
by

Oneilwe Gillian M. Mmolawa

A Dissertation Submitted as part of the requirements for the degree of Master of Science in Mother and Child Health

University of London

Centre for International Child Health
Institute of Child Health
University of London
30 Guilford Street
London WC1N

Submitted: December 1992
# TABLE OF CONTENTS

## ABSTRACT

## ACKNOWLEDGEMENTS

## MAP OF BOTSWANA SHOWING DISTRICT TEAM AREAS

### CHAPTER 1

**Background and Literature Review**

1.1 Geography, Climate and Population

1.2 Health Service Delivery System.

1.3 Summary of the Study Area

1.3.1 Health Care Delivery System in Gabane

1.3.2 Staffing Patterns, Transport and Communication

1.3.4 Statement of the Problem

1.3.5 Need for this Study

### CHAPTER 2

**Objectives and Methods**

2.1 General Objectives

2.1.2 Specific Objectives

2.2 Gaining Access into the Study Area

2.2.1 Type of Study

2.2.2 Study Population and Setting
<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.3 Definition of Terms</td>
<td>15-17</td>
</tr>
<tr>
<td>2.3 Methods Used in Data Collection</td>
<td>18-20</td>
</tr>
<tr>
<td>2.3.1 Instrument Used in Data Collection</td>
<td>20-21</td>
</tr>
<tr>
<td>2.3.2 Validity and Reliability</td>
<td>21-23</td>
</tr>
<tr>
<td><strong>CHAPTER 3</strong></td>
<td></td>
</tr>
<tr>
<td>Results</td>
<td></td>
</tr>
<tr>
<td>3.1 General Characteristics of the Study Population</td>
<td>24</td>
</tr>
<tr>
<td>3.1.1 Age Distribution of Groups Interviewed</td>
<td>24-25</td>
</tr>
<tr>
<td>3.1.2 Age at First Pregnancy</td>
<td>26</td>
</tr>
<tr>
<td>3.1.3 Marital Status</td>
<td>27</td>
</tr>
<tr>
<td>3.1.4 Educational Level Obtained</td>
<td>27-28</td>
</tr>
<tr>
<td>3.1.5 Planned Pregnancy Among Pregnant Women</td>
<td>28</td>
</tr>
<tr>
<td>3.1.6 Parity</td>
<td>28</td>
</tr>
<tr>
<td>3.2 Pregnant Women</td>
<td>29</td>
</tr>
<tr>
<td>3.2.1 Practices Related to Pregnancy</td>
<td>29-32</td>
</tr>
<tr>
<td>3.2.2 Nutrition During Pregnancy</td>
<td>32-34</td>
</tr>
<tr>
<td>3.2.3 Perception of Normal and Abnormal Pregnancy</td>
<td>35-38</td>
</tr>
<tr>
<td>3.2.4 Perceptions of Normal and Abnormal Labour</td>
<td>39-42</td>
</tr>
<tr>
<td>3.3 Men</td>
<td>43</td>
</tr>
<tr>
<td>3.3.1 Practices Related to Pregnancy</td>
<td>43-47</td>
</tr>
<tr>
<td>3.3.2 Nutrition During Pregnancy</td>
<td>47-49</td>
</tr>
</tbody>
</table>
3.3.3 Perception of Normal and Abnormal Pregnancy 49-52

3.3.4 Perception of Normal and Abnormal Labour 52-57

3.4 Elder Women 57

3.4.1 Practices Related to Pregnancy 57-60

3.4.2 Nutrition During Pregnancy 61-63

3.4.3 Perception of normal and Abnormal Pregnancy 63-68

3.4.4 Perceptions of Risk in Pregnancy and Childbirth 68-71

3.4.5 Perceptions of Normal and Abnormal Labour 71-76

CHAPTER 4

4.1 Discussion 77

4.1.1 Modern and Traditional Perception of Risk in Pregnancy and Childbirth 77-78

4.1.2 Perceptions of Pregnancy, Childbirth and Its Complications 78-80

4.1.3 Perceptions of Risk Regarding Age and Parity 80

4.1.4 Nutrition and Food in Pregnancy 81-82

4.1.5 Relationship with the Government Provided Health Services 83-84

4.1.6 The Potential for Integration of Traditional Services with ‘Government’ Maternity Services 84-85
<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age Distribution of Pregnant Women Interviewed</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>Age Distribution of Men Interviewed</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>Age Distribution of Elder Women Interviewed</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>Age Distribution of Pregnant Women at First Pregnancy</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>Age Distribution of Elder Women at First Pregnancy</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>Marital Status</td>
<td>27</td>
</tr>
<tr>
<td>7</td>
<td>Educational Level Obtained</td>
<td>27</td>
</tr>
<tr>
<td>8</td>
<td>Planned Pregnancy</td>
<td>28</td>
</tr>
<tr>
<td>9</td>
<td>Parity Among Pregnant and Elder Women Interviewed</td>
<td>28</td>
</tr>
</tbody>
</table>
APPENDICES

Appendix 1  Age Distribution of Participants Interviewed
Appendix 2  Botswana Obstetric Risk Screening Card
Appendix 3  Questionnaire - Pregnant Women
Appendix 4  Questionnaire - Men
Appendix 5  Questionnaire - Elder Women
ABSTRACT

Aim of Study: To investigate traditional beliefs and practices in relation to perceptions of risks in pregnancy and childbirth in Gabane, Botswana.

Design: A cross-sectional study using a structured and semi-structured questionnaire and unstructured interviews with pregnant women, men and elder women.

Setting: Households in the community and a primary health care clinic for pregnant women.

Participants: Thirty pregnant women, thirty men, and thirty elder women in each group making a total of ninety in all.

Main Outcome Measures: The community's definitions of risk in pregnancy and childbirth and their knowledge, beliefs and practices.

Principal Results: This community's knowledge of obstetrically defined risk indicators for pregnancy and childbirth is limited. Risk factors according to traditional beliefs include wider lifestyle and behavioural characteristics of the pregnant woman, her partner and her carer.
Pregnant women's opinion of antenatal services is generally low. The screening value of antenatal care is not clearly understood and communication is poor.

Elder women took their pregnant daughters to traditional healers first, but if the condition was considered serious, took them to the 'government' clinic or hospital.

**Recommendations:** There is need for more communication between health services staff and pregnant women, men and elder women regarding the function and value of antenatal visits and regarding danger signs in pregnancy and labour.
ACKNOWLEDGEMENTS

I would like to thank all members of my family, especially my husband and sons, for their continued support throughout my study.

Special thanks to Ms Susan Murray, Lecturer, Institute of Child Health, my personal tutor and supervisor. This project would not be what it is now without your continued support and encouragement throughout my stay.

Thanks to all members of staff of the Institute of Child Health who made my academic life tolerable.

Thanks very much to Mr Keith Sullivan, Lecturer in Medical Statistics, for your patience and support with statistical methods.

Many thanks to the Chief of Gabane, the community and the primary health care clinic staff, for their sincere support throughout my data collection phase.

I would like to express my gratitude and admiration to my Principal Tutor, National Health Institute, Botswana, Mrs S D Mosieman, who was very supportive and assisted with some of the photocopying of my project.
I would not have coped without the special support of my colleagues who through their experiences and exposure widened my knowledge on cultural aspects of different countries.

I would like to thank Mrs W Tshiamo, a personal friend and Sister in Christ, who assisted my family during my absence.

Thanks to all the people who helped in making this project a reality.

My sincere thanks to the Botswana Government who financed me for this course.

LE KA MOSO!
Map – Botswana

District Health Team Areas

- District and Sub-District Headquarters
- District Health Team Headquarters
△ Town Council
• General Hospital
+ Health Centre
4 District Health Team
... District Health Team Boundaries
CHAPTER 1

1 BACKGROUND AND LITERATURE REVIEW

1.1 Geography, Climate and Population:

Botswana is a landlocked country in southern Africa of approximately 582,000 km² of which about two-thirds is a desert. The climate is semi-arid with high temperatures in summer, and low during winter nights, often reaching sub-zero levels. There is unreliable rain fall, making water availability to be scarce. Sufficient water is needed in Botswana for growing crops and grass, supply mining and other industrial needs, as well as to meet the demands of human settlement (National Development Plan [NDP], VI & VII, 1985-91, 1991-97).

The population of Botswana is approximately 1.3 million (Republic of Botswana Stat Brief, 1991). Batswana has a relatively homogenous population when compared to other African countries. There is a patrilineal descent system. A man’s family will give cattle to the woman’s parents as bride wealth (bogadi). Before the influence of Christianity, youth were initiated into adulthood through such ceremonies as bogwera for boys and bojale for girls. These practices have slowly disappeared, except for a few ethnic groups in the southern and southeast of Botswana (Anderson, 1986; Government of Botswana/UNICEF, 1986). Most
of the elder women and some elder men interviewed in the study were actively involved in these ceremonies.

In spite of the patrilineal descent system, Batswana do not express an obvious sex preference regarding children. A child is considered a gift from God (modimo) and is treasured to the extent that after the birth of the first born (whatever its sex), the mother and father cease to be called by their own names. Out of respect they change to the child’s name, ie, if the child’s name is Tube, the mother becomes Mmatube (mother of) and the father (if mother married) Rratube (father of). However, a family which has children of only one sex is looked upon as ‘not knowing how to give birth’. The preference idea is to have an equal number of male and female children (Anderson and Stagard, 1986).

1.2 Health Service Delivery System:

Primary Health Care (PHC) has been accepted by the Botswana Government as the most appropriate strategy for the attainment of health for all. The central components of the PHC strategy are equity, intersectoral collaboration, and community involvement (NDP, VI & VII, 1985-91, 1985-97). The government is the main provider of health care services throughout the country. There are some private and mission hospitals as well as private practitioners, but mainly in towns and big villages. In addition to these services, there are traditional faith healers and diviners who are part of the PHC system, although not officially
integrated into the modern system (Government of Botswana/World Health Organization [GOB/WHO], 1989).

Maternal Child Health and Family Planning (MCH/FP) is the government’s top priority under PHC with the main aim of promoting the health of women and children. These are a vulnerable section of the population due to, respectively, their exposure to physical stress of reproduction and to growth requirements (Botswana Family Health Survey I, II [BFHS I, II], 1984, 1988).

