7 | (22%) |
| 2 or more | 8 | (32%) | 12 | (50%) | 9 | (15%) | 14 | (44%) |
| Total | 25 | (100%) | 24 | (100%) | 59 | (100%) | 32 | (100%) |
| Probabilities | Mann-Whitney n.s. | | | | Mann-Whitney n.s. | | | |

Table 5.22. Length of hospital stay in community-booked and shared care women

| Length of stay | Primiparous women | | Multiparous women | |
|---|---|---|---|---|
| | GP unit-booked (%) | Shared care (%) | GP unit-booked (%) | Shared care (%) |
| One night/few hours/not at all | 10 (39%) | 2 (5%) | 24 (80%) | 19 (48%) |
| One or more nights | 16 (62%) | 37 (95%) | 6 (20%) | 20 (51%) |
| Total | 26 (100%) | 39 (100%) | 30 (100%) | 39 (100%) |
| Probabilities | Chi square 0.0007 | | Chi square 0.008 | |

## Section E
## Women's preferences and satisfaction

The questionnaires sought women's preferences about the management of labour and who would care for them. Five items have been chosen and are presented in Tables 5.23 to 5.27, namely women's attitudes to epidural anaesthesia, episiotomy, electronic foetal monitoring and having a familiar midwife and/or GP at the labour. All show marked differences between the groups (where significance levels have been calculated, these are shown at the foot of the table).

The question arises as to whether these women were predisposed before booking to wanting a "natural" labour, or whether their preferences developed during the course of their antenatal care. To shed light on this, the group of women who changed GP in order to make a community booking are revisited. Their contribution is shown in the rates below (Tables 5.23 to 5.25). The numbers are too small to calculate the probability that the difference between them and the overall population of community-booked women is significant – but it is possible to gain a general impression of the contribution their (strong) views make.

Moving on to satisfaction with labour, Tables 5.28 to 5.31 show different aspects of women's satisfaction. The three aspects are: satisfaction with care, sense of control and satisfaction with pain relief. Satisfaction with care has been operationalised in terms of satisfactory communication which is subdivided into explanations during labour and opportunities for debriefing afterwards. The greatest differences in levels of satisfaction were between primiparous women booked for the two systems of care. There were marked differences in satisfaction with explanations during labour and sense of control ($p = 0.003$ and 0.000 respectively). There was less difference in satisfaction with pain relief ($p = 0.32$, i.e. not significant). These striking findings are shown in a series of pie charts (Figure 5.1).

The final set of results (Table 5.32) is an analysis of the Anxiety and Depression score carried out by Health Visitors a month after the delivery. It measures the woman's current state of mental health and does not refer directly to the labour. Higher scores indicate a greater degree of anxiety and depression. It can be seen that community-booked women do better than shared care women – but surprisingly those who have had complications and been transferred do better than those who had a straightforward delivery. A striking finding is that there is much greater variance amongst the shared care women. An analysis of variance between all community-booked and all shared care women (i.e. with and without transfer or complications) showed a significant difference between the two groups (p = 0.05). The difference between transferred and non-transferred women (within the community-booked group) also reached significance (p = 0.01).

**Table 5.23.** Women's preferences for epidural anaesthesia – comparison between community-booked and shared care women

| Attitude to epidural | Primiparous women | | | | Multiparous women | | | |
|---|---|---|---|---|---|---|---|---|
| | Community-booked (%) | | Shared care (%) | | Community-booked (%) | | Shared care (%) | |
| **Hope to have/ wouldn't mind** | 6 | (18%) | 15 | (37%) | 5 | (8%) | 12 | (31%) |
| **Don't want epidural** | 28 | (82%) | 26 | (63%) | 57 | (92%) | 27 | (69%) |
| **Total** | 34 | (100%) | 41 | (100%) | 62 | (100%) | 39 | (100%) |
| **Probabilities** | Chi square 0.069 | | | | Chi square 0.003 | | | |

Note: % "don't want"s among community-booked women who changed GP:
Primiparae (N=9): 100% Multiparae (N=28): 93%

**Table 5.24.** Women's preferences for episiotomy – comparison between community-booked and shared care women (parities combined)

| Attitude to episiotomy | Community-booked (%) | | Shared care (%) | |
|---|---|---|---|---|
| Would not mind | 22 | (23%) | 34 | (42%) |
| Would be disappointed | 34 | (35%) | 37 | (45%) |
| Would feel let down | 41 | (42%) | 11 | (13%) |
| Total | 97 | (100%) | 82 | (100%) |
| Probability | Chi square 0.000197 | | | |

Note: % attitudes among community-booked women who changed GP (N=37):
"not mind" 11% "be disappointed" 35% "feel let down" 54%

**Table 5.25.** Attitude to foetal monitoring in community-booked and shared care women (parities combined)

| Attitude to foetal monitoring | Community-booked (%) | | Shared care (%) | |
|---|---|---|---|---|
| Hope to have it | 5 | (5%) | 28 | (35%) |
| Wouldn't mind | 39 | (41%) | 48 | (59%) |
| Don't want | 52 | (54%) | 5 | (6%) |
| Total | 96 | (100%) | 81 | (100%) |
| Probability | Chi square 0.0001 | | | |

Note: % "didn't want" foetal monitoring among women who had changed GP:
All parities (N=37) 68%

**Table 5.26.** Preference for having familiar midwife during labour in community-booked and shared care women (parities combined)

| Attitude to having familiar midwife | Community-booked (%) | | Shared care (%) | |
|---|---|---|---|---|
| Not important | 2 | (2%) | 34 | (44%) |
| Would like if possible | 28 | (29%) | 38 | (49%) |
| Very important | 68 | (69%) | 5 | (7%) |
| Total | 98 | (100%) | 77 | (100%) |
| Probability | Chi square 0.001 | | | |

**Table 5.27.** Preference for having known GP at labour in community-booked and shared care women

| Attitude to having known GP at labour | Community booking (%) | | Shared care (%) | |
|---|---|---|---|---|
| Not important | 41 | (42%) | 65 | (85%) |
| Would like if possible/ very important | 57 | (58%) | 12 | (15%) |
| Total | 98 | (100%) | 77 | (100%) |
| Probability | Chi square 0.001 | | | |

**Table 5.28.** Satisfaction with carers' explanations among community-booked and shared care women

| Whether all available choices explained | Primiparous women | | | | Multiparous women | | | |
|---|---|---|---|---|---|---|---|---|
| | Community-booked (%) | | Shared care (%) | | Community-booked (%) | | Shared care (%) | |
| Always explained | 28 | (88%) | 22 | (55%) | 43 | (71%) | 19 | (50%) |
| Usually explained | 3 | (9%) | 12 | (30%) | 11 | (18%) | 5 | (13%) |
| Sometimes explained | 1 | (3%) | 3 | (7%) | 3 | (5%) | 11 | (29%) |
| Never explained | 0 | (0%)- | 3 | (7%) | 4 | (7%) | 3 | (8%) |
| Total | 32 | (100%) | 40 | (100%) | 61 | (100%) | 38 | (100%) |
| Probabilities | Mann-Whitney 0.003 | | | | Mann-Whitney 0.02 | | | |

**Table 5.29.** Satisfaction with discussion of events after delivery among community-booked and shared care women

| Wish to have talked more about events | Primiparous women | | | | Multiparous women | | | |
|---|---|---|---|---|---|---|---|---|
| | Community-booked (%) | | Shared care (%) | | Community-booked (%) | | Shared care (%) | |
| Yes, definitely | 1 | (3%) | 5 | (14%) | 1 | (2%) | 4 | (11%) |
| Yes, possibly | 6 | (19%) | 8 | (22%) | 6 | (10%) | 13 | (35%) |
| No, not really | 25 | (78%) | 23 | (64%) | 56 | (89%) | 20 | (54%) |
| Total | 32 | (100%) | 36 | (100%) | 63 | (100%) | 37 | (100%) |
| Probabilities | Mann-Whitney 0.15 | | | | Mann-Whitney 0.0001 | | | |

**Table 5.30.** Sense of control during labour and delivery reported by community-booked and shared care women

| Degree of control | Primiparous women | | | | Multiparous women | | | |
|---|---|---|---|---|---|---|---|---|
| | Community-booked (%) | | Shared care (%) | | Community-booked (%) | | Shared care (%) | |
| Very much | 21 | (64%) | 6 | (15%) | 48 | (77%) | 21 | (54%) |
| Fairly much | 10 | (30%) | 18 | (45%) | 11 | (18%) | 14 | (36%) |
| Not much | 2 | (6%) | 15 | (38%) | 1 | (2%) | 4 | (10%) |
| Not at all | 0 | (0%)- | 1 | (3%) | 2 | (3%) | 0 | (0%) |
| Total | 33 | (100%) | 40 | (100%) | 62 | (100%) | 39 | (100%) |
| Probabilities | Mann-Whitney 0.0000 | | | | Mann-Whitney 0.0159 | | | |

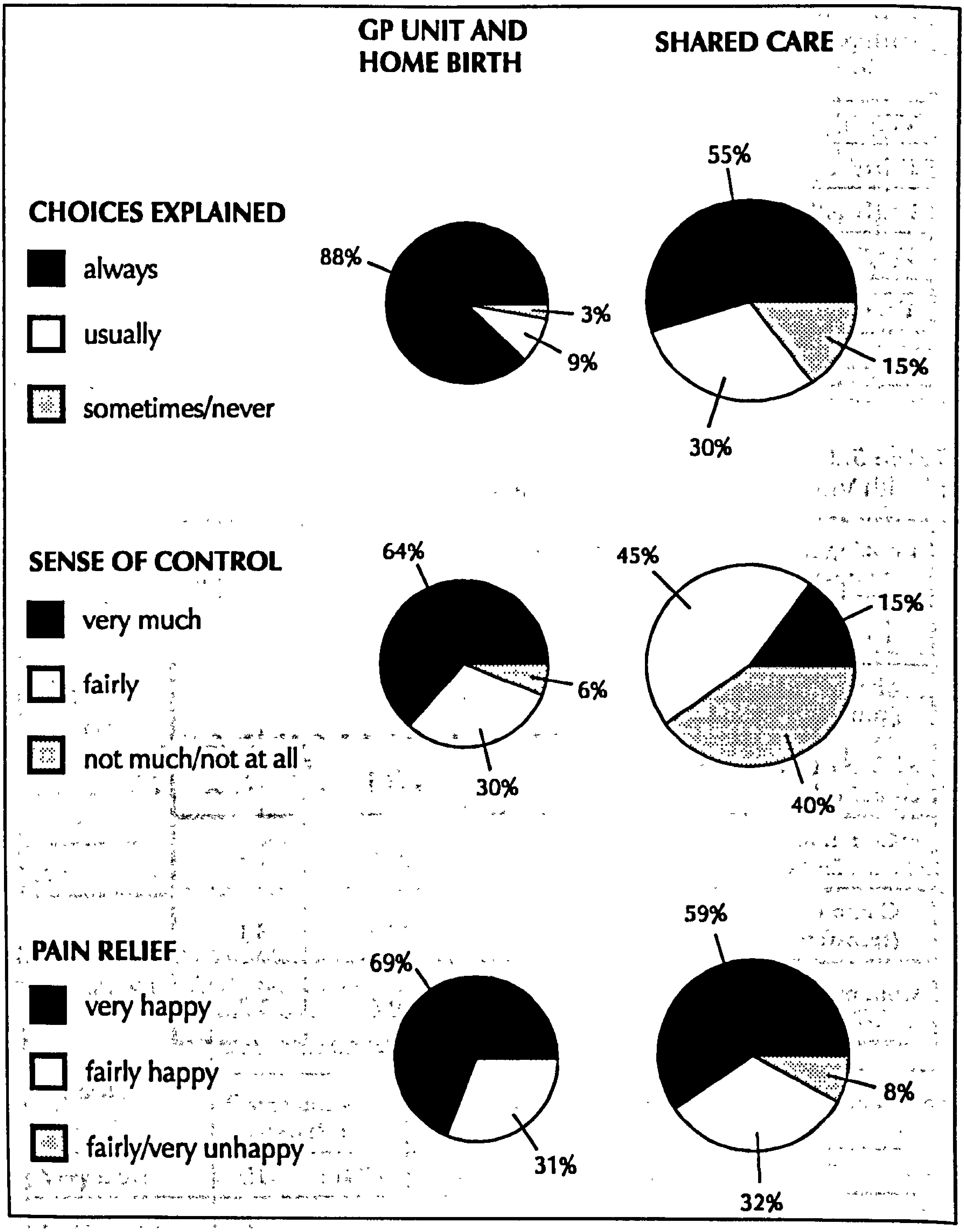
**Table 5.31.** Satisfaction with pain relief among community-booked and shared care women

| Satisfaction with pain relief | Primiparous women | | Multiparous women | |
|---|---|---|---|---|
| | Community-booked (%) | Shared care (%) | Community-booked (%) | Shared care (%) |
| Very happy | 22 (69%) | 22 (59%) | 46 (77%) | 29 (78%) |
| Fairly happy | 10 (31%) | 12 (32%) | 12 (20%) | 5 (14%) |
| Fairly unhappy | 0 (0%) | 2 (5%) | 1 (2%) | 3 (8%) |
| Very unhappy | 0 (0%) | 1 (3%) | 1 (2%) | 0 (0%) |
| Total | 32 (100%) | 37 (100%) | 60 (100%) | 37 (100%) |
| Probabilities | Mann-Whitney 0.32 | | Mann-Whitney 0.93 | |

**Table 5.32.** Anxiety and Depression scores carried out by Health Visitor at one month postnatally

| Booking group (and outcome) | Number of results | Mean score | Standard deviation |
|---|---|---|---|
| Shared care (normal delivery only) | 42 | 22.1 | 3.0 |
| Shared care (complication in labour) | 22 | 20.7 | 7.2 |
| **Shared care (all outcomes combined).** | **64** | **21.63** | **4.8** |
| Community-booked not transferred) | 63 | 20.8 | 2.5 |
| Community-booked (transferred) | 20 | 18.6 | 3.1 |
| **Community-booked (all outcomes combined)** | **83** | **20.3** | **2.8** |

**Figure 5.1.** Satisfaction with labour among primiparous women (pie sizes proportional to number of respondents)



## Section F

## Expectations for the birth – comparison of community-booked and shared care women

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This section is derived from responses to the "open" question at the end of the antenatal questionnaire: "Do you have any other hopes or plans for the birth?". It provides a semi-quantitative analysis of the post-coded comments and a qualitative description of the content and possible implications of the defined categories. The responses were also given to an independent observer. Her categorisation is also described and used to amplify the researcher's findings. More detail about the process can be found in Chapter 4 (Design).

About 40% of women expressed "hopes or plans" (there was no statistical difference between the groups in this respect although the community-booked women wrote longer comments on average than the shared care women). Some women answered "none": they, as well as those who left a blank, may have felt that the questionnaire had already covered their concerns, or that they were entirely flexible.

The comments were subdivided and allocated to 14 categories. Some sentences or phrases were split and/or allocated to more than one category. The number of allocations to each group is shown in Table 5.33 overleaf. Not too much should be made of counting essentially qualitative data, but there is a strikingly similar distribution of comments between the two groups of women. Six categories do, however, predominate ("leading categories" marked with an asterisk in the table).

Two such categories are shared by both groups, viz.;

- carers, style of care, self in labour
- reference to specific interventions

For the community-booked women, the other leading concerns were:

- the role of partner/family
- having a natural/non-interventionist birth

For the shared care group, they were:

- having a normal/quick/uncomplicated labour
- reference to pain/discomfort

Table 5.33. Analysis of women's "hopes and plans for birth"

| Community-booked women | | | Shared care women | |
|---|---|---|---|---|
| Percentage allocations (N=182) | Leading categories | Description of category | Leading categories | Percentage allocations (N=113) |
| 11 | * | Carers/care/self | * | 16 |
| 12 | * | Specific interventions | * | 9 |
| 9 | | Normal/quick/ uncomplicated | * | 15 |
| 7.5 | | Pain/discomfort | * | 9 |
| 9.5 | * | Natural/non-interventionist | | 8 |
| 9.5 | * | Partner/family | | 5.5 |
| 9 | | Place/atmosphere | | 7 |
| 9 | | Previous experience | | 6 |
| 7.5 | | Flexibility | | 8 |
| 7 | | Baby | | 8 |
| 4 | | Active birth | | 4.5 |
| 2 | | Reference to hospital | | 2 |
| 1.5 | | As "experience" | | 2.5 |
| 1.5 | | Safety | | 0 |

The following is a description of the content of the six main categories, which taps into qualitative similarities and differences between the groups.

Both groups had very similar priorities in what they wanted of their carers. They should give information and guidance; they should discuss and explain things; they should be supportive, but allow the woman and her partner freedom and privacy. *Continuity of care* was also important. The community-booked women wanted the midwife they already knew; the shared care women wished this was possible. Wanting to be "in control" came through in both groups, but it was more explicitly articulated by the community-booked women. Control meant being informed, being treated sensitively, being involved in decision-making, being "in partnership" with carers as well as "being able to do what I need when I need". These desires were expressed by the shared care women, but only one actually used the word "control".

Moving to women's comments about *specific interventions,* only one in each group *wanted* a particular intervention ("wouldn't want to be allowed to go too much overdue" and "if pain becomes unbearable, to have an epidural"). The rest listed interventions they hoped to avoid. For the shared care women, these were usually Caesarean section and forceps. There was less detail, but one mentioned having an epidural rather than general anaesthetic if a Caesarean was required, and one wanted to avoid "electronic monitoring by scalp clip". The community-booked women also mentioned forceps, but the main hopes centred on avoiding *episiotomy/stitches* and active management of the third stage of labour. One woman wanted "minimum (preferably no) vaginal examinations" another "no drugs" another to avoid "rupturing of membranes". A possible explanation for the focus on episiotomy/stitches is that more of the community-booked women were multiparous and remembered the pain they had had previously. Another explanation – borne out by the many references to the management of the third stage – is that they were better informed about the detail of possible interventions. A feeling that came through this section was that shared care women hoped they "would not need" certain interventions, whereas the community-booked women, although sprinkling their comments with "hope" and "unless necessary" tended to see intervention as something about which there was a choice.

This sense of inevitability about the course of labour fits with the shared care women's slightly greater emphasis on wishing to have a *normal, quick, uncomplicated labour.* It was more likely to be their first or only statement: "just hope...". But the words used by both groups are very similar: quick, smooth, normal, OK, easy, straight forward, uncomplicated.

Wanting labour to be "normal" clearly overlaps with wanting it to be "natural". I tried to distinguish between reference to an innate course of labour and an approach to its management. That community-booked women talked more of "natural" than "normal" illustrates once again the theme of inevitability/control.

This section included comments about avoiding intervention (in a general sense) or "interference" and using specific procedures seen as more "natural". A fascinating feature of this section is that almost every single statement, in both groups, is qualified by the words "if possible": "as natural as possible", "with as little intervention as possible"....

We now move on to women's comments about *pain in labour.* The shared care women's comments fell into two groups – those that referred to methods of pain relief and those that revealed a belief in the inevitability of pain without mentioning specific remedies. Only one dared hope "no pain" and only one referred to "discomfort" (caused by a scalp clip in her previous labour). A few of the community-booked women expressed similar plans and fears, but a quarter actually said they didn't want pain relief at all. Cutting across these subcategories was the idea that the need for pain relief would involve the influx of "technology".