1.3 Summary of the Study Area (Gabane):

Gabane is a peri-urban village fifteen kilometres southwest of Gaborone, the capital city of Botswana. It has a population of approximately six thousand people, of which 3,322 are female, and 2,653 are male (Central Statistics Office, August 1992).

1.3.1 Health Care Delivery System in Gabane:

There is a PHC clinic in the village which has no facilities for deliveries. However, there are facilities for antenatal care, family planning, child welfare services, and postnatal care until six weeks to two months after delivery. Pregnant women who are at term are asked to deliver at a referral
hospital in Gaborone, fifteen kilometres away from home. Women identified as being at ‘high risk’ during antenatal services, are referred to the same hospital. These are women with pre-eclampsia, hypertension, and antepartum haemorrhage. (See appendix on risk indicators used).

1.3.2 Staffing Patterns, Transport and Communication:

There are two midwives at the clinic involved in both preventive, promotive, and curative services. At the time of the study at the clinic, the other midwife was on annual leave, leaving one enroled midwife to ‘overstretch’ to meet the demands of the community. However, there are other members of staff who assist with other duties such as filling the antenatal forms, weighing, and checking blood pressure during antenatal visits. Particular emphasis in the study is placed on the midwives who specifically deal with the pregnant women.

There is a clinic ambulance and a driver stationed at the clinic. Communication in cases of emergencies are minimal as there is no telephone to contact the referral hospital staff. However, an ambulance is available to transport patients to the Princess Marina Hospital.
Facilities for emergencies are also minimal. There are no operating facilities, even of the simplest kind for maternity cases, not even a symphysiotomy pack, nor are there staff trained to use them. A doctor is rarely available at the clinic - once in two weeks. The clinic does not have oxygen facilities. There is, however, one delivery pack for emergencies and manual disposable mucus extractors for babies.

1.3.4 Statement of the Problem:

According to Ulin (1981), the rationale for health behaviour is not always apparent on the surface, and yet an understanding of why people behave as they do is a necessary first step to effective health education. The care given to people should address their local needs, and if people attach little value to the services provided, little will be achieved if the problem is not identified.

Despite the MCH/FP services available in Botswana, fertility rate remains high - 5.0 children per woman by the time she reaches her 50th birthday. Teenage pregnancy is a
disturbing problem, 24.6 % of teenagers 15-19 years are mothers (BFHS II, 1988; Manyeneng, 1986).

Pregnancy and childbirth are physiological processes, in most cases taking their normal course. A pregnancy which differs from the norm because of the conditions in which it occurred, or in which it develops, is likely to cause special risks to both the mother and child. Risk implies an increased probability that an adverse outcome may occur and may be predicted because of the presence of a number of variables, indicators, or risk factors. These risk indicators include the age of the mother (especially in developing countries where a girl is married as early as ten years), high parity, first pregnancy, previous child loss, close birth spacing, and malnutrition (Backet et al, 1984).

The MCH/FP services in Botswana are geared towards the concept that no pregnancy is entirely devoid of risk. Risk is seen as a proxy for need (Backet et al, 1984). Risk factors/indicators in pregnancy should be detected early and these women should have their pregnancies monitored more frequently and with more technical support than normal pregnancies. According to the BFHS II study, of the
preceding five years, 90 % of mothers received antenatal care from a health worker at least once and 77 % delivered in institutions. The quality of antenatal care is not discussed in the study. However, one antenatal visit is inadequate, although it may be better than none. A study by Owuornomondi on perinatal mortality in Botswana showed that mothers who attended antenatal care once were 7.7 times more likely to have perinatal death than two or more visits. It is also clear in the BFHS II study that not all mothers utilize the services, 10 % did not, although no reasons are given as to why not. And it is possible that those women most at risk are less likely to use the services. Ulin in her study of use and non-use of preventive health care services in Botswana discovered that in health and in illness, as in other dimensions of life experiences, people face situations in which they most choose between new and old structures and values. The decision to attend a PHC clinic is in the long-run pragmatically determined by what the client perceives as the practitioner’s ability to get the desired results at affordable cost.

One of the key strategies of safe motherhood initiative, is the role of family planning in preventing maternal death and
improving the quality of women's lives. Repeated pregnancies and illegal abortions are the major causes of maternal mortality and disabilities. Clearly contraceptives cannot reduce the danger of a specific childbirth. Once the woman is pregnant, or about to give birth, she should be assisted by trained health personnel, and there is a need for adequate transport, as well as an adequate referral system. Correction of anaemia, prophylaxis against tetanus, and treatment of existing conditions, as well as providing adequate nutrition in the developing world, are some of the measures that will reduce the risks. However, family planning can reduce the number of women dying in childbirth and childbirth disabilities by reducing the number of lifetime risk by reducing the number of times a woman becomes pregnant, helping her to space birth adequately and therefore delaying the onset of reproductive causes (GOB/UNICEF, 1989; Royston and Armstrong, 1989; Kwast, 1987).

In Africa as a whole, high maternal mortality rates are compounded by high fertility, in addition to other causes. The average number of live birth per woman is 6.9, but in rural Africa it is quite common for a pregnant women to
have given birth to eight live babies and to have been pregnant several times more. If at each pregnancy such a woman has a 1:140 chance of dying, she has a lifetime risk of at least 1:20 (Kwast, 1989).

In Botswana, a study on maternal mortality over a five year period on recorded institutional death (a reflection of part of the picture as death outside the institutions go unreported), showed a trend to that of other developing countries. Of the 112 recorded maternal deaths (not the whole country), nearly half, 48% were said to be in the high risk group. Sixteen mothers were in the age group 15-19, 27 mothers were 35 years and over, and 13 mothers were grand multiparous. The identified medical causes were infection, haemorrhage, toxaemia, previous associated illnesses, and prolonged labour (Mashalaba, 1977-81). However, the study does not explain whether these deaths could be avoided and whether quality prenatal care was provided.

Gongoro, in another study, shows the trend of identified medical causes following the same pattern. Avoidable factors were identified in 72% of the total 104 maternal deaths. Reasons for avoidable death were summarised as:
(1) failure in administrative arrangements, (2) failure of the clinical management, and (3) failure on the part of the patients to seek medical help in good time. The study does not explain further why patients delayed in seeking care. Despite the accessibility of health services, 10% of mothers do not attend antenatal care, and 23% are delivered by ‘untrained’ health workers (untrained in the sense of the western medicine). In Botswana the government encourages women to be attended by a trained health worker, and although traditional practices are known to exist, they are discouraged (NDP VI).

1.3.5 Need for this Study:

Gongoro identified one of the reasons for avoidable death as being a failure on the part of the patients to seek medical help. Not all women attend for antenatal care nor seek delivery by a trained health worker. The reasons for these are probably complex, relating possibly to logistic problems such as transport, difficulty in finding alternative child-care arrangements and cost, to perceptions of the medical services provided and to perception of need to such services (WHO, 1991-92).
The purpose of this study therefore is to take up this last point and to investigate traditional beliefs and practices related to risks during pregnancy and childbirth. There is considerable literature in the medical field defining risk factors, determining who the risk groups are, and suggesting strategies to reduce risks (Maine, 1990; Nessa, 1991; Gunawan, 1991). However, I have not identified any studies carried out at the community level in Botswana to find out what 'lay' men and women perceive to be 'risks' in pregnancy and childbirth.

The head of the household is an important member of the family in terms of decision making processes at this level. The gender of the household head is also significant, because he/she determines the nature of various activities and characteristics of the household, and the extent of participation in development. A substantial proportion of the households are headed by women in both urban (35 %) and rural (46 %) areas, a changing trend from tradition.

Women are still highly under represented at the community and national decision making levels. Less than one third of the councillors are women and only two women are members
of parliament, leaving the majority to men. There is only one woman permanent secretary (Botswana Government, 1991).

Looking at this trend, I feel there is a need to study the two groups (men and women) on their definitions of risk in pregnancy and childbirth. What is scientifically defined as a risk in other cultures may not necessarily be seen as a problem requiring them to seek medical care, especially when a decision has to be made.

The recommendations from Botswana Family Health Survey I, was that emphasis be placed on informing men about the health and other benefits of family planning, to reduce the risks of pregnancy, childbirth and associated risks.

I hope the results of the study may help the health workers to strengthen their strategies in promoting the health of women and children.
CHAPTER 2

2 OBJECTIVES AND METHODS

2.1 General Objective:

The aim of the study is to investigate traditional beliefs and practices related to perception of risk in pregnancy and childbirth.

2.1.2 Specific Objectives:

A) To discover the traditional beliefs and practices related to aspects of pregnancy and childbirth.

B) To find out to what extent pregnant women, men, and elder women know about obstetrically defined 'risks' in pregnancy and childbirth.

C) To see to what extent traditional and modern belief systems complement or conflict with each other.
D) To identify any aspects of traditional practices that could be evaluated and incorporated into the Ministry of Health Services.

2.2 Gaining Access into the Study Area:

No study will be successful without the support of relevant authorities, especially in a given short time period.

Permission was sought from the Ministry of Health (MOH) through a written letter. A summary of the proposal together with a proof from the Institute of Child Health (London) where I study were given to the Permanent Secretary as well as three copies of the questionnaire.

The same were given to the Chief (Kgosi) of Gabane village and to the Senior Sister in-charge of Gabane clinic. Participants in the study were asked for permission to be interviewed at the time of contact. However, it was also explained that interviewing them was voluntary and those who did not want to take part were also allowed to do so freely without fearing any recriminations. Participants were also assured of confidentiality of the information and that no names were actually needed for the study.
2.2.1 Type of Study:

It is a qualitative cross-sectional study about definitions of risk in pregnancy and childbirth in a peri-urban village in Botswana.

2.2.2 Study Population and Setting:

Three groups of participants took part in the study, pregnant women within the childbearing age 15-49 years, men aged 16 years and over, and elder women aged 50 years and above. Thirty (30) participants in each group were identified making a total sample of ninety (90). The study was conducted in Gabane, a peri-urban village, southwest of Gaborone, the city capital of Botswana.

2.2.3 Definition of Terms:

**Pregnant Women**: Women within the childbearing group age 15-49 years who at the time of interview were expecting a child.
Men: Males aged 16 years and above at the time of interview. Age 16 years was chosen as an appropriate minimum because according to a study on teenage pregnancy in Botswana (unpublished, 1986), adolescents were found to be sexually active at age 16.

Elder Women: Women who at the time of interview were age 50 years and over.

Kgotla: It is place with offices where all tribal matters are administered. There is a chief (Kgosi) or chief representative (mothusa kgosi) as the overall head of tribal administration at that particular place.

Lands: A settlement of Batswana during rainy reasons. A place where people plough, but at times livestock are kept there, cows, goats, sheep, donkeys, etc.

Bogwera and Bojale: An initiation for teenage men and women to introduce them into adulthood.
Herbs and Roots: These two words are used exchangeably in this context to mean any form of traditional medicine used during pregnancy and childbirth.

Lolwapa (Household): A group of one or more people living together under the same roof or several roofs within the same dwelling eating from the same pot. Malwapa (households) is the plural term.

Seome: Vaginal spotting of blood in pregnancy.

Popelo: Womb (uterus).

Ngaka: Traditional healer.

Setswana: Local language of Batswana.

Batswana: People of Botswana.

Motsetse: A woman in her period of confinement after birth.
2.3 Methods Used in Data Collection:

Sampling methodology proved to be a major area of limitation in this study, as one method after another proved to be ineffective in this field situation.

Initially, a simple random sampling of household numbers from the August 1991 population census was planned. Attempts to get the map of household from the national population office failed because the results of the population census were not yet out. I was informed that there was no way my request could be met, because all the documents concerning the census were not officially released.

Another method had to be chosen, although the first one was the most reliable and accurate method if done with care (Bailey, 1982; Kirkwood, 1988). A random sampling of wards was then chosen to be the next most appropriate and reliable method, similar to the initial one. This was attempted. All the four major wards in the village were given numbers one to four. These were put together and a random selection of two wards was done as a representative of the groups under study. The method was considered accurate and reliable since there was equal chances of any of the four wards to be picked up. Choosing the lolwapa (household) for interview was done by spinning a one litre Coke bottle on the ground on a flat surface every morning. Where its ‘mouth’ pointed was the lolwapa where the interviewing process was done. The next lolwapa to be interviewed was the one which faced the main gate or outlet to the initial one.
Spinning of the Coke bottle is considered accurate and reliable, as each lolwapa within the area had an equal chance to be chosen. However, the force used in spinning and the flatness of the ground level may still be questioned.

Due to some factors which may be related to the serious drought situation, progress seemed to be very slow. For fourteen days of fieldwork only eleven participants were interviewed. Drought has no doubt affected the movement of people and population of Gabane being quite disperse, walking to the next lolwapa was time consuming. Most of the malwapa (households) were having school children and other people who were not in the sample. To get the sample number required in the last six weeks needed another change in the sampling method.

A systematic sampling method was then adopted where only one ward was now randomly chosen from the two that were already under study. The spinning of the bottle was continued and every lolwapa was visited until the sample size was achieved. In the next three and half weeks, the men and elder women sample were adequate, but there were almost unbelievably only one pregnant woman in the group. The possibility that there were others who were in early pregnancy and had not registered at the clinic or did not want to reveal their pregnancies cannot be ruled out.

To get the number of pregnant women from the community within the remaining eighteen days did not seem feasible. It was practical at this time to look for
avenues where pregnant women could be found, hence the PHC clinic was used to ‘capture’ them when coming for various services such as antenatal, child welfare, and curative services. Everyone who was pregnant and who volunteered to participate was interviewed. Since this is a non-probability method, the obvious limitation is that the results may not be generalised beyond the specific sample studied and it actively excludes those women who have not opted to use government PHC services. The information obtained in a relaxing home environment may not necessarily be the same as that obtained at the clinic where one went for a service. In one way or another, they may be in a hurry to get home. Traditional practices are done at home and interviewing people and observing their normal daily activities is vitally important in realising the practicalities of any given situation. However, even recognising these important limitations, useful insight was still gained into knowledge, attitudes and practices concerning risk in pregnancy and childbirth within this particular population.

2.3.1 Instrument Used in Data Collection:

The period of interviewing lasted nine weeks and I used a combination of structured, semi-structured and unstructured techniques. The structured questionnaire was used to determine the characteristics of the people one was dealing with such as age, education, parity, marital status, and locality. The semi-structured and unstructured sections of
the interview were used to get as much information as possible regarding the knowledge and practices in a traditional setting. In particular, regarding the definitions and perceptions of risks in pregnancy and childbirth. The interviews were conducted by myself in Setswana (local language) where reproductive subjects are often referred to euphemistically, for example, sexually-transmitted diseases are referred to 'diseases of sharing blankets' and 'socks' for condoms.

Focus group discussions were planned after the individual interviews, but attempts to organise these failed as participants did not turn up at appointed times for the discussion, although they promised to come. The reasons for failure to turn up may be due to lack of medical incentives and to the pressure of drought situation in the country.

2.3.2 Validity and Reliability:

A pretest of all the three questionnaires were done a week before the study was conducted. The pilot study interviews took place at the kgotla (tribal administration). Four (4)
elder women, seven (7) men and two (2) pregnant women were interviewed. As a result of the pretest, amendments were made to the questionnaire as follows:

**Men:** A question on ‘how many children do you have?’ was deleted because some men have other children outside their marriages and there were no implications of risks to the present wife. Others were divorced and remarried.

**Elder Women:** The question under marital status about stable partner was deleted as it was ‘ill mannered’ in a tswana culture to ask this group about whether they are in a stable relationship.

A question asking their opinion on whether men should assist in birth was added since all the seven men in the pretest group were against male midwives. I felt it would be interesting to hear views of elder women in this regard.

**Pregnant Women:** A question on how many children wanted or preferred was added since males were asked the same question to see if there was any difference in the preferred number of children between the two groups.
The question on whether male midwives were acceptable in assisting in childbirth was added to see if there was any difference in the three groups interviewed.

Generally, correction and amendments of numbers, spelling and omissions were done to some questions.

I conducted all the interviews personally in *setswana* (local language) using a *setswana* version of questionnaires.

Data collected from the community using the random and systematic sampling do not show any difference in responses. The only pregnant woman interviewed in this community is not discernably different from the rest of the group. She had already registered at the PHC clinic. Although the interview setting was different, her responses did not stand out as noticeably different from the others in terms of either content or detail.
CHAPTER 3

RESULTS

3.1 General Characteristics of the Study Population:

3.1.1 Age Distribution of Groups Interviewed:

Table 1: Age Distribution of Pregnant Women Interviewed.

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>20-24</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>25-29</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>30-34</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>35+</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

mean age = 25.4 years

A total of 33 % of women interviewed were within age 15-19 years (4 (13 %) were between 16 and 17 years) and still growing (Royston and Armstrong, 1989).
Table 2: Age distribution of men interviewed.

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>25-34</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>35-44</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>45-54</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>55+</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

mean age = 39.1 years

2 (7 %) men were fathers at age 17 and 18 years considered under age (legal age in Botswana is 21 years).

Table 3: Age distribution of elder women interviewed.

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-54</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>55-59</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>60-64</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>65+</td>
<td>14</td>
<td>47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

mean age = 63.8 years

Nearly half (47 %) elder women interviewed were aged 65 years and over (the eldest in this group was 81 years). They are considered experienced in terms of traditional maternity care services by the community.
3.1.2 Age at First Pregnancy:

Table 4: Age distribution of pregnant women at first pregnancy.

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>20</td>
<td>67</td>
</tr>
<tr>
<td>20-24</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

67 % reflect a group of age 15-19 years as mentioned under figure 1.

Table 5: Age distribution of elder women at first pregnancy.

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>20-24</td>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>25-29</td>
<td>6</td>
<td>27</td>
</tr>
<tr>
<td>30-34</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100</td>
</tr>
</tbody>
</table>

Seven could not remember their ages at first pregnancy and one never had a child.
3.1.3 Marital Status:

Table 6: Marital status (numbers and percentages).

<table>
<thead>
<tr>
<th>Groups Interviewed</th>
<th>Married</th>
<th>Widowed</th>
<th>Stable Partner</th>
<th>Single</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant women</td>
<td>7 (23%)</td>
<td>0</td>
<td>2 (7%)</td>
<td>21 (70%)</td>
</tr>
<tr>
<td>Men</td>
<td>16 (53%)</td>
<td>8 (27%)</td>
<td>not assessed</td>
<td>6 (20%)</td>
</tr>
<tr>
<td>Elder women</td>
<td>15 (50%)</td>
<td>0</td>
<td>5 (17%)</td>
<td></td>
</tr>
</tbody>
</table>

Calculations of percentages and numbers were per each group of the population interviewed.

3.1.4 Educational Level Obtained:

Table 7: Educational level obtained.

<table>
<thead>
<tr>
<th>Groups Interviewed</th>
<th>No formal education</th>
<th>Can read and write</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant women</td>
<td>5 (17%)</td>
<td>2 (7%)</td>
<td>15 (50%)</td>
<td>9 (30%)</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>Men</td>
<td>9 (30%)</td>
<td>5 (17%)</td>
<td>11 (37%)</td>
<td>7 (23%)</td>
<td>3 (10%)</td>
</tr>
<tr>
<td>Elder women</td>
<td>19 (63%)</td>
<td></td>
<td>7 (3%)</td>
<td>1 (3%)</td>
<td>1 (3%)</td>
</tr>
</tbody>
</table>
Most participants under no formal education can read and write. They were assisted by members of their families.

3.1.5 **Planned Pregnancy Among Pregnant Women:**

Table 8: Planned pregnancy.

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>Unplanned</td>
<td>20</td>
<td>67</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

3.1.5 **Parity:**

Table 9: Parity among pregnant and elder women interviewed.

<table>
<thead>
<tr>
<th>Para 0</th>
<th>Para 1</th>
<th>Para 2</th>
<th>Para 3+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant women</td>
<td>14 (47 %)</td>
<td>2 (7 %)</td>
<td>3 (10 %)</td>
</tr>
<tr>
<td>Elder women</td>
<td>0</td>
<td>1 (3 %)</td>
<td>1 (3 %)</td>
</tr>
</tbody>
</table>

There was no difference among the level of education and planning pregnancy and pregnant women still wanted more children (tables 7, 8, and 9).
3.2 Pregnant Women:

3.2.1 Practices Related to Pregnancy:

Is there anything special women do when they discover that they are pregnant?

17 (57 %) Register (Go ikwadisa) at the clinic
8 (27 %) Go to an elder woman and clinic
2 (7 %) Drink roots (medinyana) from elder women
1 (3 %) Visit a health worker
1 (3 %) Visit a traditional healer
1 (3 %) Inform your partner

What are the reasons for these practices?