The final asterisked category is the *role of partner/family* in the labour. An obvious difference between the groups was that some community-booked women mentioned their other children as well as their partners (all of these planned a home birth). Only two wanted children present for the birth itself ("if they wish" "hopefully") the others wanted them to be present "immediately after". With respect to their partners, both groups wanted them to be present "at all times" (including during any interventions) – shared care women particularly seeing their partner as someone who would save them from being alone. For the community-booked women there were additional strands: that they be allowed privacy with just their partner and that the partner be allowed to "actively participate". These wishes were less prominent in the few comments from the shared care group.

Two other categories, less important in terms of size but vital in understanding the expectations of the women, are *"birth as an experience"* and *"flexibility"*. It is said that middle-class women and those opting for home/GP unit delivery see birth as an "experience" in its own right (not simply as a means to an end, i.e. having a baby). Both groups used the word "experience" very rarely (twice in the community-booked and once in the shared care group). There were other references to it "not being traumatic" or "enjoying it". Obviously, this is more of an *attitude* which will be found running through the other categories. The comments on place/atmosphere are illustrative. Community-booked women stress "peacefulness" "quietness" "a relaxed atmosphere"; shared care women also talk about a "relaxed atmosphere" but are generally more matter-of- fact: "stay at home as long as possible", "the shortest possible stay (in hospital)".

*Comments about the baby* show similar divergence: both groups make equal mention of having a "normal healthy baby" but the community-booked women would also like their first encounter with the baby to be "gentle". One comment (from a woman booked for home birth) illustrates the futility of insisting on a distinction between "birth as a means to an end" and "birth as an experience". She says, "... if the baby is handicapped in any way ... that this is handled sensitively".

If women are *determined* to have a particular kind of birth (experience) does this imply they are less flexible? The marginally greater frequency and length of comments amongst the community-booked group might support this view. Proportionally, too, they made fewer references to being flexible. But the nature of the comments in the two groups was slightly different. The shared care women tended to talk about flexibility as a corollary to particular wishes. Only two gave "having an open mind" as a primary aim. In the community-booked group, the issue of flexibility was often addressed directly. The sense of "necessity" for intervention was emphasised, also the need for the carers to be flexible, too. But above all there was a sense that it was possible to have a change of plan, while still feeling in control. This was well put by a woman who gave perhaps the most detailed list of "hopes" in the whole series: "I have had two children before, one at home so I know that despite my list of plans for the birth, as long as I'm in control of decisions, I will feel it to have been a positive experience, all the same I want ...".

## Validation of categorisation and interpretation using a second analysis

As explained in Chapter 4 (Design) the women's comments were given to an independent person to categorise. She did this "blind" to the women's booking group, but the researcher then separated out each category into either community-booked or shared care groups. Thus a chart corresponding to the researcher's own analysis was created. This is shown in Table 5.34.

Table 5.34. Independent analysis of women's "hopes and plans for birth".

| Community-booked women | | | Shared care women | |
|---|---|---|---|---|
| Percentage allocations (N=182) | Leading categories | Description of category | Leading categories | Percentage allocations (N=113) |
| 11 | * | General hopes | * | 17 |
| 10.5 | * | Interventions | * | 13.5 |
| 13.5 | * | Professionals/family | * | 8.5 |
| 9.5 | * | Pain relief | * | 10 |
| 9.5 | * | Loss of control | * | 9.5 |
| 7 | | Natural/normal | | 2.5 |
| 7 | | cf. Previous experience | | 6 |
| 6 | | Events after birth | | 6 |
| 4 | | Foetal abnormality | | 5 |
| 6 | | Place | | 5 |
| 4.5 | | Speed of labour | | 4 |
| 4 | | Stitches/episiotomy | | <1 |
| 3 | | Atmosphere | | 2.5 |
| 3 | | Active labour | | 2.5 |

By coincidence, the independent observer also identified 14 categories, some of which were further subdivided (not shown in the table). She grouped the categories into "fears" and "hopes". About a third of the responses had to do with "fears" and two-thirds with "hopes" in each booking group. As with the researcher's categorisation, the distribution of responses is fairly evenly matched between the groups. In this case, five shared "leading categories" have been identified.

There are two categories in which community-booked and shared care women differed: community-booked women were more likely to fear episiotomy and/or stitches and to hope for a "natural" birth. These differences will be touched on later. As with the researcher's categorisation, the content of each category and the interpretations drawn by the observer are as important as this semi-quantitative analysis.

The following account focuses on the main themes identified by the researcher and shows how the independent observer's categorisation strengthens the evidence for her interpretation.

*Continuity of care.* The wish to have a few known staff at labour was emphasised by both groups.

*Being in control.* Whereas the researcher had defined this as an aspect of "self in labour", the independent observer gave "fear of loss of control" as a separate category. She subdivided this into three elements:

- specific mention of control,
- trusting carers and
- being kept informed.

These reflect exactly the researcher's description of what women mean by "being in control".

*Specific interventions.* In the observer's classification, women's comments about interventions were "fears". In this way she collected a higher percentage from shared care than from community-booked women. This ties in with the researcher's sense that for shared care women, interventions are seen as undesirable but unavoidable, whereas for community-booked women they are a matter of choice.

*Stitches/episiotomy.* The observer made a separate category of this particular intervention. She also found comments about it to be more common among community-booked women.

*Natural birth.* The observer collected comments which contained the actual word "natural" and found them more prevalent among community-booked women. This ties in with the researcher's impression that community-booked women see themselves positively choosing a particular style of birth (by avoiding interventions), whereas shared care women hope that they will be lucky enough to have a short, uncomplicated delivery – but do not see themselves as having any influence over the course of events.

*Pain relief.* The observer found similar numbers of comments in both groups. She subdivided the category into general comments about

- being "open minded" and
- specific fears.

She found that the community-booked women were more open minded. It is interesting that the researcher also found pain relief to be an area in which women realised that their wish to avoid technology might give way to events.

*Partner/family.* The observer had this as a subcategory of "who else there" (professional/family). She also found many more comments about family among community-booked women.

*Birth as an experience/flexibility.* The observer did not identify these as a separate categories. Flexibility emerged as "open mindedness" in the category of "pain relief". The fact that they were emphasised by the researcher indicates her wish to resolve a question: do community-booked women see birth as an experience rather than a means to an end – and does that tendency make them less flexible and more vulnerable if disappointed?

*Comments about the baby.* The observer had a category "fear of foetal abnormality" (and though not a leading category in numerical terms she had written it at the head of her summary). The comments in both booking groups were very similar – simply hoping for a healthy baby. Comments about how that baby would arrive, and be handled in the first moments after birth were put in a separate category ("events after the birth"). So whereas the researcher had linked comments about the baby with maternal expectations about the birth, the observer successfully separated them. This casts doubt on the researcher's conclusion that community-booked women's ideas about "birth as an experience" may override their wish for a healthy end product. Perhaps the researcher was imposing her own viewpoint – that of a researcher and a doctor, looking at birth as a phenomenon – whereas the observer was herself a mother and a midwife.

# 6 WOMEN'S EXPERIENCE OF TRANSFER

This chapter is drawn from the stories of 12 women who had planned to have a home birth or GP unit delivery under the care of their own community midwife and GP, but who had to be transferred to consultant care because of unexpected complications either in late pregnancy or during labour itself. I shall not attempt to prove that transfer was a "good" or a "bad" experience for individual women or for the sample as a whole. Rather, I shall draw on aspects of each story, in order to generalise about what makes it so.

The first section discusses the overall potential for disappointment surrounding transfer, focusing on women's attitudes and their mechanisms for adjustment. Subsequent sections look more closely at phases and elements of the process of transfer and show how they contribute to the overall experience of individual women. The final section takes up the theme of continuity.

Readers may find it helpful to refer to Appendix 1 which gives a summary of the women's stories. All names have been changed to protect the identity of women and their carers.

## The potential for disappointment

A self-evident feature of transfer is that women's actual experience of labour differs from their original hopes or expectations. Failing to "achieve" the desired experience is not, of course, limited to women booking for community-based care: women in any system may have to adjust to the consequences of unforeseen complications. What are the particular difficulties for community-booked women?

This section describes their hopes and expectations and goes on to look at the way they react to unexpected experiences. These beliefs and feelings are set out as givens. Antecedent explanations, such as the women's personal histories or influential societal norms, were beyond the scope of the study and can only be hinted at here and in the discussion. The aim of this section is simply to set out the ways in which transferred women are vulnerable to disappointment. Subsequent sections will consider in more detail how different aspects of the process of transfer can accentuate or alleviate that vulnerability.

Let us start by listing some of the particular hopes and expectations entertained by community-booked women. Some of these were practical – to avoid particular interventions, to be supported by a partner or friends, to have their own familiar midwife deliver them, to be at home or at least not to stay overnight in hospital. When these arrangements were not possible, women were liable to a sense of loss. It often came over as annoyance, a feeling of having been cheated despite everyone's best efforts.

> I couldn't stop crying because I'd set my heart on coming out in six hours. I was looking forward to having people I knew around me and I'd got to know Teresa [midwife] ... it wasn't the same as what I'd wanted, it wasn't what I'd planned. I just couldn't stop crying and I couldn't understand why, after all the time I'd gone without any problems, why now, why not the beginning or half way through, why near the end when I'd set my heart. [Jane]

> I feel like my body's cheated on me basically. Having delivered one I thought "Why can't this one come by the same route?" But it [the baby] just wasn't turning around. It was awkward. But I think it's just one of those things. [Christine]

> I mean I wasn't disappointed with myself or anything. I think it was just more annoying. And it was particularly annoying because they said it was

> quite likely it [retained placenta] would happen again, well there was an increased possibility ... they would recommend that I didn't opt for a home birth, which was very annoying because after having her went so well I thought, oh next time I'm not even going to set foot in [WH], I'll do the whole thing at home. [Hilary]

The last quote hints (by way of denying it) at another aspect of disappointment – disappointment with self. Wanting a natural birth with minimal analgesia or other technical intervention is not value free. So if a normal (natural) birth is not achieved, the woman may judge herself to have failed. Women displayed a range of responses to this pervasive construction. Some were supremely oblivious to it, seeing events as "bad luck" and no reflection on themselves (see Jane and Hilary, above). But others internalised it and felt guilty at having failed. Between these extremes were strategies to ameliorate its impact (feeling guilty is uncomfortable!). One such strategy was for the woman to focus on what she had achieved and to justify what she had not. Another was to seek out and to emphasise explanations which deflected the blame (onto the interventions themselves, her body, the baby – see Christine, above). A final approach side-steps altogether the threat of guilt about performance in labour by focusing on other outcomes – having a healthy baby, being well cared for. Individual women adopted one or a combination of strategies. The following examples range from the "guilty" to the "exonerated" and end with the "side-step" but in reality no individual woman could be characterised in such simplistic terms.

> When I'd decided on an epidural I felt for some reason a bit guilty about that. The NCT [National Childbirth Trust] teacher was very dismissive of any kind of pain relief really. I suppose she sowed the seeds of it somehow being a failure if you resorted to things like that, but at the time you don't care, they could have cut my head off and I wouldn't have bothered. [Anne]

> In the end I didn't have the forceps. I was rather pleased about that ... I didn't do quite as well as I hoped ... in a way I did as well as I could do remembering how I was feeling. [Debby]

> There was a huge knot in the cord ... he showed us the cord and the knot was about the size of her head so apparently every time I was contracting she was pushing down and stopping her oxygen supply and that's why her heartbeat was going ... So I'm glad there was a reason because it's a bit disappointing when you've put your mind to it that you're going to go through a natural labour and everything. [Gail]

> Linda had to be transferred into hospital for a manual removal of placenta. The placenta was "fixed into the womb and "couldn't have come away by

> itself anyway". Anyway, she had done "the important bit herself". She was not surprised at the subsequent complications [infection and high blood pressure] because she had been "tampered with" and her blood pressure always went up in hospital. She had had a previous stillbirth and hence felt particularly good about having a healthy baby. [Linda]†

> There's still that fantastic feeling when it's handed to you. It's mine, it's here and alright, and you've carried it for nine months ... having her handed over green cloths in the theatre was as emotional as having her landed on my tummy in a labour suite. [Christine]

Before leaving the issue of women's sense of failure it seems worth focusing on its opposite, which is open mindedness – that is, the ability to adjust to the unexpected without experiencing a sense of threatened personal integrity. Two women were explicit about being open minded and they used a combination of strategies. One was to have aims which side-stepped the need to "succeed" in labour: the important thing was to be given the chance to *try* for natural labour, and to understand the necessity for any interventions. Another was to separate the physical problems of labour (in both cases, malpresentation – the baby coming down in a transverse position) from the sphere of personal responsibility. They had a realistic view of what they could control and were assertive in doing so – but did not feel a sense of failure over things beyond their control.

> I feel alright about that [being transferred] partly because it had all been explained to me beforehand that home births are only home births as long as they progress normally ... .I felt like I'd reached the point of needing some assistance ... I'd been allowed really a long time to try and have a home birth and it really wasn't progressing. [Maureen]

> The end of it was quite different to what I'd expected ... I didn't come away feeling that I hadn't done it properly or that I'd failed or anything, which I suppose fitted in with a bit of the birth plan about trying to keep an open mind really 'cos you don't know what's going to happen. [Fiona]

All these difficulties could be experienced by shared care women undergoing unexpected complications. They are exaggerated in community-booked women because of hopes specific to that system – home birth, continuity of care – and because the focus on achieving a natural delivery is stronger. The latter is

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† The tape recorder not switched on (in error) for Linda's interview. Inverted commas are used for verbatim comments within paraphrased quotes.

fostered by the community midwives and GPs. But the inevitable corollary of this support from carers is the revelation of their personal investment in the outcome. Consequently women often felt that they had let down their carers as well as themselves. Sometimes this was at the level of shared disappointment, but sometimes it contributed to a sense of guilt, and even responsibility on the woman's part for the way her carers had been treated by hospital staff.

> She [midwife] come down and they said "Oh she's had it" so she come flying in ... and she was really disappointed because they were all looking forward to delivering it. She said you know she'd been outdone ... I think what it is you get close to your midwife and the midwives get to look forward to delivering the baby. [Jane]
>
> I felt like one in a thousand it had gone wrong for ... That's a point they've lost. [Barbara]
>
> I felt why doesn't she [visit me], is there something wrong? There's no way it could have been anything I did wrong 'cos as I say I was just a piece of meat really ... its not rational, there's no way I could have been responsible for her, but I think I was just a bit anxious that she felt she'd had her nose pushed out 'cos of me really. [Enid]

To summarise, community-booked women have particular expectations. If these are frustrated by transfer, they are vulnerable to disappointment and even guilt. Their carers' investment in the outcome can actually contribute to this sense of failure if things "go wrong".

## Preparation for transfer: expectation and open mindedness

This section picks up and develops the theme of expectations introduced above, emphasising again the inherent vulnerability of community-booked women. But it seeks to show how the phase of preparation can modify expectations and hence the experience of transfer.

> It's alright coming down to antenatal classes and seeing it all on video, going through the stages and things, but I suppose some of it surprised me ... and though I kind of knew in my head quite a lot of what to expect, actually experiencing it was quite different ... Having said that, yes it was different in that I suppose my hope had been that I wouldn't need to get into a more technical delivery really. [Fiona]

In the end, the experience of labour is unpredictable, but women nevertheless have hopes and expectations about it. We saw in the preceding section how women booking for community-based delivery are especially likely to hold or to develop a wish to have a "low tech" delivery, to avoid hospital, or at least hospital intervention, and to be attended by a few familiar carers. These are the things they "know" about. But those who are transferred will learn, through experience, about medicalised birth. When hospitalisation is the (societal) norm, a conscious effort has to be made to achieve any alternative. Can women simultaneously prepare themselves for the options they wish to have and those they wish to avoid?

Several of the interviewees, like Fiona (above), had made positive efforts to prepare themselves for the kind of birth they wanted:

> Funnily enough, while we were at the classes we were all trying to be terribly positive, you know, "this is what we've all come to hear". [Anne]

> I'd been really horrified at the thought of having to have a Caesarean section, so we'd done loads of relaxation and we'd looked at all the different positions ... squatting's supposed to open up the pelvis more, so we thought, well, we'll do that, and practised. [Hilary]

These excerpts underline the difficulty: positive preparation for the desired "birth plan" may reflect or even induce fear and denial of the alternatives. Raising expectations contributes to the sense of failure if they are not met. This dilemma was recognised, in retrospect, by the women themselves. Can it be addressed at an earlier stage? In a couple of cases, it had come into focus around the formal preparation of a birth plan. Fiona had specifically included a note about "keeping an open mind"; Barbara had been advised by her midwife *not* to make a birth plan but just to "take it as it goes".

What kinds of information might convert this open mindedness into useful preparation for transfer and beyond? Firstly, there is information about the likelihood of transfer:

> Originally when I asked for a home delivery and talked to the GP about it, he was sort of fairly honest in explaining, and you know, because it was a first birth that there was a reasonable chance that I'd end up in hospital ... I certainly always said that I only wanted a home birth as long as it was alright for me and the baby ... what I'd hoped out of a home delivery was not that he had to be born at home but just to be given the chance to try. [Maureen]

Secondly, there is information about the eventualities which will necessitate transfer:

> I knew that would happen, she'd explained that to me beforehand, what drugs the GP was likely to use and at what point it would be handed over ... I knew that once I'd elected to have an epidural that that would be the case. I don't remember them explaining that to me at that point but I knew that would happen. [Enid]

Thirdly, there may (or may not!) be discussions about the mechanism and implications of transfer. Barbara, the woman who was advised not to prepare a birth plan but to "take it as it goes" was transferred for failure to progress in second stage. Explanations at the time of transfer were unsatisfactory, but where she had prior knowledge of the system it allowed her to keep track of events:

> She had been using Entonox [gas and air] and was "in another world". But she knew she had been transferred, because she was "whizzed off to a different room" ... Later, on the postnatal ward, she realised that the hospital team had still "got her" because she saw the consultant's initials on her temperature chart. No one had explained that once transferred she would remain under hospital care until discharge. [Barbara]†

Beyond transfer are all the procedures and interventions which accompany an obstetrically complicated birth in hospital. No women volunteered accounts of

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† Barbara requested that the interview was not taped, but notes were made during and immediately after the interview. Inverted commas are used for verbatim phrases within paraphrased quotes.

any discussions in the early antenatal period about such procedures. But once transfer was likely or imminent, the community carers often prepared the woman for what would happen in hospital. Clearly there is no sharp distinction between early, non-specific preparation and that tailored to the woman's developing circumstances. Christine, transferred antenatally for breech presentation, discussed her options with the hospital staff over a period of weeks. She developed a rapport with one of the registrars and valued her advice – but she also talked about the forthcoming delivery with her community midwife:

> She [the community midwife] called and she had a chat about it. Basically I was asking her about sort of different options on sections, and different anaesthetics and things, and what she'd found with actually looking after people after they'd had a Caesarean and what she sort of thought about it all ... Having seen her through the clinic and knowing her from [the previous pregnancy] it was quite nice to have somebody that you sort of knew a little bit more ... rather than the midwife from the hospital that you'd not seen before and didn't really know. [Christine]

Jane, who was transferred for induction when she developed severe pain due to sciatica, provides another example:

> I suppose I could have insisted on coming home in six hours if I'd wanted to ... but if something happened to me overnight I would have been rushed back in, so I thought well, one night in is not going to do any harm ... Nancy [the GP] more or less said what the doctors turned round and told me in the hospital ... that I'd more or less have to stop in. They said it could be two or three days to see how I went ... Nancy had said they'd keep me in after I'd had him but she wasn't sure, it depended on when I had him and how I was. [Jane]

In Christine's case the discussion with the community midwife increased her knowledge and her sense of choice. In Jane's case, there was little sense of choice, but the GP's outline of events made it easier for her to accept the hospital doctors' advice.