Register at clinic:

11 (37 %) Nurses should not ‘refuse’ to help me (ba nkgana) when I have problems.
6 (20.5) Nurses take blood and urine and give treatment.
4 (13 %) Advised by my mother to go to clinic.
3 (10 %) To be given tablets and injections (iron and tetanus toxoid) to help baby grow.

1 (3 %) To visit nurse to tell me if I am sick or not.

Some of the responses were:

1 (3 %) You know you do not treat us well if we have not registered.

1 (3 %) I registered because nurses will help me in childbirth because my mother is far away.

1 (3 %) I want to feel free to come to clinic if I have problems.

The high percentage to register may be due to the fact that there were already registered or registering at the PHC clinic because the reasons mentioned for registering reveal fear of not being accepted when help is needed. It may be due to sample bias as all but one were interviewed at the PHC clinic.

Elder women and traditional healers:

8 (27 %) They know our culture (Ba itse setswana)

3 (10 %) When I am not sure I am pregnant

2 (7 %) They are not only interested whether the baby is ‘breathing’ (O hema sentle).
They treat other diseases which nurses do not consider as a disease, like when the baby’s legs come first when you give birth.

**What did the nurse do at your antenatal check-up?**

- **18 (60 %)** Take blood and urine to check if you are sick.
- **15 (50 %)** Pump your hand to check if you have high blood pressure (madi a ko godimo).
- **11 (37 %)** Examine and tell you when to come.
- **11 (37 %)** Ask many unnecessary questions (Dipotso tse di sa tlhokofaleng).
- **9 (30 %)** Supply tablets and injections.
- **4 (13 %)** Check whether the baby is alive.
- **3 (10 %)** Give treatment when sick.
- **2 (7 %)** Tell you that you are not sick, it is the normal pregnancy processes, as if it is your first baby.
- **2 (7 %)** Tell you to go and see the doctor after wasting time coming to the clinic.
- **1 (3 %)** Tell you your womb is too tired to hold other babies to come. You should think of stopping giving birth.
What did the elder women do during your visit?

8 (27 %) They really examine you (Ba go thatlhoba /sedila tota).
They massage your abdomen with warm water and apply vaseline. You really sleep well.

7 (23 %) They know our culture (Ba itse setswana) and they tell us what should be avoided.

3 (10 %) The give roots (medicine) to keep the pregnancy healthy.

3 (10 %) I never get better when I go to the clinic (Ga nke ke thusega ko kokelwaneng).

2 (7 %) Their hands are ‘cool’ because they do not run around like the young nurses. You sleep well after they have examined you.

1 (3 %) They have all the experience and they know better, it is in their hands, they do not read from books.

3.2.2 Nutrition During Pregnancy:

Is there any special kind of food which should be eaten during pregnancy?

There was the general feeling among those interviewed 24 (80 %) that the same food normally eaten at home should be continued in pregnancy.
However, the question of ‘special’ food was challenged by more than half 18 (60 %), asking where do you get food? The question may have been unclear or it may be a reflection of poverty and drought which struck the country this year and the whole of southern Africa.

Is there any food which should be avoided during pregnancy?

15 (50 %) Felt there were foods to be avoided while
3 (10 %) denied any food not be eaten and
12 (40 %) have no idea.

What are the foods to be avoided and why?

15 (50 %) Eggs 8-will block the birth passage
8-delays rupture of the ‘water’
4-were told not to eat without given reasons

12 (40 %) Intestines of animals (mateng)
7 (23 %) The baby will have long penis if it is a boy.
5 (17 %) No reason given.
1 (3 %) Women will bleed a lot when giving birth.
1 (3%) Hoofs - Baby girl will have big ‘private’ parts.
1 (3 %) Fat meat - Baby will be spoiled (otla senyega)
1 (3 %) Chicken legs - Baby will have long finger nails and scratch herself.
It is good to eat a lot during pregnancy?

<table>
<thead>
<tr>
<th>Good</th>
<th>Not Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 (80%)</td>
<td>6 (20%)</td>
</tr>
</tbody>
</table>

Reasons for eating more:

- 8 (27 %) To make sure the baby grows.
- 5 (17 %) Share food with the baby.
- 4 (13 %) I feel hungry more often now that I am pregnant.
- 4 (13 %) I am eating for the two of us. I do not know maybe three.
- 2 (7 %) So that I keep well.
- 1 (3 %) The baby is taking some of the food.

Reasons for not eating more:

- 2 (7 %) I just can’t eat more.
- 1 (3 %) There is no space for food.
- 1 (3 %) This baby doesn’t like food.
- 1 (3 %) I really take the food out (vomit) if I eat more.
- 1 (3 %) I fear the knife (thipa). If the baby is big the doctors take not time to operate (go sega) you.
3.2.3 Perceptions of Normal and Abnormal Pregnancy. How do you Know if Pregnancy is going Well?

15 (50 %) I will not know unless nurses tell me.
11 (37 %) When I am not sick.
3 (10 %) When the baby is playing in me.
1 (3 %) When I am working normally.

How do you know things are wrong?

13 (43 %) When I am sick.
12 (40 %) I will not know unless I am informed.
1 (3 %) I don't know it is my first experience.
1 (3 %) When baby is not playing.
1 (3 %) Feeling of tightness when I walk.
1 (3 %) When I bleed.
1 (3 %) When I do not give birth in time.
1 (3 %) When water pours out (metsi a tshologa).
1 (3 %) Nurses told me my baby is not in good position.
What will you do?

23 (77 %)  Go to hospital.

6 (20 %)  Go to hospital if I have money for transport.

3 (10 %)  Inform my grandmother.

2 (7 %)  Inform my mother.

1 (3 %)  Inform my partner.

The hospital was mentioned here instead of the Primary Health Care Clinic because it has no other maternity care except antenatals and postnatals at 6 to 2 months. All mothers are to deliver in a hospital 15 km away.

Bleeding and swelling in pregnancy. Is it dangerous to bleed during pregnancy?

<table>
<thead>
<tr>
<th>Dangerous</th>
<th>Not Dangerous</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 (70 %)</td>
<td>9 (30 %)</td>
</tr>
</tbody>
</table>

Reasons (why?)

Dangerous

13 (43 %)  It is dangerous, but I don't know why.
9 (30 %) It is a sign of sickness of some kind.
7 (23 %) The baby is coming before time (oa thaeetsa).
2 (7 %) Its an abortion (oa senyegelwa).
1 (3 %) Baby will come dead.
1 (3 %) The baby is in the wrong position.

Not dangerous
5 (17 %) Baby is changing position.
1 (3 %) I told my partner a lie that I was pregnant.
1 (3 %) I will be happy because I will continue with my classes.
1 (3 %) I know a friend who had a child, but she never missed her menses.
1 (3 %) It is just not dangerous, I can’t explain why.

What about swelling during pregnancy?

<table>
<thead>
<tr>
<th>Dangerous</th>
<th>Not Dangerous</th>
<th>No Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 (60 %)</td>
<td>9 (30 %)</td>
<td>3 (10 %)</td>
</tr>
</tbody>
</table>
Reasons (why?)

Dangerous

7 (23 %) One is sick.
5 (17 %) High blood (madi a ko godimo) pressure.
5 (17 %) It is dangerous, but I don't know why
1 (3 %) Eating foods you are not supposed to.

Not dangerous

4 (13 %) Elder women say its a boy
3 (10 %) Twin pregnancy.
2 (7 %) Pregnant women (Baimana) do have swelling.
1 (3 %) The baby is near birth (term).

Did you have any problems giving birth?

Participants who had previous pregnancies were sixteen (16) in the group of thirty. Three of these mothers had problems with one of their pregnancies as follows:

1 (3 %) In labour for two days and gave birth to a dead child in hospital.
1 (3 %) Gave birth at seven months and stayed in hospital for one month.
3.2.4 Perception of Normal and Abnormal Labour:

How do you know if your labour is going well?

13 (43 %) I will not know unless one who is helping me with the birth tells me.
8 (27 %) Strong points and then give birth.
5 (17 %) When a deliver in a short period of time.
2 (7 %) I will not know, I am always in pains.
2 (7 %) Nobody discussed labour with me.
1 (3 %) How can I know what is happening inside me?

How will you know that things are wrong?

15 (50 %) How can I know when I am not helping myself? The person assisting me will tell me.
7 (23 %) When the baby is not coming in time.
2 (7 %) When pains are sleepy (dithabi di robetse).
2 (7 %) When pains are accompanied by more bleeding.

The impression was that the person conducting the delivery is the one who is supposed to know when labour is progressing well or there are some problems.
What will you do if you think things are going wrong?

29 (97 %)  Will go to hospital immediately.
1 (3 %)  Will inform her mother and she will decide what to do next.

Who would you like to be with you when you are in labour?

16 (53 %)  ‘Nurses’ (midwives)
7 (23 %)  Partners
5 (17 %)  Grandmothers
2 (7 %)  Mothers

What about a midwife assisting in birth?

16 (53 %)  Did not like a male midwife.
14 (47 %)  Wanted to be assisted by a male midwife.

14 (47 %) pregnant women who wanted a male midwife to assist in the birthing thought he was more supportive and more understanding than a female midwife. These were women who were delivered by both at one point during their previous birth. 9 (30 %) were delivered by both male and female, while 5 (17 %) were told by their friends who were assisted by male midwives.
Only 5 (17 %) of the 30 pregnant women wanted their partners to be present during childbirth. 4 (13 %) of these were primigravidas with no difference in educational background. The hospitals in Botswana, except private wards where these women are expected to deliver, does not admit companions of either sex to the maternity wards.

Is it dangerous to bleed after childbirth?

<table>
<thead>
<tr>
<th>Dangerous</th>
<th>Not Dangerous</th>
<th>No Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 (20 %)</td>
<td>21 (70 %)</td>
<td>3 (10 %)</td>
</tr>
</tbody>
</table>

Why is it dangerous?

5 (17 %) There is too much blood loss which is not good.
1 (3 %) It is good for the first day and not more than that.

Why is it not dangerous?

18 (60 %) Go siame thata go thuba. It is good to ‘break’. This relates to bleeding with clots. As the woman bleeds sometimes small clots come out as well after birth. This cleanses popelo (womb) after nine months without ‘washing’ meaning periods.
I hate to be mokento (injection) immediately after birth.
Baby suckles clean milk (mashi).
I nearly died when I was giving birth to my third child in hospital because I was given mokento and I did not bleed.
One is sick if there is no bleeding.
Giving mokento after birth should be stopped. Why do you give it? At home nothing happens.

Is there anything special women in your area do during the first weeks after birth of the baby to treat the womb?

Lie on your stomach immediately after the birth of the baby for at least 2 months so that popelo come to its normal size.
Take hot baths three times a day to lessen pains and to prevent chronic backache in future.
Drink traditional herbs to aid bleeding after mokento from hospital.
Drink traditional medicine (melemo ya sestswana) to cleanse popelo.
Eat good food, special for you so that you gain strength after going through childbirth.
Everything is done for you, you just lie down on your stomach for 2 to 3 months if not working.
3.3 Men:

3.3.1 Practices Related to Pregnancy:

Is there anything special that men do in your area when they discover that their partner is pregnant?

12 (40 %) Avoid sleeping with other women.
6 (20 %) Give her money.
4 (13 %) Consultant traditional doctors to give them help.
3 (10 %) Tell my grandmother to help her.
3 (10 %) Encourage her to register at the clinic.
2 (7 %) Do not come home late at night.
2 (7 %) Do not take long trips.
2 (7 %) Be with her when she needs me.
1 (3 %) Take her to the clinic when she is not well.
1 (3 %) Stay at home if I am not at the cattlepost.
10 (33 %) Nothing is done.

What are the reasons for doing these things?

4 (13 %) When a woman is pregnant her blood is weak and she easily ‘catch’ diseases.
To make sure the woman is well while she is pregnant.

She should be happy and enjoy her pregnancy.

No-one wants a deformed baby.

She will be happy if she has money to buy herself what she wants.

Pregnant women wants attention, it is wise to give them what they want and will stop making 'noise'.

Make sure you don’t ‘give’ her diseases it is a shame.

One has to be very careful these days.

The responses of three men was:

Is AIDS as serious as you tell us in our country?

What will make you take your partner to the clinic during her pregnancy?

When she is not well.

To register for her pregnancy.

To register so that she can be helped if she has problems.

She should be examined and treated if she is sick.

As soon as she tells me she is pregnant.

There is no choice, government force us in a way to take our wives to the clinics even when they don’t get much help
there. If you don’t take her there an there are problems you are told to continue since you know it all.

**What did the nurse do when you took her to clinic?**

15 (50 %) I did not go with her.

5 (17 %) What kind of questions are you asking me.

2 (7 %) It elder women’s job.

2 (7 %) My grandmother will ‘kill’ me if she can hear me open her mouth.

2 (7 %) I am never involved unless there are problems.

2 (7 %) Nurses never allow anyone to see what they do.

1 (3 %) She is examined alone.

1 (3 %) She told me they took blood and urine to check if she is ill or not.

**What will make you take your partner to the traditional healer during pregnancy?**

9 (30 %) When she is not feeling well.

3 (10 %) Pregnant women don’t go to the clinic everyday.

1 (3 %) My mother takes care of her at home when she is pregnant.
I am not married yet.

I never take her to the traditional healer my grandmother treat her at home.

Are there other reasons?

When she is not getting better at the clinic.

To check if there are other problems that can interfere with her pregnancy.

Find out if she needs traditional or 'clinic' treatment.

When she is not well, although you people at the clinic claim to know everything. You were 'defeated' (lo paletswe) to cure my wife.

For different kinds of illnesses in pregnancy.

What did the traditional doctor do?

I call her to my house and she gives her medicine after treating her properly.

Gave her medicine to mix her soft porridge in the morning.

Gave her a bath with medicine.

I did not take her there because she did not have any problems.
1 (3 %)  We are never chased away like at the clinic.

3.3.2  Nutrition During Pregnancy:

Is there any food which should be avoided during pregnancy?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 (17 %)</td>
<td>13 (43 %)</td>
<td>11 (37 %)</td>
</tr>
</tbody>
</table>

6 (20 %)  You are asking me women's questions.

3 (10 %)  Go and ask women.

1 (3 %)  These questions do not belong to us.

2 (7 %)  1  Cow that died of difficult birth. They say she will have problems giving birth.

2       2  They did not tell me.

2 (7 %)  Eggs: Did not know why.

2 (7 %)  Internal organs: No reasons given.

1 (3 %)  Wild animals: No reason.

1 (3 %)  Liver: They say she will have too much blood.
Is it good to eat a lot during pregnancy?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 (57%)</td>
<td>13 (43%)</td>
</tr>
</tbody>
</table>

Reasons for eating a lot:

6 (20 %) She shares food with the baby.
6 (20 %) The baby needs to grow.
2 (7 %) She may be carrying one or more babies who also want to eat.
1 (3 %) If she wants to eat let her eat.
2 (7 %) Did not know why, although they felt they should eat more.

Reasons for not eating a lot:

4 (13 %) She may be sick (Go kanna ga mo lwatsa)
3 (10 %) A big baby may also cause problems.
1 (3 %) She may have problems when ‘God thinks of her’, (when she is giving birth).
1 (3 %) There is just no room to eat a lot, its just inviting problems.
1 (3 %) It is not necessary to eat a lot.
1 (3 %) She feeds the baby with her own blood eating a lot may cause problems.

3.3.3 Perception of Normal and Abnormal Pregnancy:

How do you know if pregnancy is going well?

11 (37 %) She will tell me (O tlaa mpolelela).
5 (17 %) When she is not complaining and sick.
2 (7 %) I will ask her how she feels.
4 (13 %) If she is eating.
1 (3 %) When she is happy (A itumetse).
1 (3 %) When she is getting fat.
1 (3 %) Nurses will tell me.
1 (3 %) Doing her normal work.
3 (10 %) Did not know.

How do you know if things are not well?

14 (47 %) She will tell me if she is not well.
1 (3 %) She will look dull and weak.
1 (3 %) If she complains.
1 (3 %) I will just know.
If she is always sick.

I will ask her.

When she is loosing weight and does not concentrate on whatever she is doing.

They will tell me.

What will you do if things are not going well?

Take her to hospital.

Call a traditional healer.

Try traditional roots for pregnancy.

Take her to whoever is nearer (nurse or traditional healer).

Inform her parents.

Advise her to go clinic.

Is it dangerous to bleed during pregnancy?

<table>
<thead>
<tr>
<th>Dangerous</th>
<th>Not Dangerous</th>
<th>No Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 (77 %)</td>
<td>2 (7 %)</td>
<td>5 (17 %)</td>
</tr>
</tbody>
</table>
Why is it dangerous?

8 (27 %)  She is ill.
5 (17 %)  She is having an abortion (Oa senyegalwa).
4 (13 %)  May lose a lot of blood.
4 (13 %)  Baby is coming 'before time' (premature birth).
3 (10 %)  Baby is not well.
2 (7 %)  Baby is not happy because the mother is ill.

Why is it not dangerous?

1 (3 %)  The partner was having 'minor' problems when he 'met her' (Ga ba kopana), meaning during sexual relations.
1 (3 %)  There was just a blood clot not a baby.

What about swelling in pregnancy?

<table>
<thead>
<tr>
<th>Dangerous</th>
<th>Not Dangerous</th>
<th>No Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 (43 %)</td>
<td>3 (10 %)</td>
<td>14 (47 %)</td>
</tr>
</tbody>
</table>
Why is it dangerous?

4 (13 %) She is ill.
3 (10 %) Baby is not well.
3 (10 %) Mother’s blood is not moving well.
1 (3 %) She is having high blood pressure.
1 (3 %) The kidneys and heart are diseased.
1 (3 %) She has too much blood (volume).

Why is it not dangerous?

2 (7 %) They say it is a baby boy.
1 (3 %) They say it will give birth to twins.

3.3.4 Perception of Normal and Abnormal Labour:

How do you know if labour is going well?

12 (40 %) Did not know.
4 (13 %) Nobody tell us anything until the baby is born.
3 (10 %) I am not allowed near her.
3 (10 %) They will tell me.
2 (7 %) She will tell me.
1 (3 %) I will not be with her.
1 (3 %) They will tell me a baby has been born.
1 (3 %) My mother will tell me.

A response from an 18 year old who impregnated another 18 year old both secondary school students replied thus:

1 (3 %) ‘She told me four days before she went to hospital to "buy" a baby that she was in pain. I was so scared because I thought she was too young to give birth’.

How do you know if things are going wrong?

10 (33 %) They will tell me.
3 (10 %) When she does not give birth.
3 (10 %) When elder women (basadibagolo) tell me they are problems.
1 (3 %) When the baby is in wrong position.
1 (3 %) I was never told until when my wife was giving birth to our sixth baby that there were problems.
1 (3 %) They told me when my wife was giving birth at the hospital.
What will you do if things went wrong?

17 (57 %)  Take her to hospital to be helped.
5 (17 %)  Call a traditional doctor to advise me if things were going to be all right and then take her to hospital.
2 (7 %)  Ask her parents to take her to hospital for help.
1 (3 %)  Give her traditional medicine to ease her pains and help her give birth.
1 (3 %)  Pray to God for help and take her to hospital.
1 (3 %)  Go to clinic to ask for an ambulance to take her to hospital.

Who would you like to be with your partner during labour?

Nurses 12 (40 %)
Family member 12 (40 %)
Husbands/partners 4 (13 %)
Nurse and family member 2 (7 %)

Why not you?

16 (53 %)  It is not our tradition (Gase setswana).
5 (17 %)  Men have 'hot' legs and will cause difficult childbirth.
1 (3 %) I cannot help her I am so ignorant.
1 (3 %) I have never heard of men witnessing childbirth.
1 (3 %) It is my mother’s duty.
2 (7 %) My heart will ‘break’ they say its nothing to watch.

Reasons for being present:

2 (7 %) She is carrying my baby.
1 (3 %) These people do not realise how much pain we go through waiting.
1 (3 %) To see what is happening because I am anxious.

Who should assist a woman during labour and childbirth?

Her mother or grandmother 18 (60 %)
Nurses (midwives) 12 (40 %)

The respondents answered this question by dividing practices into the tswana tradition (Ka setswana) and the ‘English’ tradition (Ka sekgoa) meaning modern medicine, which refers to institution deliveries.
Reasons for mother/grandmother assisting in birth:

11 (37 %)  They know all our traditions (Ba itse setswana).
9 (30 %)   Treat 'traditional sicknesses' in childbirth.
6 (20 %)   They have experience in childbirth.
3 (10 %)   Give moral support.
4 (13 %)   Hospital birthing have created a lot of diseases for use because of borrowed cultures.
4 (13 %)   Diseases have increased ever since hospital birthing started.