We have focused so far on the kinds of factual information which prepare a woman for transfer and obstetric interventions. These may make her more open minded in the sense of knowing about possibilities other than her chosen options. But will they help her accept the unexpected? This has more to do with attitude than knowledge. It is easy to point to the attitudes which foster a sense of acceptance:

> I feel alright about [transfer] partly because it had all been explained to me beforehand that home births were only home births as long as they progressed normally. [Maureen]
>
> I'm not stupid, I'd go into hospital if my life was in danger. [Linda]

It is much harder to explain what factors foster such attitudes. Doubtless the woman's personality – her history, her circumstances and her current frame of mind – play a large part, areas which were not explored in these interviews. Societal norms and peer pressure are also important, but these too were beyond the scope of the study. But if these are accepted as givens, how can the behaviour of the carers contribute? In this respect, it may be that their willingness to discuss transfer is as important as the content of the discussion. The woman then understands that transfer is possible, and that it lies within the bounds of her carers' experience and interest. When Christine's midwife and Jane's GP explained and predicted what would happen in hospital they were sanctioning these events, and bringing them into the domain of the caring relationship.

Let us return, finally, to Anne who, after hasty transfer, an induction, epidural and forceps, felt that her antenatal classes were "forty five pounds down the drain". The only positive elements of her experience had to do with the support she received during and after her labour, much of it from her partner:

> The only thing I can say that [the classes] did was for that hour or two hours, whatever her classes were, it was a time where both Ian [woman's partner] and I could focus on being pregnant ... and I think it was good for Ian that he met other blokes and could say, "I've been thinking this", and find out that they're all thinking similar things and having similar doubts and worries ... I've met some nice people as a result of it, and I shall keep the friendships up, so that's a positive thing I've got out of it. [Anne]

In her case, she felt completely unprepared, in an informational sense, for her experience. But her "preparation" had included developing and strengthening relationships whose positive effect did not depend on the nature of her labour. We have seen how information given in the context of a relationship which predates transfer has a special value. Anne's comments remind us that the relationship itself is valuable.

In summary, the difficulty inherent in preparing for transfer is that positively choosing one set of options tends to cast the others in a negative light. Information about the frequency, indications, mechanism and consequences of transfer, and about the procedures which may follow it, prepare the ground for later explanations. The giving of this information, in advance of transfer, helps bridge the gap between expectation and experience. When the information is given by community carers it has an additional value: it has the effect of including and sanctioning post-transfer experiences as being within the ambit of the community-based system, recognisable and sharable with those carers.

Finally, if we focus on the process of information-giving, we see that this has the side-effect of developing relationships, which will serve the woman well whatever the outcome.

## The process of transfer: readiness and acceptance

This section looks at the moment of transfer itself, and how the way it is handled affects women's experience.

> My midwife and GP thought that things might not be very straightforward because the back pain continued and at that point decided or advised me to think about having a transfer to the hospital which meant them being able to get more specialist advice really about what the problem might be ... I think [they] were quite keen to stick to the birth plan really, and were, yes, quite keen to do it themselves. So I think their kind of decision making process was quite gradual as well ... so yes, I didn't feel like I was forced to make decisions quickly. In fact I was given quite a lot of choice by them. [Fiona]

> I'd been going to Dr Stevens on a weekly basis, and I'd got to about, I don't know, was it about 38 weeks, and to me it was just another routine appointment ... I'd had swelling of my ankles and feet and fingers from quite early on, although it did seem quite a bit more severe. And we went in and she looked at me, and she checked my blood pressure ... she said "Yes, it's as I suspected, I'm really not very happy with you, there's quite a lot of swelling around your ankles" – which there was – " and your blood pressure's such and such a thing, and there's two plusses of protein in your urine, and I really think you need to go to hospital." Well, I wasn't sure what she meant, so Ian [woman's partner] said "Well, when do we have to go?" and she said, "I'm going to ring up now and see if they can take you in." And this was all very sudden, you know, I said, "It's that bad is it?" and then she went on to explain the complications of pre-eclampsia, and its something that can fluctuate within half and hour and become a life-threatening event, all this sort of business. Which, I burst into tears at that point because I'd been totally unprepared for this. She didn't give me the choice. [Anne]

In Fiona's story, she and her carers move towards transfer in parallel. In Anne's case, her GP's assessment cuts sharply across her own perception of her state of health. Which situations foster, and which deny women a sense of choice?

Pregnancy and labour have a biological momentum of their own: clearly the circumstances in which transfer becomes clinically necessary (which are themselves the subject of considerable debate) will dictate the speed of the decision to transfer. But the time-scale of assessments in labour is generally shorter than during pregnancy (though obviously a life-threatening complication can arise at any time). So women transferred in labour might be expected to lack explanations and the opportunity for adjustment. Fiona (above) was transferred for failure to progress in second stage. But her labour had been a long one and in fact there had been time for discussion. Several other women transferred during labour remembered that explanations had been given, although they only had blurred memories of their content. Even when the explanation was assimilated, the physical aspects of the situation predominate. Maureen, who had planned to have her first baby at home, had a three-hour second stage before being transferred to hospital:

> I was fairly convinced that things were not progressing very much and was still being encouraged by them to keep going ... the GP [did an examination and] ascertained that the baby's head was stuck sideways ... so then he spoke to me about being transferred. He asked me whether I had understood and I said I had ... I was more than happy to agree to go to hospital. It was obvious to me that I needed assistance ... I think they were really trying to give me as many chances as possible ... to have a home delivery. [Maureen]

Women who are transferred in labour are vulnerable in a particular way – they will find it harder to absorb, and may not receive, adequate explanations about interventions. One woman, booked for a GP unit delivery, was only aware she had been transferred during second stage because she was "whizzed off to a different room" (Barbara). Even though she is caught up in an intensely physical process, the act of explanation plays a part in helping the woman adjust to the intervention. But it looks as though there can also be a sense of physical readiness, which makes transfer more acceptable. A further example is provided by Fiona.

> I was happy to accept advice to consider an epidural and some assistance ... I was desperate really ... really tired. [Fiona]

Returning to the opening examples, it was the antenatal transfer of a "well" woman (Anne) which felt rushed. Three other women amongst the twelve interviewees were transferred antenatally. One of these was planning to have her fourth baby in the GP unit, and had to be transferred quite suddenly at thirty-nine weeks because of severe sciatica:

> I was laid on the settee when Nancy [the GP] came and she asked me how I felt, and I just turned round and told her – it was pure agony, like being paralysed down one side ... She just turned round and she says "Oh I'm sorry you'll have to go in" ... I was upset, I was nearly in tears, because everything had gone alright up to then. [Jane]

Another woman went two weeks beyond her due date, giving her plenty of warning that she might have to be transferred for induction of labour. She describes how the GP explained this to her and her feelings as he telephoned the hospital for an appointment:

> They don't like you to go beyond fourteen days because the placenta might not be able to nourish the baby ... there was nothing wrong with me or the baby because we were both, well I was very healthy apart from being fed up [laughs] ... half of me thought, well I'm not going to end up going and then another half of me thought, well at least something's happening now. [Gail]

The third woman referred herself to hospital when she started having pains at 35 weeks. The baby was breech, there were no cots in the local special care baby unit and it looked for a while as though she would have to go by ambulance to another town and have an emergency Caesarean section. Fortunately the contractions settled. But the baby remained footling breech and her only options were a "trial of labour" (i.e. to be closely monitored and risk an emergency section) or to have an elective section. She accepted the hospital's advice to have the latter. But she was able to see the results of her scan and pelvic X-ray, and to talk with the registrar and her community midwife over a period of several weeks.

> If they'd have said, "yes, you can go for a trial of labour", I don't think I'd have been very happy with that, having seen the X-ray and having seen everything else. If the baby had been with its feet up beside its head consistently, then that would have been different again. But the fact was, I mean you could see basically, its head was here all the time, you could feel the little head here, you could feel the hands here, and you could even feel its feet here. And it was sort of sat there like, you know, "I'm sitting here and I'm not budging. It doesn't matter what you do, this is where I am" ... At the time I felt miffed, really. I thought, "this isn't fair, this is cheating on me, this one". [Christine]

These women were transferred with differing degrees of urgency. Gail and Christine both had weeks to adjust to the prospect of intervention; for Jane, as for Anne, things moved very quickly. But their differing degrees of acceptance seem to have more to do with their sense of "agreement" with their carers' plans than the suddenness *per se*. Gail was "fed up" with waiting; Christine saw the X-ray and felt the baby "not budging" from its feet-first position. Jane was in "pure agony" and, although she was bitterly disappointed by the turn of events, she was glad to get to hospital for pain relief. Only Anne felt the speed of transfer was unnecessary. Her GP explained the reasons very fully, and Anne understood in an intellectual sense (she repeated them to me in detail). But she had been "walking round like this for the last couple of weeks and it didn't seem to bother [her]". It looks as though this "agreement" can be experienced at different levels – intellectual, emotional and, as in labour, physical. Women who are transferred less urgently (usually antenatally) may actually be more vulnerable to a sense of coercion – despite excellent explanations – because their emotional and physical experience does not match the clinical assessment.

To summarise, for these respondents, transfer was "acceptable" if they felt ready for it, and this readiness could be experienced intellectually, emotionally and physically. Two scenarios were likely to produce "unreadiness" – complications requiring urgent intervention when carers may fail to give satisfactory explanations and potential complications which have not yet affected the woman's own sense of well-being.

## Interaction with the hospital: fear of medicalisation

Only two of the women interviewed had intended to deliver at home. The other ten were booked for delivery in the GP unit. This is physically in the hospital (a designated room in the labour suite). So even if they had not been transferred to consultant care they would in any case have had their babies "in hospital". But their interaction with the hospital would have been minimal, because they would have been cared for entirely by community-based staff, and not experienced the medical procedures which tend to be routine for women in the "shared care" system. All the women were clear about the distinction between the two systems and the fact they had crossed from one to the other.

A couple of women moved from home to hospital before the decision to transfer, and it is clear from their narratives that their attitude to physical "transfer" and feelings about being in the GP unit were very different to their feelings about medical "transfer" and being on the same labour suite under consultant care. It should come as no surprise that women understand the arrangements and have some affiliation to the system they have chosen. I stress the point because I wish to demonstrate the particular way in which women who were originally booked for community-based care perceive "hospital" care. Much of their experience of the hospital will resemble that of women who were under shared care (i.e. hospital-based care) throughout. I am interested in those comments which reflect their special situation.

> I was fine until I actually went and then it was all ... very big and I thought "I'm like a nobody". And I also was a bit worried that because I was a GP unit patient that they thought "She's been passed over at the last minute, she didn't really want to come to the hospital." ... They didn't make me feel that when I actually went in but I was concerned that they might. [Gail]

> There's a bit of a kind of an atmosphere once you get to the hospital of being, I mean, people assuming that you're somebody who thought they could manage a home birth ... and you're another person who's come in and so I felt like we needed to convince the registrar that we were serious and sensible people. [Maureen]

These women's fears about hospital might prove to be more or less justified, but what the excerpts illustrate is that there are worries which derive from the *fact* of being transferred, irrespective of the hospital care itself. Two stories, from women who had somewhat untypical reasons for choosing community-based care, serve to cast these worries into relief.

> [Q: Why had you decided to go for the GP unit?]
>
> A: In the first place it was like, instead of having to trail to hospital with the other two, you know what I mean, so I thought, well it's only down the road here, the doctor's, so it's easier for me to go straight there you see ... instead of me having to trail to hospital every other week or something ... I got rather friendly with Teresa [the community midwife] from going down there like, and I were looking forward to her coming in with me and delivering me ... So I were a bit disappointed when I phoned her up and she said she were on holiday. So then I really weren't bothered who it was as long as everything were alright. But I would have liked T to deliver me. [Karen]
>
> Linda had had a previous pregnancy under shared care. This had ended with an intrauterine foetal death and induction of her stillborn baby. Apart from the loss of her child, she had had "everything in the way of painkillers" and "didn't know what was going on" during the labour. In her next pregnancy, she felt "awful, panicky", at her first antenatal appointment and had to leave in the middle of a parentcraft class. She decided to have a home birth. The hospital doctor tried to dissuade her, but said that if her GP agreed to it, he would "support them all the way". In the end, she had a normal delivery at home, but had to go into hospital for manual removal of a retained placenta. The GP explained why this was necessary and she was able to accept transfer. It was she who said "I'm not stupid, I'd go into hospital if my life was in danger". [Linda]

In these examples, Karen rejected shared care simply because it was inconvenient, and her only commitment to the GP unit was her allegiance to one particular midwife. When this midwife was not available, and she had difficulty contacting the substitute, Karen had no misgivings about referring herself to hospital. Afterwards, the midwife was "a bit mad about it" and Karen expected that her GP would "probably shout at her when she got down there" – but for herself, transfer to hospital was not in itself a problem. Linda also had specific reasons for avoiding hospital – bad memories and the fear of losing control. Once she had had a live baby at home, and with her GP, midwives and indeed the promise of the hospital doctor, to support her choices throughout pregnancy and labour, she was able to face hospital.

For these two women, hospital care raised specific difficulties, but transfer *per se* was not a problem. This contrasts with women who have never previously experienced hospital (like Gail and Maureen) but who have chosen community-based care: for them the issue of transfer may be more threatening. This will be in addition to the unwanted aspects, real or imagined, of hospital care.

So much for community-booked women's expectations about hospital: what was their actual experience? The interviews focused heavily on interactions with staff as a crucial element of that experience. The quality of explanations (which facilitates choice and control), the degree to which each woman felt she was treated as a person, and the development of real relationships with members of staff, emerged as themes.

> I couldn't sit up, I was still flat so my view of things was very limited ... they didn't say they'd done an episiotomy, but obviously they must of, well they did do, but they didn't tell me they had, I didn't have any choice in that ... I'd been catheterised twice and didn't know it and various sorts of things. [Anne]

> So he [the consultant] came in and had a look at everything ... and he explained what was happening on the monitor to me and he said, "I'm sorry but we're going to have to do a section because she's obviously very distressed, there's something not right, she should be picking up after these contractions and she isn't doing." He showed me all this on the graphs and everything and within, oh, twenty minutes he was down, he'd got a trolley for me to go upstairs [to the operating theatre]. [Gail]

Both these women had been transferred antenatally, and had had a series of interventions before the culmination described. If anything, Gail's situation was more urgent and unforeseen (Anne had had a dural tap during an epidural some hours earlier, so pushing was contraindicated, and it was always extremely likely she would need assistance with the delivery). Yet it was Gail who felt that things had been adequately explained, even though time was so pressing. Perhaps a truly dramatic event such as an emergency Caesarean is more likely to be acknowledged by the staff as needing proper explanation, whereas a series of lesser interventions build up without anyone recognising the need. What is ironic, is that of the two women, Anne probably set more store by good explanations than Gail. She was a nurse, she had actually changed doctor in order to get a GP unit booking, and for her personally, it was extremely important that all the procedures be justified. This was a strong theme throughout her story – from the time of antenatal transfer onwards. But her need was not recognised by the hospital staff.

This is not a surprising finding – it is a common complaint levelled against obstetrics, and medicine generally, that the doctor's agenda takes precedence over the personal agenda of the patient. Transferred women are well placed to comment, because they have also experienced a system which does endeavour to be woman-centred. The following example shows how a hospital doctor and woman misunderstood each other in a way which even a passing personal acquaintance would have avoided:

> [The registrar] said, "Right, I'm going to catheterise you" and I said, "I don't want to be catheterised" and she said, "I've got to because otherwise I'm in danger of damaging your bladder and if you're not prepared to be catheterised then I'm not prepared to do it [a Ventouse extraction] and I'll call the consultant instead" ... The thing which was difficult is that I just don't think they were explained, 'cos it's not that I wanted to resist any of those things if I understood them ... I also felt like she didn't even know what my personal circumstances were. She comes in for a very short time and deals with the problem, it didn't feel like she was treating me as a person." [Maureen]

A more concrete example of hospital staff suffering from a lack of insight into the woman's personal circumstances was given by Jane. She had been given a prescription for painkillers before she was discharged home:

> There was no way I was being doped up when I've got a toddler and a young baby to see to ... Mike [husband] is never in ... so I'm literally being left on my own with two young babies and I said no, and me and the staff nurse had a slight difference about it because I said I would either call in to see my GP or I would get my GP out ... and they would give me painkillers themselves which would be suitable for me. [Jane]

On the whole, the transferred women accepted that the hospital staff (in particular the doctors) could not be expected to provide the same sort of care they experienced from their GP. They might be "cold" or "in an incredible hurry" but at least they were "efficient". But when women had been transferred antenatally, or early in labour, and their personal community carer was absent throughout, the need for woman-centred hospital care was more keenly felt.

A few women did develop strong relationships with a hospital doctor or midwife. A good example was Linda, who had a normal delivery at home but had to be transferred with a retained placenta. She had previously had a stillbirth (as explained earlier in this section) and was understandably upset at having to go into hospital.

> While on the labour ward, recovering from her epidural and manual removal of placenta, she was visited by a midwife, Brenda, who had looked after her during the delivery of her stillborn baby. Brenda also visited her on the postnatal ward, and gave her news of two other [hospital] midwives

> who had been involved: one had stopped work, one had moved down south. Talking with Brenda made Linda feel "like a fairy tale come true" and helped her take another step in coming to terms with the stillbirth, so she could accept the new baby as such – rather than feeling he was a replacement for the one she lost. [Linda]

Another example was Christine, who had been seen several times by one particular registrar during the run-up to her elective Caesarean section:

> It wasn't even her theatre day, and she swapped with somebody to do the section for me, which was lovely ... the atmosphere in there was great. I sort of thought that it would be really sort of clinical and removed and it wouldn't be anything like a natural birth. But I don't know. It was, as I say, this doctor had, well, I got the feeling she had put some effort into it ... it was nice and relaxed and everybody was friendly. It was difficult to feel as if you'd had an operation. [Christine]

Finally, let us return to Gail, who had "felt like a nobody" and been worried about how the hospital would view someone who had been "passed over" by the GP unit.

> I'd go through the GP unit again, even though they were absolutely brilliant in [the hospital]. You know, they were all really good, but now I know that if there are any problems you are just passed over anyway, and they treat you the same. [Gail]

For all these women, the attitude of the staff made a crucial contribution to how they experienced their deliveries. In Linda's case, a past tragedy was positively integrated with her current birth experience; for Christine, a Caesarean section could be seen as "natural" and for Gail, her fears about transfer proved unfounded.

I am conscious that this section is far from comprehensive: women's interaction with the hospital varies enormously according to the indications for transfer and the precise complications and obstetric interventions they undergo. Their subjective experience will also be shaped by their personal expectations and outlook.

But, in summary, I would suggest that women who have been transferred face particular problems in their interactions with the hospital. Firstly, having an allegiance to the community-based system may raise fears about transfer to hospital *per se*. Women may themselves have, or expect the hospital to have, a negative attitude. Secondly, some women may have specific worries about the hospital – those worries which led them to book for community-based care. Thirdly, transferred women have experienced a woman-centred system. They will feel any lack of good explanations and personalised care particularly acutely in the sense that they can make comparisons. Once again we see the vulnerability to disappointment of community-booked women. But when there *is* a good rapport with hospital staff, this can dramatically improve the woman's experience.

## Debriefing after transfer: developing a story

The interviews took place four to six weeks after the delivery. The women had had time to assimilate their experiences, to reach some sort of understanding about what had happened to them. It could be argued that their accounts were biased by this process, and indeed it would have been interesting to hear immediate postnatal accounts. On the other hand, the "final" story is likely to have most long-term impact – and creating that story is part of the total experience. I was interested in the content and the process of assimilation: what did women want to know and how did they find out?