Reasons for nurses (midwives):

18 (60 %)  They are trained for the job.
5 (17 %)   They give women 'air' if they are tired.
3 (10 %)   They help where normal birth is not possible.
2 (7 %)    They can tell if the baby is not breathing.
3 (10 %)   What can we do, they are the ones allowed to do what they want.
1 (3 %)    My wife was done an unnecessary operation. If she was assisted at home she will have given birth properly. At night if they want to sleep they just call a doctor to come and take the baby out.
What about male midwives?

17 (57 %) I don’t want them, they are men like us.

2 (7 %) They create problems for our wives.

2 (7 %) What do they want to see in these women?

2 (7 %) Where have you ever heard of men giving birth, they just read from books.

1 (3 %) These are men who have thrown our culture away.

1 (3 %) A woman who has been well in her pregnancy, you hear she gave birth by a ‘knife’. It is because these men who are roaming in the Batsetse (women who have given birth). I don’t know what attracts them.

3.4 Elder Women:

3.4.1 Practices Related to Pregnancy:

Is there anything special elder women in your area do when they discover that their daughters are pregnant?

9 (30 %) call a traditional doctor (ngaka) to give advice and herbs (molemo) to prepare the womb (popelo) to keep the baby well.
5 (17 %) do boil herbs and give their daughters to drink to prevent (sireletsa) any illnesses associated with pregnancy.

4 (13 %) prepare herbs which are added into the bath water to avoid evil spirits (dikgaba) to interfere with pregnancy.

4 (13) do nothing because they have poor eyesight and can no longer dig roots (midinyana) special for pregnancy to help their daughters.

Some of the responses were:

6 (20 %) do nothing because the government has taken our daughters by building clinics and hospitals.

2 (7 %) nurses do not allow us to tamper with pregnancy. You want us to go to prison!

5 (17 %) you know very well that the ‘law’ (molao) your ‘law’ will take me to prison. Why do you ask me something you already know.
Who would you like to assist your daughter during pregnancy?

<table>
<thead>
<tr>
<th>Assistant</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwife/doctor</td>
<td>11</td>
<td>37</td>
</tr>
<tr>
<td>Elder woman (Basadibagolo)</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Myself (mother)</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>No choice</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

Reasons giving for taking daughters to the following midwife/doctor:

6 (20 %) They have metals (ditshipi) (meaning instruments) to help if the baby is not growing in the womb.

8 (27 %) Trained for the job.

6 (20 %) Take blood and urine and give treatment if you are found sick.

3 (10 %) Take you to hospital if you are sick in their van (ambulance).

Mothers and elder women:

Mothers and elder women are grouped here because they belong to the same group. Elder women (basadilbagolo) were referred to this group’s
mothers who were still alive at the time of interview.

8 (27 %) Want to be involved in whatever is happening to my daughter.

6 (20 %) Sometimes the daughter is too young and ignorant about what is happening with her pregnancy.

4 (13 %) In our tradition (Ka setswana) there are diseases that seriously need tswana medicine not 'English' ones. An example commonly cited was bleeding during pregnancy which needed traditional treatment.

2 (7 %) Some of the ailments need traditional medicine only and others need modern treatment. Traditional medicine in the old days was good because you were just treated once and you were completely cured.

No choice:

2 (7 %) No choice for me our daughters belong to the government, but if they cannot help, they dump (latlhela) them back to us.
3.4.2 Nutrition During Pregnancy:

Is there any special kind of food which should be eaten during pregnancy?

There was the general feeling among those interviewed 28 (93.%) that the same food normally eaten at home should be continued in pregnancy. However, the question of ‘special’ food was challenged by some elder women 11 (87 %) that the country is ‘barren’ and even if there were special food in shops, there was no crop and livestock to sell because of the effects of severe drought.

Is there any food which should be avoided during pregnancy?

13 (43 %) Intestines of animals (mala a diphologolo).

Why: 7 (23 %) Baby will have a long penis if it is a boy.

23 (10 %) Mother will give birth to same sex in future pregnancies.

2 (7 %) Baby will be born deformed.

1 (3 %) Baby will be born blind.

9 (30 %) Eggs (mae)

Why: 5 (17 %) Mother will experience difficult childbirth.

2 (7 %) Forewater (membranes) will not ‘break’ (rupture).
Birth passage will be blocked.

Some of the other foods to be avoided that were mentioned were:

Water melon - early rupture of membranes.
Meat with ligaments - difficult childbirth.
A cow that died of giving birth (pharelwa) - difficult labour.
Wild animals - baby will not sleep at night.

The comment made by 4 (13 %) elder women before answering the question on food to be avoided was: You young generation (basha) eat everything and that is why you end up ‘having knives’ (dithipa) meaning caesarian sections and episiotomies.

Is it good to eat a lot during pregnancy?

<table>
<thead>
<tr>
<th></th>
<th>Good</th>
<th>Not Good</th>
<th>No Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7 (27 %)</td>
<td>19 (63 %)</td>
<td>4 (13 %)</td>
</tr>
</tbody>
</table>

Reasons for eating a lot:

3 (10 %) Sharing food with baby.
3 (10 %) Mother and baby should be healthy.
2 (7 %) Baby will grow well.
2 (7 %) Satisfy appetite.

Reasons for not eating a lot:

11 (37 %) Child will be too big causing problems during birth.
6 (20 %) It causes indigestion which creates a lot of problems.
3 (10 %) One becomes too fat and lazy, as a result the baby will be lazy too and birth pains will take too long.
2 (7 %) Fear of the knife (thipa) during childbirth.

3.4.3 Perceptions of Normal and Abnormal Pregnancy:

How do you know if a woman’s pregnancy is going well?

9 (30 %) When she does not complain.
8 (27 %) When she is not sick.
5 (17 %) When eating and sleeping well.
4 (13 %) When baby is ‘playing’ or ‘kicking’.
2 (7 %) If there is no complaints when she is doing her normal daily activities (household chores).
2 (7 %) I call a traditional healer to ‘prepare’ her so that the pregnancy is not disturbed.
2 (7 %) I ‘look’ for the head (palpate) to see if it is facing down.
2 (7 %) Ask nurses if my daughter is fine.
2 (7 %) I ‘throw bones’ (ditaola) and they will tell me that things are well.
1 (3 %) I am informed in a dream (Ke senolelwa mo diponong).

The other 4 (13 %) participants interviewed said that there is usually no problems encountered because they give their daughter traditional medicine/‘roots’ to prevent any illness.

4 (13 %) I will not know unless something wrong happened to her.

How do you know if things are going wrong?

10 (33 %) Always complaining of this and that.
8 (27 %) When there problems when giving birth.
4 (13 %) Not eating well.
2 (7 %) Baby not kicking.
2 (7 %) Traditional bones (chtaola) will tell me.
2 (7 %) When she complains of backache.
3 (10 %) When she ‘sees’ her period (Fa a bona setswalo).
3 (10 %) When the head is not facing down.
These were some of the following things mentioned:

1 (3 %) Call a traditional doctor to throw bones (itaola).
4 (13 %) We are discouraged by the government, how can I know?
1 (3 %) When the baby is too high in the womb (Mpa ele ko godimo).
1 (3 %) When her legs swell.

What would you do if these things happened to your daughter?

<table>
<thead>
<tr>
<th>No</th>
<th>%</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>53</td>
<td>Call a traditional doctor</td>
</tr>
<tr>
<td>14</td>
<td>47</td>
<td>Take her to clinic thereafter</td>
</tr>
<tr>
<td>13</td>
<td>43</td>
<td>Take her to clinic at once and find out from the traditional doctor later</td>
</tr>
</tbody>
</table>

Of the 16 (53 %) women that called a traditional doctor, 14 (47 %) will then send their daughter to the clinic after finding out from the traditional doctor whether they were serious problems or not. 2 will end at the traditional doctor for treatment. While 13 of the elder women will take their daughter to the clinic, they will still consult a traditional doctor.
(which may be in the absence of the patient) to find out if things were going to be all right or otherwise.

**Is it dangerous to bleed during pregnancy?**

<table>
<thead>
<tr>
<th>Dangerous</th>
<th>Not Dangerous</th>
<th>No Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 (60%)</td>
<td>9 (30%)</td>
<td>3 (10%)</td>
</tr>
</tbody>
</table>

Reasons:

**Dangerous**

11 (37 %) Baby is coming before time (Ngwana o tla pele ga nako).

5 (17 %) She is sick (Oa bo a lwala).

2 (7 %) The baby is not well.

2 (7 %) Too much blood (O na le made a manst) because of injections (Mekento) you give to them in hospital when they give birth (referring to previous birth).

1 (3 %) O kopakopantse dikgetse meaning she mixed the bags (she had sex with another man).

1 (3 %) Seome meaning time of giving birth will be delayed from 9 months to 10.
Not dangerous:

4 (13 %)  Seome.
3 (10 %)  Baby is changing position.
2 (7%)  Cleansing the womb after injection (mekento) you give in hospitals.

No idea:

3 (10 %): These are the problems of the modern generation (basha) we never experienced them during our time.

The cause of bleeding is associated with sytoncinons which are routinely given after the third stage in Botswana. There is a belief that the womb needs to rid itself of the unclean blood after birth and if this is prevented it may cause problems and bleeding later.

What about swelling?

<table>
<thead>
<tr>
<th>Dangerous</th>
<th>Not Dangerous</th>
<th>No Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 (27 %)</td>
<td>18 (60 %)</td>
<td>4 (13 %)</td>
</tr>
</tbody>
</table>
Reasons:

**Dangerous:**

3 (13 %) She has too much blood because of the injections (mokento) when she gave birth to previous children.

1 (3 %) Baby is lying across (ngwana o phikame).

1 (3 %) Baby is in the wrong position.

1 (3 %) Baby is sick.

1 (3 %) The womb was infected when she became pregnant.

1 (3 %) Mother is sick.

**Not dangerous:**

15 (50 %) Baby boy.

5 (17 %) Twin pregnancy.

1 (3 %) An easy childbirth.