A common denominator was the need to confirm key events and put them into chronological order, a pattern that could be owned, remembered and repeated. Although several of the women protested that the labour was a blur of confused events over which they had had little control, by the time I saw them, they could all give step-by-step accounts of their birth story. These accounts occupied at least the first ten minutes of every interview and flowed with a minimum of prompting. Two women who had been particularly "overtaken" by obstetric complications and interventions had developed their stories with the help of their partners:

> Barbara wished she had a video of the birth: it's supposed to be even more wonderful than your wedding day and she couldn't remember any of it. She wouldn't have been able to tell me anything if she hadn't kept "quizzing" her husband, and he hadn't "relayed" it to her. [Barbara]

> Just talking about the whole thing [with boyfriend] ... about everything being hazy. I just wanted to check out what things fitted in where, really, and did I really say that, or was it just my imagination? [Enid]

Women who had felt more in control during the labour had not had to struggle so consciously to create their story, and it tended to flow more confidently. But for Barbara and Enid – and others to a lesser degree – there was an ongoing process of retrospectively gaining control.

Beyond this (re)ordering of events was a search for justification: justification of the interventions they had experienced, and justification of themselves – had they tried hard enough? Once again we see the gap between expectation and experience and the importance of coming to terms with it.

> They said she just wouldn't have survived a normal birth. So, I'm glad there was a reason because it is a bit disappointing when you've put your mind to it that you're going to go through natural labour and everything. [Gail]

> I'm convinced [now] that I couldn't have done more on my own. I've heard enough of how she was positioned to think that I couldn't actually have pushed her out. [Fiona]

> The placenta was fixed into the womb, so it couldn't have come away anyway ... I did the important bit myself. [Linda]

Let us return to Barbara and Enid, the two women who had felt so "overtaken" by medical interventions. Interestingly – because neither received satisfactory individual explanations – they both mused on hypothetical situations: Barbara asked her community midwife what would have happened if she had been at home rather than in hospital; Enid wondered if her baby would have died in the days before modern medicine. This line of questioning seems to be establishing a similar kind of justification: without all this, my baby would have died.

Another line of enquiry pursued by some women was the future implications of their experience: what could they expect in the next pregnancy?

> They said it was quite likely that this [retained placenta] would happen again, well an increased possibility, and therefore they would recommend that I didn't opt for a home birth, which was very annoying. [Hilary]

> She [the consultant] explained that my contractions hadn't been strong enough to get the baby out ... if I decide to have another child that needn't happen again and that was all quite reassuring. But I just needed to hear someone say, "It was alright, you did alright," having been there with me. [Fiona]

> It was a fluke, it was unlucky, it was the baby that had knotted the cord. He said I'm tall enough, there's no reason whatsoever why it should cause problems next time because it wasn't my fault at all, which is quite reassuring really. [Gail]

Even in these examples, the first agenda – explanation for explanation's sake, and reassurance about their performance – creeps in: "you did alright", "it wasn't my fault". For women who had had particularly difficult experiences this was more important than planning another birth. (One woman, Anne, was adamant that after all she had been through, she would never have another child anyway.)

> I said to him [the SHO] "Was there any reason, was there anything about my body that would have made it [happen]?" His initial response was

> "Why? Do you want more children?" So I said, "Well I'd just like to know why it actually happened, like this time" ... He couldn't really give me ... an explanation that I found acceptable. I'm hoping that when I go back for the postnatal [examination] that they might give me some idea. [Enid]

How can women be helped as they look for explanation and reassurance? There are hints embedded in the excerpts already quoted. Partners can provide it: creating a story does not necessarily require expert advice, just information and comment from someone who was there. The perspective also needs to be woman centred: what are the issues for this woman at this time?

If we focus on each group of carers, we will see that any of them can provide, or fail to provide, these elements of support. Let us look first at hospital doctors: we heard how Fiona's consultant had explained that the contractions hadn't been strong enough but that that needn't happen again in a future labour. Fiona felt the consultant was "a bit remote because she hadn't been involved in the process". I would also venture to suggest that the consultant couched her explanation in terms which were less relevant to Fiona's needs – stressing that her contractions weren't strong enough – whereas the midwife talked about how the baby was positioned. (Failure to progress is, of course, the result of a subtle interaction between these factors.) The physical diagnosis ("you have an incoordinate uterus") is inevitably taken personally. As Fiona said, what she needed to hear was someone say "It was alright, you did alright" having been there with her. In Gail's case the consultant who debriefed her fulfilled both roles: he had been present (he had diagnosed foetal distress and initiated the emergency Caesarean section), and in his assessment of her future chances he reassured her that it hadn't been "her fault".

If we turn to the community carers – midwives and GPs – it is noticeable that the latter were mentioned less frequently in this, as in other contexts. GPs traditionally make at least one postnatal home visit, even to women who are booked for hospital (shared care) delivery. In the interviews, I asked whether the GP had visited on the ward and/or at home and about any discussions which might have taken place. Their input varied from insignificant to lengthy debriefing.

> I never thought of ringing my GP. He's the last person I'd think to say, "Excuse me, but I've had my baby." [Christine]

> There's been some cross communication with regard to Dr Stevens. She did ring me up and ask me if I'd sort of had the baby or not ... [she] did come out, but I don't know why she came really ... she just sort of said, "Are you

> alright?" and I sort of said "Yes" and she said "Oh fine, then. When you go to register him you'll get a pink card." [Anne]
>
> Barbara told the GP she "felt a bit weepy". He said "everyone is, it's your hormones". They didn't talk about the labour – "he wasn't there much anyway". [Barbara]
>
> She [the GP] had a cup of tea, she did stop for a bit because I was her last visit. She made sure I was her last visit and I told her some of it and she said to me, "Were you happy about it?" and I said "Not really, it was not what I wanted." [Jane]

When women have been transferred antenatally, the GPs will have had no involvement in the labour, and through lack of communication with the hospital and community midwives, may not even know the woman is back at home after delivery. It is ironic, however, that the carer who traditionally provides highly personalised, continuous care should frequently fail to do so in this context. The last example, however, shows that even when the GP had not been present at the labour, she could provide some useful debriefing, letting the woman express her feelings about what had happened.

Community midwives were more likely to provide the sort of support that women needed, having more often been at the labour (at least up until transfer) and interpreting events from the woman's perspective. But when we look at women's comments about the midwives' role postnatally another element emerges:

> The midwife who was there at the delivery also came ... she's actually been to see [the baby] on her last few midwife's visits ... at the time she was only a duty midwife, so it's quite nice for me that she is able to see her at home. [Fiona]
>
> The first time I saw Viv [community midwife] was on Tuesday, when she came back off sick leave ... that's quite nice, because she sort of sat, I mean, the two others have been great, all midwives are, I've yet to find one who you don't get on with. But it was nice ... because I know her ... opening the door to a face that you knew. It did make a difference. [Christine]
>
> I've not seen either of the [practice] midwives at all ... Rachel has been off sick, so that's understandable. But I had half hoped that Wendy, the other one, would have been the one to do the follow-up visits, but I've not seen her at all. [Anne]

Continuity has a value in the sense that debriefing is better done with someone who was at the labour – who knew what happened. But women also value being visited postnatally by a previously known carer for its own sake. Somehow this adds to the wholeness of their overall experience. As well as appropriate factual input and the quality of any care or counselling, the recurring presence of a familiar helper draws the elements of a disruptive episode into a meaningful story.

In summary, women's overall experience of transfer includes the process of assimilation which occurs postnatally. Confirming and ordering the events of labour is particularly important when they had little control at the time. Carers can best assist this process if they were actually present and if they give explanations which are woman-centred, often focusing on her need for justification. But debriefing is more than event-specific counselling: the continued interaction with known carers provides a backdrop against which women can "own" their experience.

What does continuity of care in the context of community-booked women mean? Most women had an unequivocal ideal – to be cared for in labour and postnatally by the particular one or two midwives they had got to know antenatally. This kind of highly personal attachment emerged in all but two of the interviews.

> So I'd been lucky: Diane, my midwife from my doctor's was actually in [the hospital] that week, so she'd been with me up 'till that time. Then she went off duty, so I'd had the same midwife all the time which was really nice because at least it was somebody that I knew. [Gail]

> In the morning I rang [the hospital] again and it was another community midwife who was on call, but fortunately she said as it was getting so near 8 o'clock, the two midwives I had been seeing would [soon] be on duty, she would contact them. [Hilary]

> It would have been a community midwife, but not me own ... she was off all week, that week .... She said if it had been her day off she could have come in you see, but with her being on holiday she couldn't come. [Karen]

> I was looking forward to having people I knew around me, and I'd got to know Teresa [midwife], I'd got to know some of the other midwives at the clinic, I knew my own GP over the years, and I was actually looking forward to not having strangers with me. [Jane]

These excerpts, while illustrating the point that women want a specific midwife, introduce two other issues: the first is the possibility of being cared for by other community midwives, known by type if not in person. Karen (third example, above) is unimpressed by such niceties: we saw in the preceding section how she had no allegiance to the community-based system *per se*. If she could not have her own midwife, she might as well go into hospital. But other women did appreciate the partial continuity achieved by having a community midwife, even if not their own.

> And the midwife there [after transfer to hospital] was called Kay, I forget her surname, but apparently she's normally out in the community, so in fact she's one that I might easily have had anyway. [Debby]

The second issue is the relative importance of midwife and doctor. Jane (quoted above) was strongly attached to both, though when it came to the delivery itself, it was the midwife that she missed most – and who missed her! The vast majority of women identified with the midwife. This came over in the amount and manner that midwives featured throughout the interviews as well as in these specific comments about continuity. The following excerpt is interesting because it makes a direct comparison between the relationship with the midwife and with the GP, and because it shows how the hierarchy of continuity (personal acquaintance is valued above team membership) operates for doctors as well as for midwives:

> No, the doctor didn't come in at that point .... I understand that's quite common, that the midwives get on with it. Generally the doctor is there but my own GP, well there's two doctors at the practice, my own doctor was on holiday, and the doctor that came doesn't normally do GP unit deliveries. [But] I was quite happy 'cos I knew the midwife, you know I'd sort of built up a relationship with her over the last months and I was quite confident with her. [Enid]

So much for women's expectations about continuity; how is it affected by transfer? Inevitably there is disruption. The arrangement for these women was that after transfer the community staff were no longer formally responsible for their care until discharge from the hospital for postnatal care at home. Sometimes the community carers handed over and left altogether. But even if they stayed, their role was altered. At worst, the community carers seemed paralysed, even antagonised, by the hospital setting; at best they provided practical and emotional support, acting as an advocate within the new system. The women were as aware of disruptions of role as they were of more literal discontinuity. They were indirectly affected by their carers' ability, or otherwise, to ameliorate the post-transfer experience. But, being so attached to their carers, they also felt personally affected by what they saw of the *carers'* experience.

> She [community midwife] didn't stay for the operation ... but she stayed to see him at the end when he was born and to do his weighing and that. But I always got a feeling that she did that because she didn't want to feel pushed out by the hospital staff ....
>
> [Q: And what about the GP?]
>
> She came in but I've only got a hazy recollection of her standing there ... she didn't come in again after that. [Enid]

Enid was not visited by her community midwife on the postnatal ward. She blamed herself for the way her community midwife had been treated, and felt that might be why she didn't come to see her on the ward:

> I think Caroline [community midwife] was upset. She said she'd try and call [on] me, but they were really busy .... I was worried that she, you know, it couldn't have been directed at me, but that Caroline was a bit put out with what had gone on towards the end of the delivery and I was just a bit worried that she felt in a particular way that she didn't want to see me .... I can see now there's no way it could have been anything I did wrong .... [Enid]

This story demonstrates how a clash between the community and hospital staff can damage the woman's relationship with her carers, and how this can spill over into postnatal care and affect her feelings about herself.

Conversely, it was possible for continuity was not only to be preserved in a literal sense, but for the shift of role to be positive: sometimes the community carers were able to influence or complement the hospital care to the woman's advantage.

> The midwife came with me to the hospital, that was very nice. She was clearly in no position of any power whatsoever but she just stayed to see it through ... by sort of trying to intervene to talk about the syntometrine. I think she was trying to be as helpful as possible ... things like helping me to push into the vagina, and after he was born helping me feed. So she sort of stayed close by, so I was glad that she came even though she wasn't in a positive role in a sense. [Maureen]

> They [community midwife and GP] were there for the delivery, they just weren't able to do it.
>
> [Q: What sort of role were they playing at that point?]
>
> Well, just reassuring me really: in the middle of all this, a friend of ours turned up at the hospital .... D [partner] went to sort him out ... the doctor who was doing the delivery wasn't going to wait.... [The GP] said to the doctor, "Just hang on a minute, I'll go and get the partner". So it meant I didn't have to negotiate that myself, I could do it through her. So they were just, they were reassuring me really. I didn't feel kind of abandoned or anything. [Fiona]

It is noticeable that the community carers were seen in a positive light on occasions when they relinquished their role as medical attendants and concentrated on emotional and practical support, including advocacy. They might not be able to undertake certain obstetric decisions and interventions, but they were seen as having some influence over those who did – and as providing personal support which complemented the technical expertise of the hospital staff.

In summary, transfer disrupts continuity both in the sense of absenting the preferred carer(s) and in altering their role. Where continuity could be sustained, it improved the experience of transfer. Why does continuity make such a difference? Clearly it has an importance in its own right – women felt supported by the sheer presence of a familiar carer. But it also facilitates the implementation of each of the elements of good care described in the preceding sections: adequate preparation, appropriate explanation, good interaction with the hospital and sensitive debriefing.

# 7 DISCUSSION

## Section A
## The survey results: context and implications

### Characteristics, availability and use of the community obstetric service

The most striking organisational feature of the community obstetric service in the city is its rarity. Whereas midwives are the key carers – both in terms of women's expectations and of the midwives' actual contribution – it is the general practitioners who control access to the service. And there are very few "obstetric GPs". Only three bookings during the six month study period were "midwife only bookings" (these were excluded from the study – see footnote page 59). This study was done in 1991, two years before *Changing Childbirth*, the government report which recommended among other things that 30% of women should have the midwife as lead professional and that midwives should have direct access to some beds in maternity units (Expert Maternity Group 1993). It will be interesting to see if the pattern changes in the wake of that report.

The carers – GPs and midwives – are highly committed to a personalised, "low tech" service. Some women will have been offered the service as routine (in the few practices which regard it as such) but many will have opted into it because of strongly held preferences or beliefs. It cannot therefore be assumed that a similar service could be run on a larger scale, or that women drawn from the general population would make the same choices or behave in similar patterns to those booking for community delivery at present. This must be borne in mind when drawing more general conclusions.

What then are the differences between women booking for community delivery and a (selected) population of women booking for shared care? The survey demonstrated that there were differences in age, parity and certain social characteristics. If the tendency for community-booked women to be older (particularly the primiparous women) is true, this has important obstetric implications. These are the women most likely to run into complications. On the other hand, women who have spent longer in education and have professional jobs are more likely to have children late. It looks as though because community booking is attractive (attainable) for women of a higher social class, ironically it is covering an obstetrically riskier group.

Of course, there is a considerable overlap between the booking groups in all characteristics. Even if community booking would appeal to only a certain proportion of woman, this proportion must be more than the 3% who knew it existed. And it cannot be assumed that working class/young/primiparous women would not be interested in community booking (to give the extreme case). It may simply be that they are less likely to know about it or be offered the choice. This is borne out by the analysis of women who changed GP: they are seen to skew the community-booked population to the professional/older/multiparous. The women who were offered the option by their own GP are more like the shared care group. It is also borne out in personal experience: when GPs offer community booking to all women the uptake rises rapidly. One practice which offers community booking to all its pregnant women has an uptake of 71% including 15% home births (Dr. Kate Richards, 1992 audit, personal communication).

The same arguments might apply to the ethnic minority women who were excluded from the controls. It would be interesting to know whether their non-uptake is due to lack of inclination or of information.

## Transfer rates and obstetric outcome

The relative proportions of antenatal and intrapartum transfers, the overall rate and the indications for transfer bear further discussion. Bull's (1983) study is quoted as something of a gold standard. Why should intrapartum rates in the present study be so much higher than in the integrated GP unit at Oxford? Part of the difference may be due to the design of the study: women transferred before 32 weeks were excluded, which would have reduced the antenatal proportion (and of course the overall rate). But further clues are given by the indications for transfer at both stages.

For antenatal transfer, pre-eclampsia was a relatively rare indication (9%) and raised blood pressure (which precedes it) was not given at all. In the North Tees unit, which is an "alongside" GP unit taking a quarter of all bookings in the area, raised blood pressure accounted for 25% of antenatal transfers (Prentice 1989). At the Keynsham unit, which is an isolated GP unit taking only low risk women, the transfer rate for raised blood pressure is 16% (Garrett 1987). There may be a higher tendency to transfer if GP unit booking is more routine (i.e. less commitment to "hang on" to the woman) or if the unit is isolated (more at stake if transfer is delayed). The existence of protocols may also play a part. In the service described, there were no set protocols: GPs and midwives acted on their own clinical judgement. These factors would tend to decrease antenatal and hence increase intrapartum transfer rates.

Similar considerations apply to intrapartum transfer. The main differences between the unit described in the study and the North Tees and Keynsham units had to do with delay in first or second stage of labour. In the present unit delay in second stage accounted for 18% of intrapartum transfers; in the Keynsham unit it was 5%; and in the North Tees unit it didn't appear, though "augmentation of labour " (presumably at any stage) accounted for over a third of intrapartum transfers. A possible explanation for these differences (apart from the different way of recording indications for transfer) is that in the isolated unit, women having long labours were either transferred early (the transfer rate in first stage was 37%) or forceps were used by the GP in the unit. In the alongside unit, it looks as though labours were augmented very readily, so long first or second stages while still on the unit were less likely. Again, one sees the influence of protocols, and the freedom and confidence of GPs and midwives to exercise their clinical judgement and skills.

Turning to obstetric outcomes, the temptation is to compare the high proportion of non-operative live deliveries in the community-booked women with the similar or lower proportion in women booked for the two shared care units and to conclude that community obstetric care fosters a good outcome. A word needs to be said about causation. The three cardinal requirements are that:

1. there should be a strong association between supposed cause and effect;
2. cause should precede effect;
3. there should be an absence of disturbing influences.

The first condition is not met. Although only 48% of primiparous women at the second shared care unit (GH) had non-operative live deliveries compared to 74% of community-booked women (including those transferred) the difference does not reach significance. And there are plenty of disturbing influences, some working in favour of good outcomes in the community-booked women, some against: the women were matched for low risk obstetric history, but the community-booked women tended to be older, especially the primiparous ones. The outcomes cannot simply be ascribed to the style of care.

Comparison with data from other sources is, however, irresistible. Since not all studies give parities separately, a combined figure needs to be computed. In the present study, taking primiparous and multiparous women together the non-operative vaginal delivery rate was 86%. This compares favourably with other units:

| | | |
|---|---|---|
| Keynsham (isolated GP unit) | 92% | (Garrett 1987) |
| Bradford (integrated GP unit) | 86% | (Bryce 1990) |
| North Tees (alongside GP unit) | 83% | (Prentice 1989) |
| Oxford GP (integrated GP unit) | 83% | (Bull 1983) |
| North Tees (consultant unit) | 78% | (Prentice 1989) |

The combined figures (for women of all backgrounds and risks, primiparous and multiparous) for the two shared care units featured in the present study are quoted in a report of the local Maternity Services Task Group (Searle 1994). They are derived from the year after the study. They are as follows:

| | |
|---|---|
| Shared care unit GH | 76% |
| Shared care unit WH | 74% |

Clearly these figures are dramatically altered by the percentage of primiparous women and by the risk profile of the booking criteria of each unit. It is encouraging that in a service with a relatively high percentage of primiparous women and a liberal booking policy by comparison with other community-based systems, the non-operative delivery rate is at the upper end of the league.

## Style of care: epidural rates

When one looks at lesser interventions, "obstetric management" as opposed to obstetric outcome (or mode of delivery), the differences between the systems of care are more obvious. The community-based system is less interventionist.

Women were asked about a range of interventions (foetal monitoring, restriction of movement during labour and position at delivery, use of epidural and other forms of analgesia). The findings confirm those of other studies (Flint and Poulengeris 1986, Klein *et al* 1983) – that low risk women booked for systems which foster continuity and midwifery rather than consultant-led care tend to have fewer interventions.

It is worth discussing the epidural rate in some detail, and using it to illustrate the interplay of women's preferences, obstetric management and obstetric outcome, satisfaction and resource implications. The focus is on primiparous women, as differences between the booking groups in multiparous women were less marked. There is a strong tendency for community-booked women not to want an epidural (28 of the 32 women (82%) stated they "didn't want and epidural" when asked at 36 weeks gestation). This could explain in part their lower uptake during labour. On the other hand, nearly two-thirds of shared care women (26 out of 41, 63%) didn't want an epidural either, and only 4 (10%) positively hoped to have one. In the end, over a half of the shared care women had an epidural (as opposed to a quarter of community-booked women). It is possible that more shared care women would not have had epidurals had they been cared for in a different way.

We have to consider whether these disparities – between the number of women hoping to avoid epidural and the number actually doing so – affect satisfaction: it is entirely possible that primiparous women change their minds during labour, and it may even be that some are dissatisfied because they ***didn't*** get an epidural, or didn't get it fast enough. They were not asked about this specifically, but only one community-booked woman complained (in written comments about her care) that the process of transfer had delayed her getting an epidural when she felt ready for it.

We ***can*** form an opinion about whether the epidural rates affected overall satisfaction with pain relief. Over two-thirds of community-booked women were "very happy" with pain relief in labour (22 out of 32 women, 69%), slightly more than the shared care women (22 out of 37 women, 59%). The differences between the two groups are not statistically significant, but it perhaps worth noting that only within the shared care group were any women actually dissatisfied (3 women, 8%, "fairly" or "very" unhappy). These findings bear out previous studies – that more "powerful" analgesics do not necessarily lead to higher satisfaction with pain relief (Flint and Poulengeris 1986, Green *et* *al* 1988). They certainly don't bear any relationship to the other measures of satisfaction such as the quality of explanations and "sense of control": blotting out pain is not the only factor which contributes to a good experience. Understanding and involvement also play a part.

Another feature of epidurals is the interplay between their use for analgesia in "normal" labour, anaesthesia for interventions such as forceps and Caesarean section, and the way that they may increase the necessity for such interventions. The latter has been established since the mid-1970s (Hoult *et al* 1977) and is well reviewed by Inch (1982) and Enkin (1989). For this reason, women having elective Caesarean section have been excluded altogether, and separate figures are provided about epidural rates in all other deliveries and in those women having normal deliveries. The difference between the booking groups is more marked in the latter.

Epidurals are also important because of their resource implications. Exact costings were beyond the scope of this study but providing an epidural service requires on-call anaesthetists, extra staff time (medical and midwifery) for monitoring a more "managed" labour, sterile equipment and supplies. If the ensuing complications and interventions are also taken into account, the cost begins to mount. If epidurals are being offered in the name of analgesia (i.e. to improve women's experience) it is perhaps worth noting that they do not appear significantly to affect satisfaction with pain relief, and that other aspects of satisfaction were higher in women who received less than a third of the number of epidurals (12% as opposed to 40% in primiparous women having normal deliveries). Not all this difference can be ascribed to different hopes and expectations – some of it at least must reflect a different style of care.

## Continuity of care

This brings us on to continuity of care. Once again, we can look at this in terms of women's expectations and of the service actually provided. Any conclusions about the way these factors combined to produce particular outcomes – in the style of care, or in women's satisfaction – must be very guarded. To reach such conclusions, the study would have had to provide for a scale of continuity and to correlate it against outcome measures while controlling for other influences.

Continuity of care is a defining characteristic of the community obstetric service: some women booking for home birth may do so because they favour a non-interventionist approach or have particular worries about going into hospital, but another important factor is the possibility of being delivered by their "own" midwife. For GP unit women this is the overriding attraction as they will physically deliver in hospital in any case. The arrangement is that women attend for antenatal care at their own GP's surgery where they see a community midwife on a regular basis. The midwife is likely to make some home visits. She makes herself available to attend the birth. If she is on holiday, another community midwife will cover – often someone in the same team who may have met the woman at a clinic or home visit. In some cases the nights would be covered by the "on-call" midwife, but there was usually a high degree of commitment from individual midwives to deliver their "own" women. The GP is usually less involved, providing medical backup rather than frontline care, especially in the case of GP unit deliveries.

These arrangements are reflected in women's expectations. Over two-thirds of community-booked women (68 out of 98, 69%) said that having a familiar midwife during labour was "very important" to them. What is surprising is that a majority of shared care women said they would "like it if possible" despite the fact they knew it wasn't likely (43 out of 77 women, 56%). Having a known GP at labour was "not important" (41 out of 98, 42%, in community-booked women and 65 out of 77, 85%, in shared care women).

Continuity has been conceptualised in different ways, but in this analysis it was simply measured in terms of whether a familiar midwife attended during labour or on the first postnatal day, and the total number of staff attending in labour. Over three-quarters of community-booked women (74 out of 96, 77%) did indeed have a familiar midwife during labour. More surprising is the finding that nearly a fifth of the shared care women also said they were cared for by a midwife "they already knew from before the start of labour". This study took place before the institution of any kind of team midwifery at either hospital. An experimental system of "domicillary booking" had been started at GH. In this arrangement, a community midwife made shared care bookings by seeing the woman at home rather than in a hospital antenatal clinic. Sometimes this midwife would make a commitment to attend the delivery if she was available. But women booked in this way were excluded from the controls. It is possible that some community midwives were following women into the labour ward on an informal basis. Hospital midwives rotate between the clinic and other ward, including the labour and delivery suite – some of them may have cared for women they had already met by chance. Thus "knowing the midwife" encompasses a wide range of possible arrangements and degrees of familiarity, which were not explored.

Being visited by a familiar midwife on the first postnatal day was another aspect of continuity: the interview data show the importance of "debriefing" after events, and of not being "abandoned" by the antenatal carers. It is encouraging that four-fifths of community-booked women (79 out of 96, 82%) were visited in this way. The figure is almost as high amongst transferred women (21 out of 27, 78%), even though the community midwife is no longer formally in charge. Interestingly, a sizeable minority of shared care women also received such a visit. Once again, it would have been interesting to analyse who was making these visits – midwives known from antenatal clinic, or from the labour ward, or possibly community midwives making a social visit. The bald figures do not give any indication of the quality of the relationship or the nature of the visit.

The number of midwives and doctors attending the delivery gives an impression of continuity *within* labour. It does not distinguish between frequent sequential changes and multiple concurrent attendance. Hospital-booked women would experience shift changes, but there are also more students (midwifery and medical) in the hospital setting. Both aspects of discontinuity could, of course, be unwelcome – relating to a lot of carers during a stressful, emotional and very personal episode can be difficult. Table 5.19 gives a clear picture of the high number of midwives attending shared care women: the average number for primiparous women was 3.6 during the course of labour and delivery. It was 2.9 in community-booked women – even when the 46% of transferred women were included. Primiparous community-booked women were, however, more likely to be attended by a doctor than shared care women – even if the delivery was normal. But the difference is not significant, and community-booked women usually had only one doctor, whereas shared care women tended to have two or more.

It is interesting to speculate about the resource implications of continuity: on the face of it, community-booked women had fewer carers. But those few carers had to be on-call over long periods in order to provide the continuity. And midwives have to be of a higher grade in order to take the responsibility of caring for women independently. Costings of community-based team midwifery have concluded that it is more expensive than hospital based care. In terms of midwifery staff alone this may be true, but it might be different if the effects of the style of care (e.g. on intervention rates, obstetric outcome) and the "hotel costs" were also taken into consideration.

## Preferences and satisfaction

It is clear that community-booked women do have different preferences to shared care women. The results give their opinions about three specific interventions (Tables 5.23–25): epidural anaesthesia, episiotomy and electronic foetal monitoring. There was least difference with respect to epidurals, with nearly two-thirds of shared care primiparous women not wanting one. There was most difference over electronic foetal monitoring, with over half the community-booked women but only 6% of shared care women not wanting it. These differences may represent a genuine preference for "low tech" delivery by community-booked women, but also the fact that they were better informed. Many of the shared care women were probably unaware of the advantages and disadvantages of electronic foetal monitoring. Whether these attitudes and knowledge preceded booking or were fostered during the course of pregnancy by committed community-based carers is uncertain. The uniformly stronger preferences for "no intervention" by women who had changed their GP indicates that there may be a group of women with prior preferences who positively seek out community-booking.

Feelings about episiotomy were very mixed in both groups. The higher proportion of multiparous women in the community-booking group may be important – the postnatal pain from previous stitches was not forgotten.

Preferences about continuity are surprising only to the extent that so many shared care women wanted it. Over half said they "would like to have a familiar midwife during labour if possible" or that it was "very important" to them. Given that they were eight months into a system of care that did not offer this, the finding is highly significant! It is also interesting that the wish for continuity is focused on the midwife rather than the GP. Only 10% of the community-booked women said that having a familiar GP at the labour was "very important". This is surely a reflection of the way women perceived the midwife as the key carer, despite the fact that they had to approach her through a GP.

The open question about "hopes and plans for labour" supports the quantitative findings: community-booked women did have stronger preferences for a "natural" (as opposed to a "normal, quick") labour with fewer interventions, which they listed in more detail than the shared care women. Both groups expressed their wish for continuity of care. Both groups also recognised the need for flexibility and, while community-booked women did want to be "in control", what they meant by this was having things explained, sharing in the decision making and feeling that any intervention was necessary. These ideas shed light on the data about women's satisfaction.

Satisfaction was divided into three key areas which are good indicators of overall satisfaction with the experience of labour (see Chapter 1, Background).

*Satisfaction with explanations* reflects satisfaction with care in general. Good communication is the basis for good care. There was a significant difference between the groups: nearly 90% of community-booked women felt that choices had "always" been explained, whereas for shared care women it was only 55%. Does the fact that the majority of community-booked women were cared for by midwives they already knew have any bearing? Explanations need to be tailored to the needs of the particular woman, which is easier when she is already familiar. Also, the community-booked women were probably better informed before they went into labour which would have made the choices clearer.

*Sense of control* reflects satisfaction with the overall experience of labour: even if there is difficulty, intervention or pain, a woman who is respected and involved can still have a sense of satisfaction and fulfilment. This aspect showed an even more striking difference between the groups. Of course, all the difference cannot be accounted for by the style of care (attitudes and interventions) in labour: some of it will reflect a self-fulfilling wish on the part of community-booked women. They wanted to be in control, and they were more assertive. Some of it may reflect better preparation during pregnancy – either through discussion with their carers or specific childbirth preparation classes. This is an important finding because a sense of control is a predictor for emotional well-being in the postnatal period.

The final aspect is *satisfaction with pain relief*. The groups are similar which bears out the results of other studies (see Chapter 1 Background) showing that experiences of pain and pain relief are not directly related to satisfaction with care and overall satisfaction with labour. It is interesting that the community-booked group were marginally more satisfied with their pain relief even though they had less of it (see discussion about epidural anaesthesia, above).

These outcome measures are focused on labour. Women's satisfaction with labour is a valid concern and reason enough to influence policy. But inevitably there are attempts to link events and satisfaction in labour with longer-term well-being. In the present study, such a measure was provided by the Health Visitors' Anxiety and Depression score. This was not available for all women (some scores had not been recorded by the health visitors and some women had refused to let it be released). The available results (from 83 community-booked and 64 shared care women) show that the mean score was lower in the community-booked women than the shared care women – i.e. they had less anxiety and depression one month postnatally. This is much more likely to reflect differences in baseline mental health and social support than complications during or satisfaction with labour. If the both groups are subdivided into those who had normal deliveries and those who had complications/transfer, it looks as though the women with the more difficult labours actually had less anxiety and depression subsequently. This supports other studies which have not found a link between obstetric complications in labour and subsequent low emotional well-being or depression. It would have been interesting to see whether high ratings for "sense of control" in labour was associated with low anxiety and depression scores.

## Section B

## The interviews: women's experience of transfer and care

The theme that emerges from the interviews is that transferred women are especially vulnerable to disappointment, but that aspects of care can ameliorate the experience. The way this operates is consistent with findings from previous work, and from the quantitative part of the present study – namely that women's sense of control and of having had things explained are more influential than the events themselves. Care which fosters a sense of control and provides explanations will improve even difficult experiences.

We saw in Chapter 1 how the quality of explanations can be used as a measure of the acceptability of care and of women's satisfaction in labour. The interviews explored the importance of explanations from the woman's point of view. It was vital for women to be able to order, to understand and in some cases to justify what had happened to them. This finding echoes a body of literature which describes the process of explanation with respect to illness. Brody (1987) writes:

> "... suffering is produced, and alleviated, primarily by the meaning that one attaches to one's experience ... the mechanism for attaching meaning ... is to tell stories. Stories serve to relate individual experiences to the explanatory constructs of the society and culture and also to place the experiences within the context of a particular individual's life history."

Brody is particularly concerned with how the search for meaning (story telling) can be incorporated into the healing process:

> "... the placebo effect (or, healing by symbolic means) occurs to the optimal degree when the meaning of the illness is altered in a positive direction .... First, the illness experience must be given an explanation of the sort that will be viewed as acceptable, given the patient's existing belief system and world view. Second, the patient must perceive that he or she is surrounded by and may rely upon a group of caring individuals. Third, the patient must achieve a sense of mastery or control over the illness experience, either by feeling personally powerful enough to affect the course of events for the better or by feeling that his or her individual powerlessness can be compensated for by the power of some member or members of the caring group (such as the physician)."

This exposition of "healing by symbolic means" seems to be very relevant to caring for women transferred in pregnancy or labour. Firstly, it acknowledges that explanations must be "patient centred" – that is, applicable to the woman's belief system and also to her particular social and psychological circumstances. The dichotomy between the medical and personal "beliefs" about illness has been widely recognised (Curer and Stacey 1986) but it is particularly acute in the field of maternity care, as we saw in the discussion about choosing "medical" or "maternal" outcome measures (Chapter 1). It reaches its apotheosis in transfer, when women literally move from a "maternal" to a "medical" model of care. We saw from the interviews how women feared medicalisation, interventions and sometimes hospital itself. In a sense, transferred women become victims of their own expectations. They are apt to feel they have not performed well, or that they have let down their carers. The transition from normal to abnormal, health to illness, maternal to medical, is a problem precisely because of the existence of the two systems. The importance of seeking explanations which bridge this gap and integrate the personal aspects of experience is crucial.

Secondly, Brody emphasises the connection between explanations and control. It is easy to see why being in possession of information about choices gives women practical control over what happens to them, and a sense of involvement even when complications and interventions are inevitable. But by talking about "meaning" Brody introduces the idea of a "sense of mastery or control over the illness *experience*" (my italics). This idea also appears in Kleinman's (1988) work. Like Brody, he is concerned with the role of the healer (in his case, specifically the physician):

> "She taught me a grand lesson in patient care: that it is possible to talk with patients, even with those who are most distressed, about the actual experience of illness, and that witnessing and helping to order that experience can be of therapeutic value."

The patient he refers to was a young girl undergoing painful treatment for extensive burns. She (and he) were helpless – completely without control – in the sense of the physical realities of the situation, but the process of story telling helped her tolerate her ordeal. Thus "explanation" is turned on its head and the role of the carer is to listen to the patient explaining. Achieving a sense of meaning is a two-way process.

These ideas tie in very closely with women's need to debrief about their experience of transfer – women continued to seek explanations *after* the event.

Thus we see that gaining control in terms of finding meaning is something which can also happen retrospectively. The value of counselling after an event is recognised in bereavement, miscarriage, post-traumatic stress syndrome: the same may be true of childbirth especially where the process has been difficult.†

Coming back to Brody, the third area of resonance between his ideas about healing and the particular situation of transfer is what he says about carers. It is not immediately obvious why "the patient must perceive that he or she is surrounded by and may rely upon a group of caring individuals" in order to achieve a positive understanding of his/her illness. My interpretation of this is that sometimes the patient cannot feel directly in control – either at the practical or the "meaningful" level. In that case any sense of control is achieved by proxy – but the carer who takes over control must be trusted ("relied upon") by the patient.

This leads into the whole question of the relationship between patient and healer, or woman and carer, and may shed some light on the importance of continuity. If we turn for a moment to the literature on continuity *per se*, the importance of an *attitudinal contract* between carer and patient emerges. Banahan and Banahan (1981) describe this as a two-way contract, with the patient perceiving that a particular physician is responsible for his/her care, and with the physician accepting the responsibility and the consequent dependency of the patient upon him/her. This contrasts with numerical measures of provider continuity, such as those defined by Steinwacks (1979) (e.g. SECON, the fraction of sequential visit pairs at which the same provider is seen). Shear *et al* (1993) were able to show that even in the presence of high provider continuity, there was not necessarily an attitudinal contract and that this lessened the impact of continuity on outcomes. (Their study is particularly relevant as they were looking at continuity of antenatal care and obstetric outcomes.) The importance of an attitudinal contract is supported by a study from a general practice setting (Hjortdahl and Laerum 1992). Patient satisfaction with a given consultation was strongly related to having seen their "personal doctor" but was less

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† There is a strong link, too, with the commentary around *researching* through stories. Graham (1984) talks of stories as a way of collecting data which "overcomes the tendency to fracture women's experience" – i.e. story telling allows women to create data in their own terms instead of those dictated by the researcher and the societal norms which inform him or her. Surely this is another example of women being in control – of the meaning of their lives if not of its content.

dependent on the length of time they had known that doctor and not at all dependent on the frequency of previous contacts.

Gradually, we can put together a thesis about how continuity of care might foster women's sense of control, which seems so important to a sense of well-being, particularly in the field of sexual and reproductive health. If good explanations are those which integrate the woman's belief system and individual circumstances with the reality of her physical experience, then a carer who has knowledge of those beliefs and circumstances will be the most helpful. Explanation is a two-way process: the carer must hear the woman's story as well as give his/her own. And if individual control can be satisfactorily relinquished to a carer who has manifestly accepted responsibility for the woman, then a carer who makes such a commitment will be the most powerful healer. Neither of these attributes – to provide woman-centred explanations or to take responsibility – are absolutely dependent on continuity of care, i.e. on a prior relationship. But it is easy to see how the necessary communication and trust would build up between two people over a period of time.

This prior relationship, with its twin elements of mutual knowledge and trust, seems to be particularly important at times of crisis. Weiss (1975) writes about the management of "transition states" in the field of mental health, but his ideas are applicable to transfer:

> "Observation suggests that almost the only useful form of help is *support*. Support is furnished by a helper (who may or may not be a professional) who is accepted as an ally by the distressed individual. It consists of the communication, sometimes non-verbal, by the helper that the helper's training, experience, and understanding are at the service of the distressed individual as the latter struggles to regain equilibrium .... Because confusion and unpreparedness are so prominent among the difficulties of transition, a helper can be useful to an individual in transition by providing that individual with a framework which orders and explains the individual's experiences and responses." (original italics)

What is meant by "support"? Caplan (1974) gives this definition:

> "Support system implies an enduring pattern of continuous or intermittent ties that play a significant part in maintaining the psychological and physical integrity of the individual over time."