3.3.4 Perceptions of Risks in Pregnancy and Childbirth:

It will be ideal to start this section by a summary of elder women's parity. 27 (90 %) have three children and above. Among this same group 21 (70 %) have six and more children, a very high risk group in medical terms (Royston and Armstrong, 1989; Backet, et al, 1984). However, these are
obviously those who survived grand multiparity and therefore there may be sample basis.

Did you have problems giving birth?

19 (66 %) Had no problems.
10 (33 %) Had problems.

What problems did you have?

6 (21 %) Had difficult labour, four babies died.
2 (7 %) Haemorrhage, one baby died.
1 (3 %) Weak birth ‘pains’, baby died.
1 (3 %) Haemorrhage and long birth.

Of the 6 (21 %) that had a difficult labour 4 (13 %) ended up in hospital and two of the babies survived, although one girl now 14 years had epilepsy and she is mentally retarded as well. Two mothers did not go to hospital and both their babies were born dead.

The remaining four were hospitalized and one was given blood transfusion, three ‘bottles’.
How many children should a woman have?

20 (67 %) As God can give.
3 (10 %) When babies are finished in the womb.
3 (10 %) Ten children.
2 (7 %) Twelve children.
2 (7 %) Six children.

Why?

16 (53 %) Will help me when I am old.
12 (40 %) One become healthy and look young again.
7 (23 %) God may take others.
7 (23 %) You can never tell who will help you in future.
5 (17 %) Babies are God’s gift.
2 (7 %) I am adding to my family members.

These were some responses from elder women during the interview.

11 (37 %): You young generation (basha) you will be wiped off on this earth because you want to be more clever than God. You have ‘borrowed’ other people’s cultures and forgotten all about your own. You now take these injections and pills to have few children. Now you are getting all
sorts of diseases which you can't even treat. Here is eite (Ke eo eite) meaning AIDS. You can now see what you can do.

Family planning services were causing more problems to the young generation than good and they were a risk to their health.

3.4.5 Perception of Normal and Abnormal Labour:

Normal Labour:

How do you know if labour goes well?

16 (53 %) When she gives birth after a short time.
6 (20 %) Nurses will inform me.
3 (10 %) Consult a traditional doctor to inform about the outcome of labour.
2 (7 %) When the head is down (vertex) and the birth pains become stronger and stronger.
Abnormal Labour:

How will you know if things are wrong?

16 (60 %) When the birth of the baby is too long.
5 (17 %) When the mother starts to bleed and baby is not kicking.
2 (7 %) When childbirth pains are 'sleepy' (dilhabi di robetse).
2 (7 %) When the head is not down (vertex).
2 (7 %) When the cord comes first before the baby.
3 (10 %) Nurses will inform me

The time factor was too complex to measure because it was stated in terms of where the sun will be and the shadow of the hut or the tree in the home. It was difficult to say it in terms of hours and minutes. However, birth was not supposed to take 2 nights or 2 daytimes.

What would you do if this happened to your daughter?

18 (60 %) Take her to hospital.
5 (17 %) Call a traditional doctor to tell me if it is serious.
3 (10 %) Continue giving her traditional medicine.
2 (7 %) She will be in hospital, that is where they give birth these days.
Call a nurse at the clinic to take her to hospital.

Is it dangerous to bleed after childbirth?

<table>
<thead>
<tr>
<th>Dangerous</th>
<th>Not Dangerous</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (7%)</td>
<td>28 (93%)</td>
</tr>
</tbody>
</table>

Reasons:

**Dangerous**

2 (7%) Mother may die from too much blood loss.

The 2 elder women had problems in one of their births and they were given blood transfusions at the hospital. They repeatedly told me how they nearly died and how the nurses and doctors helped them to survive.

**Not Dangerous**

19 (63%) Cleaning (Go thatswa) the womb (popelo) after 9 months.

16 (53%) Baby will suckle clean breast milk.

11 (37%) Prevents diseases of the womb (popelo).
Who should assist a woman in labour and childbirth?

Her mother 21 (70 %)
Grandmother 5 (17 %)
Nowadays is nurses 4 (13 %)

What about her husband?

17 (57 %) It is not our tradition (Ga se seswana).
5 (17 %) Men will cause ill-health to the child.
3 (10 %) I have never heard of men assisting in birth.
2 (7 %) I hear you practice these things in hospital (men are assisting in birth).
2 (7 %) These are your practices (Ke ga lona).
1 (3 %) I really don’t know. It’s the young generation (Ke ga basha).

What about male midwives?

None of the elder women interviewed preferred a male midwife to a female one. Male doctors were acceptable for medical consultations, but not to handle a pregnant or labouring woman. The reason for this was that they were men and childbirth was a woman’s issue.
Is there anything special women in your area do during the first weeks after the birth of the baby to treat the womb (uterus)?

29 (97 %) felt it was necessary to treat the womb (popelo) while one who did have a child did not comment.

What are the reasons for treating the womb?

26 (87 %) give traditional roots to mothers to drink in order to stimulate or encourage bleeding which has been stopped at the hospital by giving these mothers injections immediately after the birth of the baby.

16 (53 %): Immediately after the birth of the afterbirth a woman lies on her stomach for the whole confinement period (Botsetse) to facilitate the womb to go back to its normal size. Confinement will take about three to six months to non-working women.

18 (60 %): Give women on confinement hot baths twice a day to help strengthen pelvic ‘bones’ (marapo a mokwatlа).

12 (40 %): If it is a good year, this is the time the woman on confinement eat ‘good’ food to make sure she recovers quickly and has enough breast milk for the baby.
5 (17 %) drink traditional roots which removes all the dirt from the womb and make her healthy.

2 (7 %) give traditional roots to prevent afterbirth pains, so that the mother can start producing enough breast milk.
4.1 Discussion:

4.1.1 Modern and Traditional Perceptions of Risk in Pregnancy and Childbirth:

Obstetrically-defined risk factors or indicators tend to rely on quantifiably measurable physical characteristics, eg, height, age, parity, blood pressure, bleeding, length of labour, etc. These are used to construct risk scores which are used as a proxy for need. However, the study community’s traditional interpretation of risk factors or indicators has tended to emphasise the social, behavioural and spiritual causes of physical problems. Although this community’s definition of risk seems to recognise bleeding in pregnancy and long labour as dangerous, they consider the broader aspects of the lifestyles of the woman and her carer to be relevant. Hence the significance of the ‘hot legs’ of the male doctor and of men in general, and the ‘hot hands’ of young female nurses, as opposed to the ‘cool hands’ of elder women. ‘Hot legs’ and ‘hot hands’ belong to people who travel a lot, who are sexually active, and who do not belong to the community. These characteristics in a ‘carer’ are seen as detrimental or risky to the pregnant woman and the woman who has given birth (motsetse) and it is thought they may affect the outcome of pregnancy and childbirth.
All 30 elder women interviewed seemed to understand that sexually transmitted diseases are dangerous to the baby. 12 men mentioned that ‘to be good to their partners’ in pregnancy, they would abstain from taking other partners at this time. But as well as an understanding of infection transfer risk, there seemed also to be important notion of contamination not at the physical, but at the spiritual level. Confinement of puerperal women (Batsetse) and their babies for 2 to 3 months was the normal traditional practice. Nobody was allowed to enter the hut except the ‘carer’ who is usually an elder woman, who provides all food, company and physical care necessary, teaches about breast-feeding and infant care, and so on.

4.1.2 Perceptions of Pregnancy, Childbirth and its Complications:

As well as asking open questions about what my respondents thought were problems or dangers in pregnancy and childbirth, I did ask a number of questions relating to obstetrically defined categories of risk such as ‘bleeding’ and ‘swelling’. I intentionally left these terms as ‘loose’ as possible, encouraging the respondents to talk as fully as possible so that their own definitions and parameters for these terms might emerge rather than quantifying them myself in the question (by referring to the quantity of bleeding or the part of the body that was swollen).
Bleeding during pregnancy was considered a danger by all the groups and associated with abortion and 'early' childbirth. Bleeding after childbirth was not considered dangerous by 21 pregnant women and 27 elder women. Quantity of blood loss did not seem to be seen as a matter for concern at least not in the same way as in modern midwifery practice in which a blood loss of 600 millilitres or more is often considered to be of some significance for the health of the woman. Rather the opposite in fact, elder women expressed concern if blood loss was prevented by the use of oxytocics in the hospital, because they believed post-partum bleeding is necessary for 'cleansing' the womb and for 'cleansing' breast milk for the baby.

According to Prendville and Elborne, routine administration of oxytocics have not been universally accepted, but nine randomised controlled trials involving over 4000 women in total do suggest that routine administration of oxytocics results in an important reduction in the risk of post-partum haemorrhage, one of the principle causes of maternal mortality in the developing countries. Interestingly, 23 of the 30 men seemed to have a stronger perception of the potential dangers of post-partum bleeding. Perhaps this is because in men's world, bleeding is almost invariably associated with wounding and with damage whereas for women bleeding can be normal and 'cleansing' in certain circumstances, eg, menstruation.
The women seem to view post-partum bleeding as they would view menstuation.

'Swelling' in pregnancy was considered 'not dangerous by 18 pregnant women, 18 elder women and only 3 men. It was commonly associated with carrying a baby boy. Degree of 'swelling' of part of the body was not specified by any of the persons interviewed. In such a context in which symptoms of pre-eclampsia are regarded as not harmful, or indeed positive, delay in seeking medical help from the maternity services may be an important contributing factor to maternal mortality and morbidity.

4.1.3 Perceptions of Risk Regarding Age and Parity:

14 pregnant women interviewed were teenagers and 15-19 years. First pregnancy was considered to be a danger by most of the respondents, but this was associated with lack of experience rather than obstetric risk. However, 12 pregnant 'teenagers' interviewed did not know whether first or subsequent pregnancies could pose more danger.

20 pregnant women interviewed did not plan their pregnancies. Elder women thought a woman should have as many as 'God' can give. Having as many children as one can get was seen as important for cleansing the womb and therefore helping women to be healthier and to look younger.
4.1.4 Nutrition and Food in Pregnancy:

There was the general feeling among the three groups interviewed (24 pregnant women, 20 men and 28 elder women) that the same food normally eaten at home should continue to be eaten in pregnancy. However, the question of 'special' food was also challenged by asking 'where do we get the food?' The question may have been unclear or it may be a reflection of poverty and drought which struck the country this year.