This definition puts continuity ("enduring ties") at its heart, and suggests that continuity itself contributes to the long-term health ("integrity") of the individual. Elsewhere Caplan (1964) talks about the "human" aspects of support. He contends that whereas professionals are trained to focus on certain aspects of a crisis, it is dealing with the personal aspects which influences the eventual mental health outcome. Thus we see how the existence of a continuing personal relationship is supportive in itself – irrespective of its heightened capacity to offer woman-centred explanations or to take clinical responsibility. Continuity of care fosters a relationship which stretches the boundaries of professionalism – and it is precisely at that boundary that the kind of support most needed in crisis is found.

## Section C
## Conclusions and recommendations

1. Community-based maternity care accounts for less than 3% of the bookings in the city. It is available only to women whose GPs offer it, or to those who are prepared to change GP. Many women who currently book for shared care have suitable obstetric histories, social characteristics and preferences about care and could benefit from community-based care. Women see their midwife as the key carer so it is ironic that the lack of "obstetric" GPs prevents access to the service. A truly midwifery-based service should be established as recommended in *Changing Childbirth* (Expert Maternity Group 1993).

2. The study was not large enough to comment on maternal or perinatal mortality, or to draw statistically significant conclusions about the mode of delivery in the different systems (community-based or shared care). However the rate of non-operative live deliveries (74% for primiparous women, 86% overall) compares favourably with other British GP units booking low risk women.

3. For a selection of interventions, the community-based system was less "interventionist" than the shared care system. The epidural rate for primiparous women going into spontaneous labour under community-based care was 25% compared to 54% in shared care women. This cannot be entirely explained by different obstetric characteristics or expectations in the two groups.

4. There are important resource implications stemming from the "low tech" style of care and its organisational features. There was a significant difference in bed occupancy between women booked for the GP unit and for shared care: 39% of primiparous women stayed one night or less if booked for the GP unit, as opposed to 5% of shared care women. Community-booked women were also attended by significantly fewer midwives during labour (24% of community-booked and 50% of shared care primiparous women had four or more midwives). Community midwives do, however, have to be highly qualified and to be "on call" for long periods if they are to provide continuity of care. Further research is needed to assess the resource implications when all these factors are taken into account.

5. The community-based system, as expected, provided substantially better continuity of care. Of community-booked women, 77% were attended by a familiar midwife in labour and 82% were visited on their first postnatal day. Whether continuity of care was responsible for other features of the service (low intervention, high satisfaction) was not explored in a quantitative way, but written comments and interview data support the proposition.

6. Women were highly satisfied with the service. Satisfaction with pain relief was (non-significantly) better despite less use of analgesia. Community-booked women were also significantly more likely to feel that choices had been explained and that they had been "in control" during labour.

7. Transfer rates were comparable with other British units (46% in primiparous, 23% in multiparous women), although there was an unexpectedly high proportion of intrapartum transfers. This is probably because home births are taking place in an urban setting (i.e. close to the hospital) and the GP unit is integrated (i.e. on the same ward as consultant beds). GPs and midwives are also not required to work to strict protocols with unnecessarily cautious cut-off points. The indications for, and outcome after, transfer are otherwise comparable to similar units.

8. Community-booked women do appear to have characteristic hopes and expectations for a "natural" delivery with familiar companions/carers and minimum intervention. They want to be "in control", by which they mean being informed and involved.

9. Transferred women are particularly vulnerable to disappointment but this can be ameliorated by continuity of care, advance preparation, explanation and sensitive debriefing.

10. The following are specific recommendations for the organisation and delivery of community-based care which would improve women's experience of transfer.

    a) Transferred women fall across the divide between the maternal and medical models of pregnancy and childbirth. Good relations between the workers in both "systems" (without diluting the contribution of either) will lessen the disruption and sense of guilt felt by women at having "failed" in the community system. Community carers need to be clear about their own "investment" in normal deliveries.

b) Community carers should "follow" the woman into the hospital system. If they cannot be formally responsible for her care once complications and interventions begin, they should at least be able to maintain a role as supporter/advocate. This should be recognised as a *bona fide* part of the job, not just as an (unpaid) "extra".

c) Midwives and GPs should explain to women booking for community-based care about the likelihood of transfer, the conditions which would necessitate it, and the organisational mechanism and consequences.

d) When transfer is inevitable, carers should explain the reasons and procedures, and try to give some idea of what will happen post-transfer. This may be particularly difficult in an urgent situation, but is actually more likely to be overlooked when the need for transfer develops gradually or is not so clear-cut.

e) Women understand and accept the need for transfer at different levels – intellectual, emotional, physical. Ironically women who still feel physically well may have most difficulty adjusting to the need for transfer.

f) Women who have booked for community-based care may have particular worries about the hospital: staff should ask about these before, during and after transfer.

g) Women should be offered the chance to "debrief" after transfer. This helps them to "order" their experience. Women are likely to seek explanation, justification and reassurance about their performance as well as information about future implications. If debriefing is done by a familiar carer, it is more likely to be woman-centred and has the added benefit of reaffirming the relationship and the acceptability of transfer within it.

h) Continuity of care post-transfer is particularly crucial: GPs should be informed when women are discharged and both the GP and familiar midwife should visit postnatally.

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# APPENDIX 1:

# SUMMARIES OF WOMEN'S STORIES

**Anne.** Interviewed on day 26.

32-year-old nurse, lives with partner. First baby. Changed to GP unit after finding out about it through a friend. Developed pre-eclampsia (raised blood pressure) at 38 weeks and was sent into hospital from antenatal clinic by GP. Admitted briefly, then monitored on day unit until two weeks overdue, when induced. Had prostaglandin pessaries in morning and afternoon with no effect, so her partner went home. Had to plead for him to be allowed back when she did start labour at 10 p.m. Had epidural early in labour which was complicated by a suspected dural tap. Spent the rest of labour flat on her back and had to have a Ventouse extraction to avoid straining. Had an episiotomy and heavy postpartum bleeding. Readmitted on day 5 with severe head ache – treated with a blood patch, which produced instant relief. She had no further contact from her own midwife after transfer. Even when she was discharged from hospital, neither of the community midwives she had met did any postnatal visits (one was off sick). Her GP phoned to check if she was home and visited briefly. Shocked by suddenness of initial transfer and painful, terrifying events in labour and afterwards. Main complaints were about unnecessary bureaucracy and not being listened to or having things explained by hospital staff. Says she never wants another baby after this experience.

**Barbara.** Interviewed on day 26.

32-year-old director medical supplies company (secretarial qualifications), married. First baby. Booked for GP unit. Normal pregnancy. Spontaneous rupture of membranes (waters went) at night. Understood she should go in straight away if this happened, so she phoned hospital. Unfamiliar community midwife phoned her back and arranged to meet her there. Her own midwife took over at 8 a.m. and stayed until 6 p.m. (when she had to go to family wedding). Had morphine late morning, was pushing by 2 p.m. but made slow progress and was transferred. Had an epidural and Ventouse extraction. Felt confused, unsure what was happening, sensed that community staff were also disempowered in hospital setting.

**Christine.** Interviewed on day 26.

33 years old, previously a secretary, now full-time mother, married. Second baby (first born by normal vaginal delivery on GP unit), booked for GP unit. Had a urinary tract infection and threatened premature labour at 35 weeks. Referred herself to hopsital, where the contractions settled. Persistent breech presentation. Decided to opt for elective Caesarean under epidural rather than have controlled non-natural labour and possibility of emergency section under general anaesthetic. Discussed options at length with registrar in hospital, friend who had had Caesarean, own community midwife. Registrar she knew did Caesarean, and saw her afterwards. Own community midwife off sick when she first came home but visited later. Minimal involvement by GP (which she did not see as problem). Felt Caesarean was nearest thing to natural birth she could have had.

**Debby.** Interviewed on day 49.

37 years old, secretary at university (degree in politics), married. First baby, booked for GP unit. Spontaneous rupture of membranes at 2 a.m. Community midwife came to see her at home and discovered meconium staining and raised blood pressure. GP came 6 a.m. and gave diamorphine. She had been nauseous throughout the night and this was worse after the diamorphine (the worst aspect of the labour). Referred to hospital (for the meconium) and went in during afternoon. Labour was accelerated with a drip but she had a normal vaginal delivery with only an episiotomy. The hospital midwife was in fact a commmunity midwife doing a "refresher" on labour ward, so could have been someone who would have looked after her anyway. Stayed in overnight.

**Enid.** Interviewed on day 23.

31 years old, social worker, steady boyfriend. First baby, booked for GP unit. Started in labour and spontaneous rupture of membranes at midnight. Midwife visited early a.m., stayed during day, and accompanied her to hospital in the early afternoon. Pains worse in hospital, pethidine made her sick and soon wore off. She opted for an epidural and the GP made the transfer by phone. Baby became distressed before she was fully dilated and she had an emergency Caesarean section under general anaesthetic. She was aware of disagreement between community midwife and hospital staff. She was not visited by the community midwife or the GP on the postnatal ward. She felt some guilty responsibility for the way the midwife was treated, and a lack of understanding about why never fully dilated and why the baby became distressed.

**Fiona.** Interviewed on day 38.

38 years old, social worker, living with partner. First baby, booked for GP unit. Long slow labour. Checked by midwife at home, given mild tranquilliser over night. Moved to hospital (GP unit room) on afternoon of second day. Back pains, slow progress. Transferred to consultant care, offered epidural. Delivered by Venthouse extraction. Community midwife and GP stayed throughout labour. Midwife visited on postnatal ward and subsequently at home. Stayed in three nights (baby jaundiced).

**Gail.** Interviewed on day 27.

30 years old, bank officer, married. First baby, GP unit booking. Referred for postmaturity, admitted and induced with prostaglandin pessary. Had own community midwife early on as she was on labour ward anyway. Back pain early on – had epidural. Signs of foetal distress on electronic foetal heart monitor, had emergency Caesarean under epidural. True knot found at operation. Own midwife (who had left by time of delivery) visited on postnatal ward, then regularly at home. GP also visited at home and listened to story.

**Hilary.** Interviewed on day 37.

30 years old, nursing manager, married. First baby, GP unit booking. Less than 5 foot tall, very conscious she might have to have forceps/Caesarean and stay in hospital, but keen to avoid this (especially staying in). Contractions from 7 p.m., moved to hospital (GP unit room) 3 p.m. following day. Pushed for two hours, squatting. Normal delivery but retained placenta. Manual removal under epidural and stayed in one night. Annoyed that this may mean she has to have future deliveries in hospital, but felt she did OK.

**Jane.** Interviewed on day 30.

38 years old, never worked outside home, married, lives on council estate. Fourth baby, wanted home birth but advised to book for GP unit in view of previous obstetric history (three babies induced for maternal hypertension). Developed severe sciatica at term, admitted for analgesia and induction, was probably already in labour when prostagalandin pessary inserted and delivered within 3 hours. Stayed in overnight. Own midwife tried to attend hospital delivery but narrowly missed it.

**Karen.** Interviewed on day 29.

23 years old, factory worker, now full-time mum, married. Third baby (two previous normal deliveries), booked for GP unit, simply because it was more convenient than trailing to hospital. Became friendly with own midwife and would have liked her to do delivery, but she was on holiday. Only priority was to have someone there when she needed it (she had quick labours before). She had had a hospital appointment to arrange induction for postmaturity, so when she went into spontaneous labour and couldn't get a community midwife, she dialled 999 and went straight to the labour ward. Stayed overnight. On return home was visited by back-up midwife who was angry she had phoned hospital.

**Linda.** Interviewed on day 23.

25 years old, shop assistant, married. Second pregnancy – previous unexplained intrauterine foetal death and induced stillbirth. Changed to home birth because she couldn't face going back into hospital. Blood pressure slightly raised prior to spontaneous labour. Quick labour with own midwife and GP in attendance. Normal delivery but retained placenta, transferred in for manual removal under spinal anaesthetic. Felt OK about going in after safe delivery baby. Met midwives from previous admission – able to reminisce and celebrate.

**Maureen.** Interviewed on day 29.

34 years old, managerial position in social services, living in stable relationship. First baby, booked for home birth although understood she might well have to be transferred. Own midwife and GP in attendance once in established labour, transferred after long second stage (transverse position). Ventouse extraction (no epidural or episiotomy). Home same day.

# APPENDIX 2:

# SCORING SYSTEMS

The *expectation score* rates women's hopes as expressed in the antenatal questionnaire, giving a high score to women who favour a "natural" style of labour. The *outcome score* rates outcome in terms of the amount of intervention (short of mode of delivery) received. The *gap* between expectation and actual outcome reflects the subjective experience and the degree of dissappointment/ adjustment. A constant is added in the formula to produce positive scores.

| **Expectation score** | | **Outcome score** | |
|---|---|---|---|
| hope to have | = 1 | yes | = 1 |
| wouldn't mind | = 2 | no | = 2 |
| don't want | = 3 | | |

| **Intervention** | **Maximum possible score** | |
|---|---|---|
| Epidural | 3 | 2 |
| Gas & air | 3 | 2 |
| Electronic foetal monitoring (belt) | 3 | 2 |
| Pethidine | 3 | 2 |
| Episiotomy | 3 | 2 |
| Electronic foetal monitoring (clip) | 3 | 2 |
| **Scoring reversed:** | | |
| Active birth (moving around in labour) | 3 | |
| Desire to deliver in upright position | 3 | |
| Walked around in labour | | 2 |
| Upright position for delivery | | 2 |
| Position of choice for labour/delivery | | 2 |
| **Total maximum score =** | 24 | 18 |

GAP = EXPECTATION SCORE − 24/18(OUTCOME SCORE) + 10

## Satisfaction score

During labour and delivery, were all the available choices explained?

always = 4
usually = 3
sometimes = 2
never = 1

How much did you feel in control of your labour and delivery?

very much = 4
fairly much = 3
not much = 2
never = 1

How do you feel about yourself in labour?

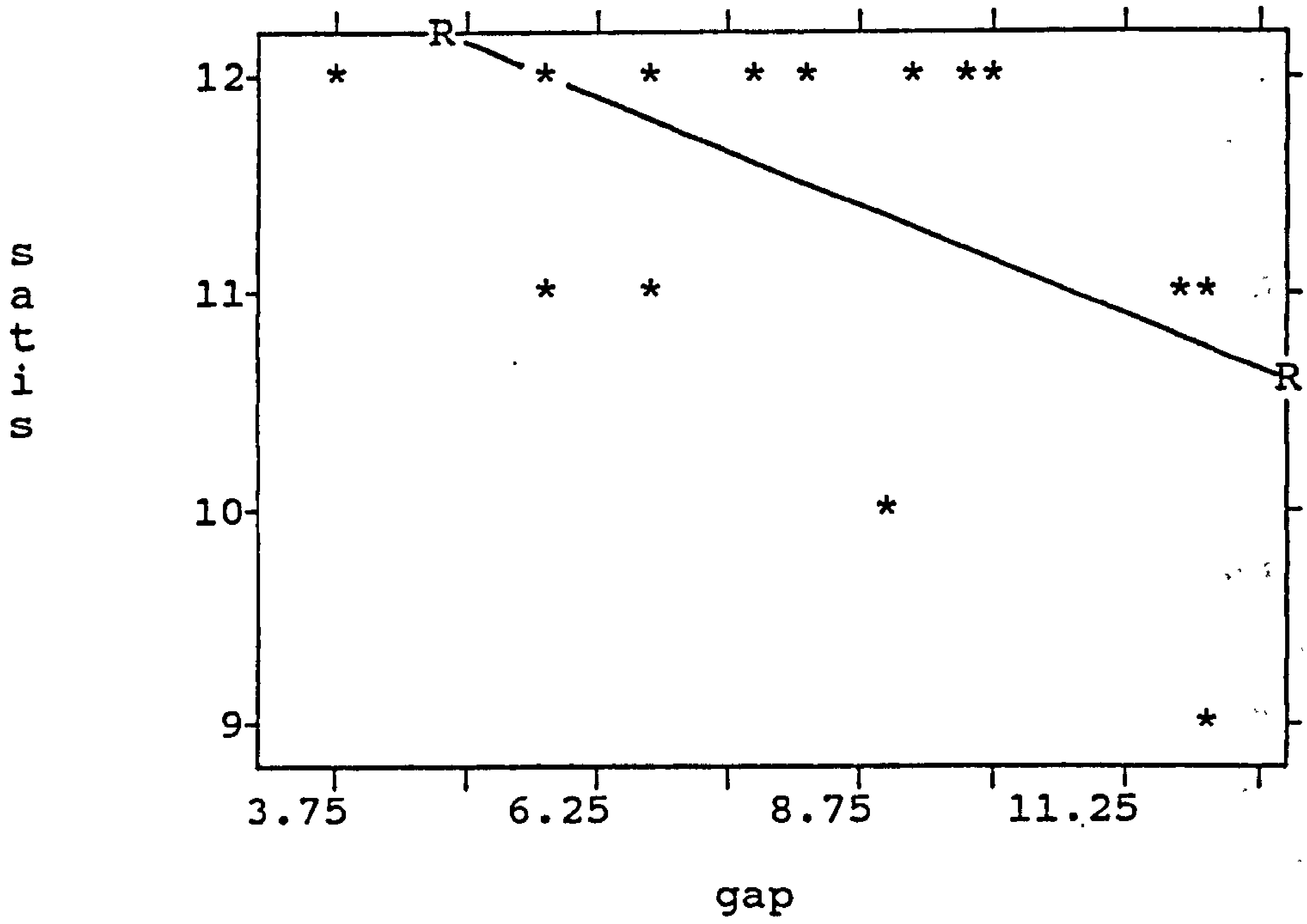
managed very well = 4
quite well = 3
didn't manage very well = 2
didn't manage at all well = 1

**Total maximum score = 12**

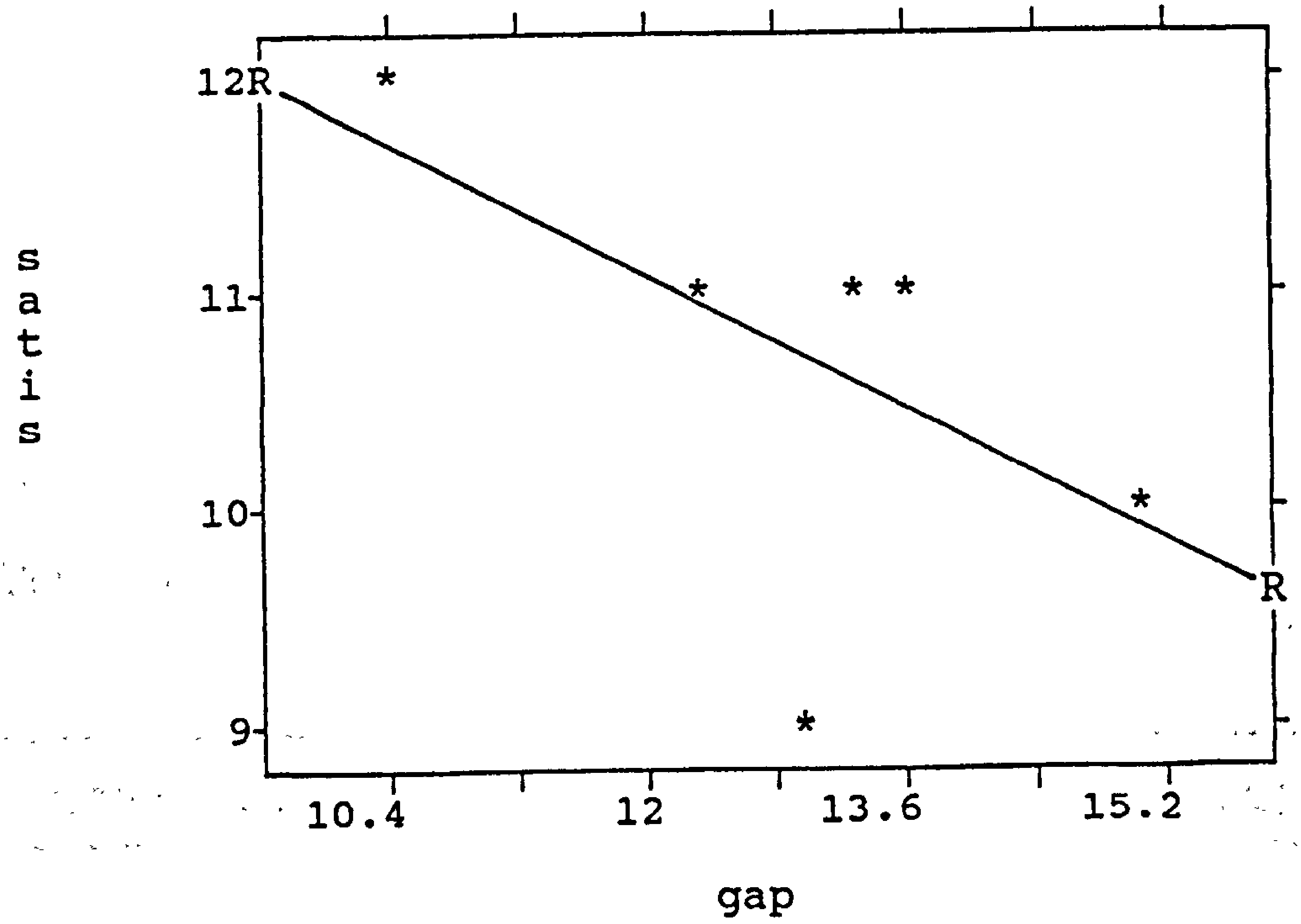
## Satisfaction against "gap"

The following figures show plots of satisfaction against "gap" in primiparous women having normal deliveries under different systems of care.

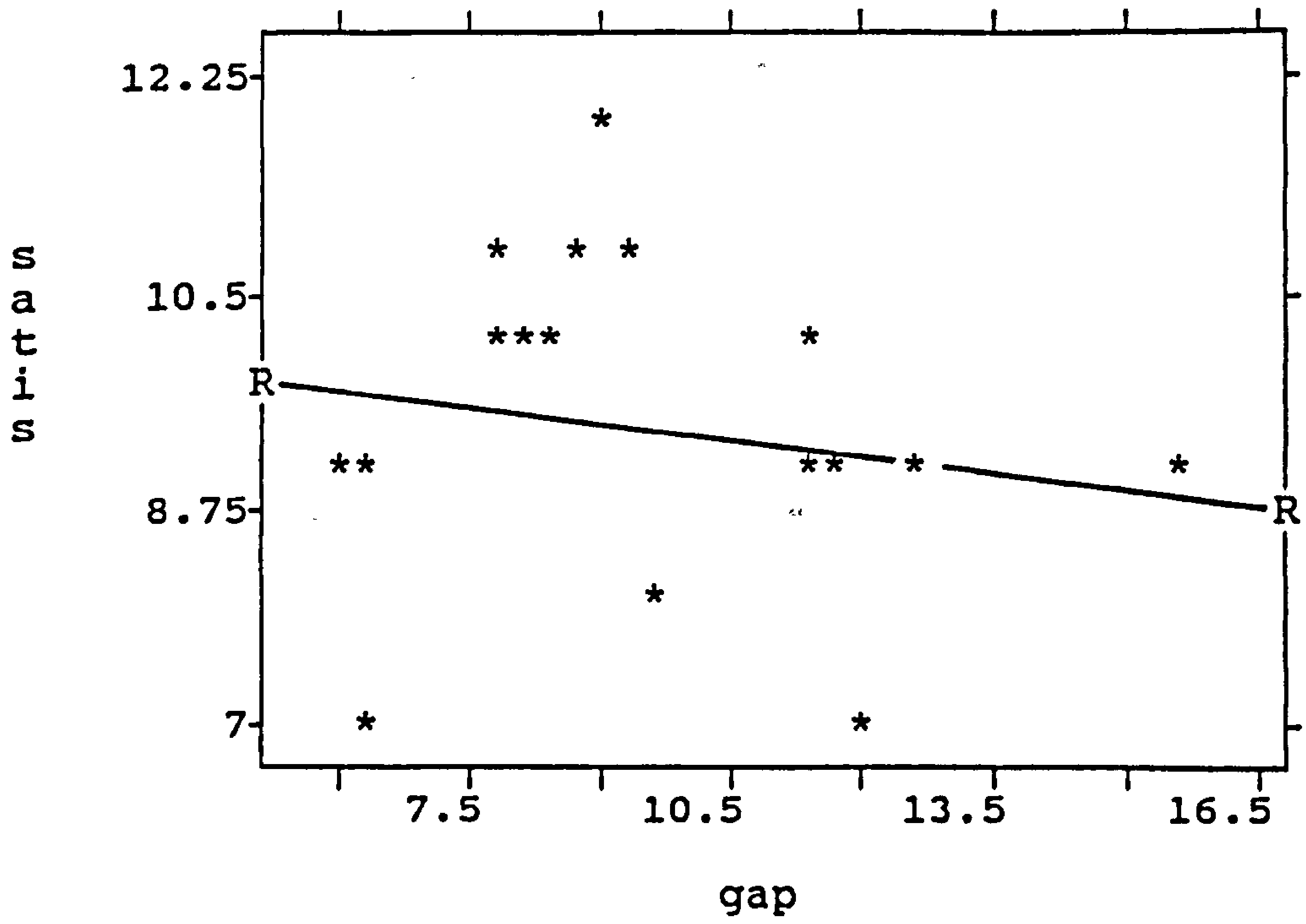
### 1. Community-based care throughout



### 2. Community care, transferred



### 3. Shared care



# APPENDIX 3:

# DOCUMENTATION

This appendix contains copies of:

- Questionnaires, antenatal and postnatal (but not the shortened postnatal questionnaire used for women who had had a Caesarean section).
- Interview schedule.
- Health visitor anxiety/depression questionnaire and letter to health visitor.
- Letters of explanation and invitation to midwife and woman.
- Information about study for midwives/women and consent form.
- Covering and reminder letters for antenatal questionnaire.
- Covering letter for postnatal questionnaire with and without request for interview.
- Reminder letters for postnatal questionnaire with and without request for interview.
- Consent for access to health visitor score with and without consent for interview.

Hosp ☐ Booking ☐ No ☐

## STUDY INTO MATERNITY CARE IN SHEFFIELD

This questionnaire has 6 sections labelled as follows:

A Date due and booking arrangements
B Antenatal checkups at local clinic
C Antenatal checkups at home
D Plans for the birth
E After the birth
F Some personal details

Most of the questions can be answered with a tick eg: Yes .. ☐
No ... ☑

Sometimes you need to fill in a number eg: FILL IN NUMBER .. 39

Sometimes you are asked to comment in your own words ..comment...

Thank you for your help. Please return the questionnaire in the envelope provided.

**All information will be held in confidence**

YOU CAN ANSWER EVEN IF YOU HAVE ALREADY DELIVERED

---

SECTION A

## DATE DUE AND BOOKING ARRANGEMENTS

A1 Can I just check, are you still pregnant?

Yes .. ☐
No, already had baby .. ☐

A2 When is the baby due?
(If baby born already, give date of birth)

| | DAY | MONTH | YEAR |
|---|---|---|---|
| FILL IN DATE .... | ☐ .... | ☐ | 199 ☐ |

A3 How many weeks are you today?
(Ignore if already had baby)

FILL IN NUMBER OF COMPLETED WEEKS PREGNANT ...... ☐

A4 What sort of delivery are you booked for?
(If baby born already, say how you planned to have baby)

TICK ONE .

Hospital delivery (shared care) .................. ☐
GP Unit delivery ................................. ☐
Home birth ....................................... ☐
Another arrangement (PLEASE TICK AND EXPLAIN) ..... ☐

.............................................................

A5 If your booking changed during pegnancy or labour, or you are still unsure of arrangements, PLEASE TICK AND EXPLAIN ............................................ ☐

.............................................................

.............................................................

A6 Have you attended any antenatal classes (including any during a previous pregnancy)?

Yes .. ☐
No ... ☐

SECTION B

## ANTENATAL CHECKUPS AT LOCAL CLINIC

B1 Have you had any antenatal care at a local clinic or surgery?

One or more visits to local clinic . ☐

No ..... PLEASE GO TO SECTION C .... ☐

B2 Have all your checkups been at the same place?

Yes .. ☐

No, more than one place. PLEASE TICK AND EXPLAIN ☐

..........................................................................

..........................................................................

B3 Please give the name of the GP in charge of your antenatal care now

..........................................................................

B4 Is this your usual GP (family doctor)?

Yes .. ☐

No, seeing this GP for maternity care only ... ☐

B5 How many different GPs have you seen for antenatal check-ups?

PLEASE GIVE NUMBER OF GPs SEEN ................ ☐

B6 Please name as many of these as possible. Please underline the GP or GPs who is/are most in charge of your care

.......................... ..........................

.......................... ..........................

.......................... ..........................

B7 During your antenatal care, how many different midwives have you seen (at local clinics or at home)?

PLEASE GIVE NUMBER OF MIDWIVES SEEN ............ ☐

B8 Please name as many of these as possible (first names only is OK). Please underline the midwife (or midwives) who are most in charge of your care.

.......................... ..........................

.......................... ..........................

.......................... ..........................

SECTION C

## ANTENATAL CHECK-UPS AT HOME

C1 Has a GP involved with your antenatal care visited your home during the pregnancy for any reason? (If baby born already only count visits before labour)

Yes .. ☐

No, GO TO QUESTION C4 .... ☐

C2 Was the visit (or visits) for any of the following?

PLEASE TICK ONE OR MORE

Antenatal care eg. a checkup or to see where you live (for GP Unit or Home Birth) ........................... ☐

An emergency visit eg. because you were ill or worried about pregnancy ................................................ ☐

Other (eg. family member ill). PLEASE TICK AND DESCRIBE ☐

..........................................................................

..........................................................................

C3 Which GP (or GPs) visited your home during the pregnancy? (Give name or say if 'partner' 'locum' 'emergency' Dr)

.......................... ..........................

.......................... ..........................

C4 Are you expecting a visit (or further visits) from the GP before the delivery (If already delivered tick "No")

Yes .. ☐

No ... ☐

C5 Has a midwife visited you at home during this pregnancy? (If already delivered only count visits before labour)

Yes .. ☐

No, GO TO QUESTION C8 .... ☐

C6 Was the visit (or visits) for any of the follow?

PLEASE TICK ONE OR MORE

Antenatal care eg. booking, a checkup, to see where you live (for GP Unit or Home Birth)............................ ☐

An emergency visit eg. because you were ill or worried about pregnancy ........................................ ☐

Other, PLEASE TICK AND DESCRIBE ........................ ☐

............................................................

............................................................

C7 Which midwife (or midwives) visited you at home during the pregnancy?

.........................  .........................

.........................  .........................

C8 Are you expecting a visit (or further visit) from the midwife before the delivery? (If already delivered tick "No")

Yes .. ☐

No ... ☐

SECTION D

## PLANS FOR THE BIRTH

D1 Do you have any special plans for how labour will be? (If already delivered say what you had hoped for)

| Do you want ...... (TICK A BOX ON EACH LINE) | Hope to have this | Wouldn't mind this | Don't want this |
|---|---|---|---|
| a) To have an epidural (injection into spine to freeze nerves below waist) | ☐ | ☐ | ☐ |
| b) To have pethidine (pain killing injection) | ☐ | ☐ | ☐ |
| c) To have "Gas and Air" (pain killing gas through mask or tube) | ☐ | ☐ | ☐ |
| d) Electronic monitoring of baby's heart during labour WITH BELT ROUND YOUR WAIST | ☐ | ☐ | ☐ |
| e) Electronic monitoring of baby's heart during labour WITH SCALP CLIP TO BABY'S HEAD | ☐ | ☐ | ☐ |
| f) Active birth (moving around during labour) | ☐ | ☐ | ☐ |

D2 Ideally, who would you like to be with you during labour?

|  | Very important to me | Would like if possible | Not important to me |
|---|---|---|---|
| Partner/friend or family member | ☐ | ☐ | ☐ |
| A GP who has given antenatal care | ☐ | ☐ | ☐ |
| A midwife who has given antenatal care | ☐ | ☐ | ☐ |

D3 For the birth itself, would you prefer a particular position? (eg in bed, supported by a wedge or pillows, birthing chair, squatting etc)

No, don't mind what position I'm in ......... ☐

Yes, do mind about position, PLEASE TICK AND DESCRIBE . ☐

...............................................................

...............................................................

D4 If an episiotomy (cutting to enlarge the birth canal) was done would you

Not mind (it is quite normal to have an episiotomy) ☐

Be disappointed .................................. ☐

Feel let down (you would prefer the risk of tearing) ☐

D5 Which midwife will look after you in labour?

Hospital midwife .... ☐

Community midwife ... ☐

Don't know .......... ☐

Name(s) if possible ....................................

.......................... ..........................

D6 Do you expect a doctor to attend delivery?

Yes, definitely ..... ☐

Probably ............ ☐

Not unless I have a problem ... ☐

Name(s) if possible ....................................

.......................... ..........................

SECTION E

## AFTER THE BIRTH

E1 How long are you hoping to spend in hospital? (If already delivered, what did you plan to do?

Not at all (home birth) .. ☐

A few hours only ......... ☐

One night ............... ☐

More than one night (PLEASE GIVE NUMBER) ............. ☐

E2 How are you planning to feed the baby?

Breast ......... ☐

Bottle ......... ☐

Don't know yet . ☐

E3 Any other hopes or plans for the birth?

...............................................................

...............................................................

...............................................................

SECTION F

## SOME PERSONAL DETAILS

F1 How old are you? GIVE AGE IN YEARS ......... ☐

F2 Are you:

Single ....................... ☐ Widowed .......... ☐

Married or living as married .. ☐ Divorced/separated ☐

F3 To which of these ethnic groups do you belong?

White ...... ☐ Asian ...... ☐ Arab .... ☐

West Indian. ☐ African .... ☐ Other ... ☐

Other (please tick and describe) ........................

F4 Is English your first language?

Yes .. ☐

No ... ☐

F5 Have you got, or are you preparing for, any qualifications, certificates or diplomas?

No ... ☐

YES (PLEASE TICK AND DESCRIBE)

........................................................ ☐

........................................................

F6 Have you ever worked outside the home?

No ... ☐

Yes (please describe present or last job) .... ☐

........................................................

F7 How tall are you? ☐ ft ☐ inches

F8 How much did you weigh before the pregnancy?

☐ st ☐ lb

F9 How many cigarettes have you smoked in the last 24 hours?

PLEASE STATE NUMBER SMOKED IN LAST 24 HOURS ........... ☐

Hosp. ☐ Booking ☐ No. ☐

## Study into Maternity Care in Sheffield

This questionnaire has sections labelled as follows:

- A. Details about labour and delivery
- B. Your experiences after the birth
- C. Carers in pregnancy
- D. Carers in labour
- E. Carers after the birth

Most of the questions can be answered with a tick

eg Yes ... ☐

No..... ☑

Sometimes you need to fill in a number ...................... 15

Sometimes you are asked to give a name or for your own comments.. comment......................................

Thank you for your help. Please return the questionnaire in the envelope provided.

All information will be held in confidence

---

## A. DETAILS ABOUT LABOUR AND DELIVERY

A1. How many days is it since the birth? ................ ☐

A2. During labour and delivery did you have

(TICK A BOX ON EACH LINE)

| | Yes | No | Don't know |
|---|---|---|---|
| a) Electronic monitoring of baby's heart with BELT around your waist | ☐ | ☐ | ☐ |
| b) Electronic monitoring of baby's heart with SCALP CLIP to baby's head | ☐ | ☐ | ☐ |
| c) An episiotomy (a cut to enlarge the birth canal) | ☐ | ☐ | ☐ |

A3. During your labour and delivery, were all the choices available explained to you?

TICK ONE

Always explained ...... ☐

Usually explained ..... ☐

Sometimes explained ... ☐

Never explained ....... ☐

A4. During your labour and delivery, did the staff explain what they were doing and why?

TICK ONE

Always explained ...... ☐

Usually explained ..... ☐

Sometimes explained ... ☐

Never explained ....... ☐

A5. How much did you feel in control of your labour and delivery of your baby?

TICK ONE

Very much in control ... ☐

Fairly in control ...... ☐

Not much in control .... ☐

Not at all in control ...... ☐

A6. During labour, did you have anything, or do anything, to help relieve the pain?

TICK ONE OR MORE

- Yes - used natural methods (eg breathing, massage, warm baths etc) .......... ☐
- Yes - Gas and air (Entonox) .......... ☐
- Yes - Injection of Pethidine (or similar drug) .......... ☐
- Yes - Epidural in the back .......... ☐
- Yes - TENS nerve stimulation (pads on back) .......... ☐
- No - None of these things .......... ☐
- Don't know, can't remember .......... ☐

A7. Overall, thinking about what was done to help relieve the pain were you

TICK ONE

- Very happy with what was done .... ☐
- Fairly happy .......... ☐
- Fairly unhappy .......... ☐
- Very unhappy .......... ☐

A8. How do you feel about yourself in labour?

- I managed very well .......... ☐
- I managed quite well .......... ☐
- I didn't manage very well .......... ☐
- I didn't manage at all well ...... ☐

A9. During labour, did you walk around?

TICK ONE

- Not at all .......... ☐
- For a very short time .......... ☐
- For a lot of the time .......... ☐
- For nearly all the time .......... ☐

A10. During labour and delivery were you able to be in a position of your choice?

TICK ONE

- All of the time .......... ☐
- Nearly all of the time .......... ☐
- Some of the time .......... ☐
- Not at all .......... ☐

A11. Did you have a Caesarian? YES ☐ NO ☐

If NO, what position did you give birth in?

TICK ONE

- On your back, supported by a wedge or pillow .......... ☐
- On your back with legs up in stirrups .......... ☐
- Another position (TICK AND DESCRIBE) .......... ☐

..........................................................................

..........................................................................

A12. Any other comments about your labour and birth?

..........................................................................

..........................................................................

..........................................................................

A13. Since your baby was born, have you talked to any health service staff about what happened during your labour and delivery?

TICK ONE OR MORE

- Yes, have talked to doctor/midwife who was present at labour or delivery ... ☐
- Yes, to other doctor/midwife who was not present .......... ☐
- No, none .......... ☐

A14. Would you like to have talked more to any health service staff about what happened during your labour and delivery

- Yes, definitely .......... ☐
- Yes, possibly .......... ☐
- No, not really .......... ☐

## B. YOUR EXPERIENCES AFTER THE BIRTH

B1. How long did you stay in hospital after the birth?

Not at all (home birth)........ ☐

Few hours only ............... ☐

One or more nights (PLEASE GIVE NUMBER) ......... ☐

B2. Were you happy with the length of stay?

Yes, this was about right for me ........... ☐

No, wanted to stay in longer than I did ..... ☐

No, wanted to go home sooner than I did ..... ☐

B3. Since the birth, have you ever felt worried or confused because different staff gave you different advice?

Yes, very often .................. ☐

Yes, quite often ................. ☐

Yes, just occasionally ........... ☐

No, never given different advice .. ☐

B4. Have there been any worries about the baby since the birth? (eg feeding, breathing, medical problems)

Yes ....... ☐

No ........ ☐

If YES, please explain ...............................

.......................................................

.......................................................

B5. How are you feeding the baby now?

Breast feeding ..... ☐

Bottle feeding ..... ☐

Breast and bottle .. ☐

## C. CARERS DURING PREGNANCY

Just to update on your carers during pregnancy

C1. Did a GP visit you at home during pregnancy for <u>any</u> reason?

Yes ........... ☐

No. (go to question C4)....... ☐

C2. Was this visit (or visits) for any of the following?

TICK ONE OR MORE

Antenatal care eg a checkup or to see where you live (for GP Unit or home birth) .. ☐

An emergency visit eg because you were ill or worried about the pregnancy ............ ☐

Other (eg family member ill) ............ ☐

C3. Which GP (or GPs) visited your home during pregnancy?

..................... .........................

..................... .........................

C4. Did a midwife visit you at home during the pregnancy?

Yes .......... ☐

No (go to Section D) ......... ☐

C5. Was this visit (or visits) for any of the following?

TICK ONE OR MORE

Antenatal care eg booking, a checkup or to see where you live ......... ☐

An emergency visit eg because you were ill or worried about pregnancy .... ☐

Other ............................ ☐

C6. Which midwife (or midwives) visited you at home during the pregnancy? ....................................

..................................................

## D. CARERS IN LABOUR

D1. Who did you contact first when you started in labour?

Labour ward ............. ☐

Community midwife ........ ☐

GP ....................... ☐

D2. Did a midwife or GP visit you at home at the start of labour (even if you went into hospital afterwards?)

Midwife visited at home Yes ☐ GP visited at home Yes ☐

No ☐ No ☐

D3. Altogether, how many different midwives cared for you and the baby during labour, birth and first hour after birth? (Include hospital, community and student midwives)

None ...... ☐

One or more (WRITE NUMBER) ....... ☐

D4. How many of these midwives did you already know from before labour started?

None ..... ☐

One or more (WRITE NUMBER) ....... ☐

D5. Please name any midwives you already knew who came to the labour or birth or immediately after

............................ ........................

............................ ........................

D6. How many different doctors saw you and the baby during labour, birth and first hour after birth? (Include hospital doctors, GPs, trainee and student doctors)

None ..... ☐

One or more (WRITE NUMBER) ....... ☐

D7. How many of these doctors did you already know from before before the labour started?

None ..... ☐

One or more (WRITE NUMBER) ....... ☐

D8. Please name any doctors you already know who came to the labour or birth or immediately after.

........................... ........................

........................... ........................

## E. CARERS AFTER THE BIRTH

E1. Thinking back to the first day after the birth, were you visited by any midwives or doctors you already knew (from pregnancy or labour or immediately after the birth?)

Yes ...... ☐

No ....... ☐

E2. Who was this?

TICK ONE OR MORE

Hospital midwife (or midwives) ..... ☐

Community midwife (or midwives) .... ☐

Hospital doctor(s) ................ ☐

GP (s) ............................ ☐

E3. Please gives name if possible ........................

.............................................................

E4. Altogether, how many times did a GP visit you in hospital (not including visits during labour, birth or within an hour of the birth)?

None ...... ☐

One or more (WRITE NUMBER) ....... ☐

Not relevant (home birth) ..... ☐

E5. How many days after the birth did the GP (or GPs) make a home visit? (include all visits for any reason, except for the labour, birth and first hour after birth)

Same day ...... ☐

One day after the birth .. ☐

More than one day after the birth (WRITE NUMBER) ☐

GP has not visited since birth .................. ☐

E6. Altogether, how many different GPs have visited you since the birth (include all visits for any reason except for the labour, birth and first hour after birth, whether in hospital or at home)

No visits from GP ....... ☐

Same GP for all visits ... ☐

One or more different GPs (WRITE NUMBER) ... ☐

E7. Please name GPs who have visited since the birth (or say if partner, trainee, locum, emergency doctor etc.)

.........................    .........................

.........................    .........................

E8. After the birth, how many different midwives visited you at home?

1 midwife for all visits .......... ☐

More than one (WRITE NUMBER) ..... ☐

E9. Had you met any of them during your pregnancy?

No, none ........... ☐

Yes, one or more (WRITE NUMBER) ... ☐

E10. Had any of them been at the labour or birth?

No, none ........... ☐

Yes, one or more (WRITE NUMBER) ... ☐

---

E11. Please name any midwives who were at the labour or birth and who visited you at home after the birth.

.........................    .........................

.........................    .........................

E12. Do you have any comments about your care during labour and afterwards?

.....................................................

.....................................................

.....................................................

THANK YOU FOR YOUR HELP. PLEASE RETURN WITH SLIP IN PREPAID ENVELOPE.

## Interview schedule

Hosp Booking No.

Name

Address

Parity

Transfer or Complication
(why, when, where, how)

Outcome of birth

..........................................................................

Introduce self Interview lasts ½ hour Will be taped (set up)

"I've asked to interview you because I'm interested in women's experiences of labour, especially when things didn't go as smoothly as hoped, or when extra medical help was needed."

START "What was the labour like from your point of view?"

(prompt: start from when you first suspected you were in labour
: or from when you went into hospital to be started off)

NOTE changes in PLACE
PERSONNELL
any PROCEDURES
PROBLEMS

10 min "Tell me more about .............."

20 min "Is there anything that could have happened differently?"

25 min "Have you talked to anyone else about your experiences?"

30 min END (tape recorder off)

NOTE any comments about the interview

The University of Sheffield

Department of General Practice

Professor David R Hannay

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re:..........................................................

Dear Health Visitor

STUDY INTO MATERNITY CARE IN SHEFFIELD

This woman has taken part in my study into Maternity Care and I have asked her permission to use her one month anxiety/depression score in my results. I will not do so unless I have received her written permission, and I will only have access to the overall score, not individual replies.

There is no need for you to do anything different or extra. I can collect the score retrospectively from Dr Taylor's office. This is simply to inform you about the study in case the woman asks you about it.

Basically, I am researching into women's experiences of labour under different types of maternity care (GP Unit/Access, Home Birth and Shared Care). I would like to use the anxiety/depression score as an outcome measure to discover what effect the labour has on women's longer term feelings. The study has been approved by both Ethical Committees and Mrs Butler and Dr Taylor have agreed to it. There is more information on the reverse of this letter.

If you have any questions please don't hesitate to contact me at the Department on the above extension number.

Yours sincerely

Dr Jillian Creasy
Research Fellow

---

## Anxiety/Depression questionnaire used by Health Visitors at 1 month

1. I have been able to laugh and see the funny side of things:

| | |
|---|---|
| As much as I always could | 1 |
| Not quite so much | 2 |
| Definitely not so much | 3 |
| Not at all | 4 |

2. I have looked forward with enjoyment to things:

| | |
|---|---|
| As much as ever | 1 |
| Rather less | 2 |
| Definitely less | 3 |
| Hardly at all | 4 |

3. I feel tense or "wound up":

| | |
|---|---|
| Definitely | 4 |
| Sometimes | 3 |
| No, not much | 2 |
| No, not at all | 1 |

4. I have felt unexpectedly panicky:

| | |
|---|---|
| Yes, quite a lot | 4 |
| Yes, sometimes | 3 |
| No, not much | 2 |
| No, not at all | 1 |

5. Things have been getting on top of me:

| | |
|---|---|
| Yes, most of the time | 4 |
| Yes, sometimes | 3 |
| Occasionally | 2 |
| No, not at all | 1 |

6. I have had difficulty sleeping:

| | |
|---|---|
| Yes, most of the time | 4 |
| Yes, quite often | 3 |
| No, not very often | 2 |
| No, not at all | 1 |

7. I have been sad or miserable:

| | |
|---|---|
| Yes; most of the time | 4 |
| Yes, quite often | 3 |
| No, not very often | 2 |
| No, not at all | 1 |

8. I have been so unhappy I have been crying:

| | |
|---|---|
| Most of the time | 4 |
| Quite often | 3 |
| Not very often | 2 |
| Not at all | 1 |

9. The thought of harming myself has occurred to me:

| | |
|---|---|
| Yes, quite often | 4 |
| Sometimes | 3 |
| Hardly ever | 2 |
| Never | 1 |

10. On waking I feel unable to face the day:

| | |
|---|---|
| Yes, most of the time | 4 |
| Yes, sometimes | 3 |
| No, not very often | 2 |
| Never | 1 |

11. I am more restless and can't keep still:

| | |
|---|---|
| Yes, definitely | 4 |
| Yes, sometimes | 3 |
| No, not much | 2 |
| No, not at all | 1 |

12. I am more irritable than usual:

| | |
|---|---|
| Yes, definitely | 4 |
| Yes, sometimes | 3 |
| No, not much | 2 |
| No, not at all | 1 |

13. Has the first month with your baby been:

| | |
|---|---|
| More enjoyable than expected | 1 |
| As enjoyable as expected | 2 |
| Less enjoyable than expected | 3 |
| Not at all enjoyable | 4 |

S. Scholey
Sheffield Child Development Study
27.2.92

The University of Sheffield

Department of General Practice

Professor David R Hannay

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Dear Midwife

STUDY INTO MATERNITY CARE IN SHEFFIELD

Please can you give the attached letter to the woman concerned at her next antenatal appointment or home visit?

1. Give her a few minutes to read the letter and ask any questions. (There is more information on the reverse of this letter, which should help you to answer questions - or she could read it herself).

2. When she has decided whether or not to participate, collect her reply slip and return it to me in the SAE provided.

3. If she fails to attend her appointment, or you forget to ask her consent, please ensure that you or a colleague see her about it as soon as possible. (We need an answer well before 36 weeks, in order to send the first questionnaire).

4. If you will not see her personally (eg. due to holidays) please give to a colleague who will see her.

5. If you feel it would be inappropriate to ask her to participate in the study (even bearing in mind that she can refuse consent and can, of course, drop out at a later stage) please return the slip on her behalf with a brief explanation (eg. social circumstances).

6. PLEASE RETURN THE SLIP EVEN IF THE WOMAN DOES NOT WISH TO TAKE PART!

If you have any questions at all, please contact myself or Mrs Maria Platts, my research assistant, on the above extension number. We can always ring you back.

Very many thanks for your help.

Yours faithfully

Dr Jillian Creasy
Research Fellow

---

The University of Sheffield

Department of General Practice

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Dear .......................

STUDY INTO MATERNITY CARE IN SHEFFIELD

I am doing some research into maternity care in Sheffield, looking at what sort of care is given and how it affects women's experience of childbirth. This study could influence the future organization of maternity care in Sheffield, so I hope you will find time to help.

If you agree to take part, you will receive:

1. A postal questionnaire about a month before the baby is due.

2. A postal questionnaire about two weeks after the delivery

3. An invitation to talk about your experience with me. Only a few women will be asked and, if you agree, I will visit you at home.

You are of course free to refuse to take part, or to drop out at any stage if you change your mind and whatever you decide, it will not influence your care. All the questionnaires will be marked with a code number, not a name, to keep the information anonymous. Your questionnaire will be returned directly to me and will at no time be shown to midwives or doctors involved with your care. If you have any questions, please contact myself or Mrs Platts on the above extension number. We can ring you back if necessary.

If you agree to take part, please sign the attached slip and return it to the midwife or doctor who gave it to you.

Thank you in advance for your help.

Yours sincerely

Dr Jillian Creasy
Research Fellow

The __aim__ of the study is to compare GP maternity care (GP Unit/Access and home birth) with shared care. I am particularly interested in the experience of women and their carers when complications arise and transfer from GP to consultant occurs.

My __objectives__ are:

1. To describe the two groups in terms of social and medical background, their expectations about childbirth, the continuity of care given, whether expectations are met, and 'satisfaction', with self and with care.
2. To describe in more detail the experiences of women who suffer some sort of complication (under either system of care), and to see if this experience is affected by prior expectations and by continuity of care.
3. To describe the process of transfer from the carers point of view. What problems, if any, are experienced?

The __subjects__ will be women booked for GP delivery through the two community midwifery offices (JHW & NGH) and for consultant delivery through the antenatal clinics. The women will be approached for their __consent__ at about 32 weeks by the midwife seeing them then, i.e.

- GP booked women by their community midwife at the soonest convenient community antenatal appointment or home visit after 30 weeks.
- shared care women by the midwife seeing them at 28 or 32 weeks in a hospital antenatal clinic (Mr Stewart's at the NGH and Miss Brown's at JHW).

The __methods__ used will be:

- a postal questionnaire at 36 weeks gestation
- a further postal questionnaire at 2 weeks postpartum
  (these will each take about 20 minutes to complete and are returned in an SAE, i.e. not via the midwife. They cover personal details, booking and due dates, details of carers involved antenatally, intrapartum and postpartum, feelings about labour and birth, and satisfaction with care)
- an interview if complications have occurred
  (these women will receive an invitation to be interviewed with the second questionnaire. The interview will be carried out by Mrs Maria Platts, my research assistant, at the woman's home. It will be in the form of open-ended questions and last about 30 minutes)
- carers (GPs and midwives) will also be approached for their account of any transfers in late pregnancy or labour (how did they maintain contact with the woman? were there any problems related to the process or transfer?)

The __researchers__:

- Dr Jillian Creasy. I am a qualified GP. I did some of my training in Sheffield (SHO in obstetrics and gynaecology). I now work part-time in general practice and part-time as a research fellow in the Department of General Practice at the University of Sheffield.
- Mrs Maria Platts is a research assistant in the Department of General Practice. She has nursing and administrative experience and has conducted surveys and interviews for many different projects in the Department.

The study is being funded through the Royal College of General Practitioners. It has been approved by the Ethics Committee for the north and south side of the city.

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TO: Dr Jillian Creasy, Department of General Practice, University of
Sheffield, Medical School, Beech Hill Road, Sheffield S10 2RX
(Telephone no. 0742 - 766222 extn. 2035

__STUDY INTO MATERNITY CARE IN SHEFFIELD__

I have read the letter about this study, and

☐ I agree to take part OR

☐ I do not wish to take part

Signed: .......................... Date: ..................

Hosp ☐ Booking ☐ No ☐

The University of Sheffield

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Professor David R Hannay

Dear

**STUDY INTO MATERNITY CARE IN SHEFFIELD**

Thank you for agreeing to take part in the study. Please complete this questionnaire as soon as possible and return it to me in the pre-paid envelope provided. You can fill it out even if you have had some complications or delivered already. If you have any questions, please contact me at the Department on the above extension number.

All best wishes for the remainder of your pregnancy and the birth.

Yours sincerely

Dr Jillian Creasy
Research Fellow

---

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Professor David R Hannay

1991

Dear

**STUDY INTO MATERNITY CARE IN SHEFFIELD**

I do not seem to have received your reply to my questionnaire. I hope you still want to take part in the study and that you will find time to answer it. You can still answer it even if you have already had the baby. If you have any difficulties or questions please don't hesitate to contact me.

I enclose another copy of the questionnaire in case yours is lost. If you have recently replied, please ignore this reminder.

Very many thanks, and best wishes for the remainder of your pregnancy and the birth.

Yours sincerely

Dr Jillian Creasy
Research Fellow

The University of Sheffield
Department of General Practice
Professor David R Hannay

Medical School
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Dear

STUDY INTO MATERNITY CARE IN SHEFFIELD

Thank you for returning the first questionnaire. I hope you and the baby are doing well. Please complete this second questionnaire as soon as possible and return it in the stamped addressed envelope provided. This is the final questionnaire in the study.

As you may be aware, the Health Visitors interview all mothers one month after the birth as part of their routine care. I would like to use the score from that interview in my study. (This will help show if certain kinds of births affect mothers' feelings later on). I will only see the overall score, not individual details. And, as with your replies so far, the information will be kept confidential. Please complete the reply slip and return it with your questionnaire.

I look forward to hearing from you. Thank you for your help so far.

Yours sincerely

Dr Jillian Creasy
Research Fellow

---

The University of Sheffield
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Also, as I mentioned in my first letter, I want to find out more about the experiences of women who had some sort of complication, or needed extra medical attention, in pregnancy or labour. As you did have some problems, I wonder if you would agree to be interviewed? If so, I will arrange to see you at home. If you don't wish to be interviewed, I would still be pleased to receive your questionnaire. Please complete the reply slip either way.

I look forward to hearing from you. Thank you again for your help so far.

Yours sincerely

Dr Jillian Creasy
Research Fellow

The University of Sheffield

Department of General Practice

Professor David R Hannay

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Dear

STUDY INTO MATERNITY CARE IN SHEFFIELD

We do not seem to have received your postnatal questionnaire. If you have returned it in the last few days please ignore this reminder. If not, please complete this second questionnaire as soon as possible and return it in the stamped addressed envelope provided. This is the final questionnaire in the study.

As you may be aware, the Health Visitors interview all mothers one month after the birth as part of their routine care. I would like to use the score from that interview in my study. (This will help show if certain kinds of births affect mothers' feelings later on). I will only see the overall score, not individual details. And, as with your replies so far, the information will be kept confidential. Please complete the reply slip and return it with your questionnaire.

I look forward to hearing from you. Thank you again for your help so far.

Yours sincerely

Dr Jillian Creasy
Research Fellow

---

The University of Sheffield

Department of General Practice

Professor David R Hannay

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Dear

STUDY INTO MATERNITY CARE IN SHEFFIELD

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As you may be aware, the Health Visitors interview all mothers one month after the birth as part of their routine care. I would like to use the score from that interview in my study. (This will help show if certain kinds of births affect mothers' feelings later on). I will only see the overall score, not individual details. And, as with your replies so far, the information will be kept confidential. Please complete the reply slip and return it with your questionnaire.

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I look forward to hearing from you. Thank you again for your help so far.

Yours sincerely

~~Dr Jillian~~ Creasy
Research Fellow

To: Dr Jillian Creasy, Research Fellow, Department of General Practice, Sheffield University, Beech Hill Road, Sheffield S10 2RX - Tel. 766222 Extn. 2035

STUDY INTO MATERNITY CARE IN SHEFFIELD

Name ..................................................

Address ..................................................

PLEASE TICK ONE

☐ I agree to Dr Creasy seeing the result of my Health Visitor's questionnaire

or ☐ I do not wish the result to be passed to Dr Creasy

Signed .................................... Date ............

PLEASE RETURN THE QUESTIONNAIRE WHATEVER YOUR REPLIES!

Very many thanks for your valuable help.

Hosp ☐ Booking ☐ No ☐

---

To: Dr Jillian Creasy, Research Fellow, Department of General Practice, Sheffield University, Beech Hill Road, Sheffield S10 2RX - Tel. 766222 Extn. 2035

STUDY INTO MATERNITY CARE IN SHEFFIELD

Name ..................................................

Address ............................................tel: ..........

1. PLEASE TICK ONE

☐ I agree to Dr Creasy seeing the result of my Health Visitor's questionnaire

or ☐ I do not wish the result to be passed to Dr Creasy

2. PLEASE TICK ONE

☐ I agree to be interviewed about my experiences in labour

or ☐ I do not wish to be interviewed.

If you are not on the telephone, please say which times would be convenient for Dr Jillian Creasy to call.

Day of week (not Wednesday) 1st Choice ................

2nd Choice ................

3rd Choice ................

Time of day (PLEASE TICK) Morning

Afternoon

Signed .................................... Date ............

PLEASE RETURN THE QUESTIONNAIRE WHATEVER YOUR REPLIES!

Very many thanks for your valuable help.

Hosp ☐ Booking ☐ No ☐