Traditionally, there were foods which should be avoided. The commonly mentioned foods to be avoided (in all the three groups interviewed) were eggs and the intestines of animals. Eggs were associated with difficult labour and childbirth, as they were believed to delay rupture of 'water' and block the birth passage, while the intestines 'made' the boys 'private parts' long. Interestingly, although men mentioned the same prohibited foods, they seemed less certain of the reasons why they were prohibited. This may be because men regarded the issue of pregnancy and childbirth to belong to women. 9 men interviewed actually said that I should be asking women the questions I asked them. The issue of reproduction is also considered private and confidential and this therefore may prevent completely free discussion.
The foods mentioned as those to be avoided are not abundant or cheap for many Batswana (local people). The staple diet is sorghum, maize meal and dried vegetables (merego).

Eating a lot in pregnancy was considered good by 24 pregnant women and 17 men, but only considered good by 7 of the 30 elder women. The reasons given for not eating a lot by 17 elder women was the need to avoid the 'knife' as a result of a big baby. 'Too much fat' on the pregnant woman was said to make her 'lazy', resulting in 'lazy' childbirth pains.

Pregnant women and men may be more aware of accessible health facilities available in cases of problems while elder women who had experience of childbirth when these were scarcely available, may be more conscious of the consequences of a 'big baby' in causing birthing problems. For them, the caesarian sections and episiotomies were perceived of as risks to be avoided. Interestingly, a recent article in The Lancet, Garner et al, (1992) have reviewed interventions to augment fetal growth and concluded: 'The perceptions of women in some societies that interventions that increase fetal growth might produce worse outcomes for them and their babies may be correct'.
4.1.5 Relationship with the Government Provided Health Services:

17 pregnant women of the sample said that they would register at the antenatal clinic when they discovered that they were pregnant. This was seen as an insurance policy should a problem arise, but not perceived as a screening service. This may be due to poor communication with nurses. 11 pregnant women said nurses 'ask a lot of unnecessary questions' during the first antenatal visits. They may also be lack of reassurance given at the clinic compared with what is given by elder women.

12 pregnant women would seek care from an elder woman and drink 'herbs' to 'prepare' the womb to accept the baby. 18 elder women would seek traditional care when daughters were pregnant and none will advise them to register at the clinic whereas 7 men would seek traditional care if their partners were pregnant.

Seeking care from traditional healers were geared towards more promotive and preventive care (preparing the womb). 'Government' maternity care was sought for curative services (in cases of problems). Traditional healers are members of the community and they share common values and beliefs. Traditional healers visit the community in their own homes, whereas women have to go to the health institutions to get help from their staff.
Elder women, to whom pregnant women turn for help, may well be giving more reassurance than the ‘government’ health workers give.

The elder women and the men did not approve of women being attended by a male doctor or male midwife, and this may cause problems when decisions to seek maternity care arises. Elder women also felt ‘disposed’ from their rightful traditional role as the adviser of their pregnant daughters. This may also discourage seeking maternity care in ‘government’ services.

4.1.6 The Potential for Integration of Traditional Services with ‘Government’ Maternity Services:

11 pregnant women said that they would first seek traditional care and then register at the clinic. 7 men would consult a traditional healer then advise the partner to register at the clinic. 16 elder women said that if worried, they would take their daughters to a traditional healer to see if there was any serious problem or not and if the latter established that there was, they would take her to the clinic.

This highlights the important role the traditional practitioner can play in timely referrals to ‘government’ maternity services if relationships between
the health services staff and the local traditional practitioners are good and the lines of communications are clear.
5.1 Conclusions:

In this community people seek maternity care services from both modern and traditional practices.

There is limited knowledge regarding obstetrically defined risk factors or indicators in pregnancy and childbirth.

Pregnant women who utilize the maternity services lack knowledge about the full purpose of antenatal care services.

Perceptions of pregnancy, childbirth and its complications in this community differ from the more obstetric view and these perceptions may delay seeking medical help for more serious complications like pre-eclampsia in pregnancy and 'bleeding' after childbirth.

'Frequent' pregnancy and childbirth among women is not considered posing any risks since the more children they have, the more the womb is cleansed from any 'dirt' and therefore diseases are prevented.
Elder women see some of the modern maternity services as exposing young women to more danger than good.

5.2 Recommendations:

1. There is need to strengthen the education, information and communication between the health workers and the community. The Family Welfare educators should spend their time with the community and not at Primary Health Care clinics.

2. The role of elder women needs to be further investigated and strengthened so that they feel they are part of the Primary Health Care Team. There is more to learn from this group of experienced women in terms of traditional practices. The need for confinement for three months where a mother and her baby are adequately looked after, need to be assessed by policy makers. An increase in the maternity leave days from the current eighty four days (42 before delivery and 42 after) to three months on full pay in line with this tradition might be desirable, if the health of mothers and children have to be improved, especially among working mothers.

3. There is need to investigate knowledge and attitudes of modern health workers about traditional practices. If health workers do not respect and accept the practices of the community they serve, the ‘road’ to co-operate
in health matters is not feasible. This is important in trying to bring the community close to work with the health worker and to participate actively in health care matters.

4 Men seemed to 'distance' themselves in matters involving pregnancy and childbirth in the study and information, education and communication need to be strengthened. Men should be actively involved and encouraged to participate in antenatal care, not only when there are problems. There is need for counselling partners at the PHC clinic.

5 Training of health personnel should include a broader component of Primary Health Care. The small project (research) in the Institutes of Training should involve working with the community and based actually in the community, not at Primary Health Care clinics.

6 There is need to repeat the study on a larger scale so that other ethnic groups can be represented and findings can then be generalised to the whole country in order to inform policy at national level.
REFERENCES

Anderson S. Traditional maternity care within a biosocial framework. 

Anderson S, Staugard F. Traditional Medicine in Botswana: Traditional 

Backetts E M, Davies A M, Petros-Barvazian A. The Risk Approach in Health 


Central Statistics Office, Ministry of Finance and Development Planning. Women 
ADDITIONAL REFERENCES


Appendix 1
Age distribution of participants interviewed.

Age of pregnant women

33% of these women were between age 15-19 years and still growing.
7% men were fathers at age 17 and 18 considered under age (legal age in Botswana is 21 years).
Nearly half (47%) elder women were 65+ years. They are considered experienced in terms of traditional maternity care by the community.
Date

MENSTRUAL HISTORY: LNMP
Usual cycle _ days
If only month known early/mid/late
Bleeding since LNMP yes/no
Details
Uncertain dates

FAMILY PLANNING:
Has practised? yes/no
Method used
Date stopped
Wants FP after delivery? yes/no

FAMILY HISTORY:
HPT Diabetes Twins Genetic Oth.
Details

MEDICAL COMPLICATIONS:
Cardiac Renal STD TB Diabetes
Anaemia HPT
Other
On treatment?
Allergies
Details

OPERATIONS AND ACCIDENTS:
Details

PAST PREGNANCIES: Grav Para Ab
No. alive Age of youngest yrs.
Complications (1 point for each risk)

OTHER RISKS:
Under 16 yrs.
Over 35 yrs.
Primigr. over 30 yrs.
Late booker
Unsatisfactory home conditions
Unwise habits - alcohol
- tobacco
- obesity
Other

GENERAL EXAMINATION:
Height (if under 150 cm.)
Shoe size
Non-pregnant weight kg.

VAGINA EXAMINATION:
Vulva Vagina Cervix
Uterine size wks. Adnexa
Pelvic size small/borderline/norm.

Pap smear done/not done
Details if abnormal

LABORATORY RESULTS:

<table>
<thead>
<tr>
<th>Date</th>
<th>Result</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>HB 1st visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HB 34-36 wk.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VDRL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pap smear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RH antibodies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CXR(if req'd)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TETANUS TOXOID: (write in the date)
Booster only
1st of 2 2nd of 2

TOTAL NO. OF RISKS AT BOOKING

NOTES AND SPECIAL PROBLEMS:

SPACING OF PREGNANCIES: (Fill in the year)
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2
FILLING IN WEIGHT AT THE FIRST VISIT: Follow the "week of gestation" line up to where it meets the dotted weight line. Write the weight, in whole kg., in the blank square at the extreme left side opposite it. Write the next kg. in the square above, and so on. Now using this newly calibrated weight scale plot the exact weight of the mother along the "week of gestation" line.

NEXT VISIT

NEW RISKS (After Booking)
- Prem Labour
- Malpr 36wk +
- Anaem <10G
- Prot +/++
- 2+ Glucose
- Wt /-
- Excess Wt
- HPT/PET
- APH
- SFD
- LFD
- Twins

DEGREE OF RISK AT BOOKING
- Normal
- Moderate
- Severe

ADvised PLAN OF ACTION
- Deliver by Midwife
- Refer for check
- Deliver in hospital

DEGREE OF RISK AT 36 WEEKS
- Normal
- Moderate
- Severe

REVISED PLAN OF ACTION
- Deliver by Midwife
- Refer for check
- Deliver in hospital
(A) PREGNANT WOMEN

Locality ________________________________

Date of interview:

1. Marital status: Married: ____________________
   With stable partner: _____
   Single parent: ____________

2. Age: __________________

3. Age at first pregnancy: ______

4. Can you read: ______________
   write: ______________
   sign name: ______________________________

5. Education completed not completed
   primary _________ __________
   secondary _________ __________
   tertiary _________ __________
   other _________ __________

6. How do you earn your living?
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________

7. Age of the youngest child (sibling): ________________

8. How many children do you have:
   Alive: ________________
   Dead: ________________
   Miscarriages: __________
9. Did you have any problems giving birth?
   Yes:______    No:______
   If yes, what problems did you have?
   __________________________
   __________________________

10. Who assisted you when you gave birth?
    Nurse/Doctor:
    Traditional attendant:
    Family member:
    Other:

11. a) Did you intend to have this pregnancy now:
    b) How many months pregnant now:

12. Have you been to see a nurse:
    doctor:
    traditional attendant:

13. How far away is the nearest clinic/hospital?
    How do you get there?

15. What would make you go to the clinic/hospital?
    __________________________
    __________________________
    __________________________
    __________________________

16. What would make you go to the traditional doctor?
    __________________________
    __________________________
    __________________________
    __________________________

17. How many months pregnant were you then when you went to
    the clinic for the first time?
18. What did she/he do when you went?
   a) Nurse/doctor:

   b) traditional healer:

19. Is there anything special that women in your area have to do when they discover that they are pregnant?

   What do they do?

20. Is there anything you need to do in order to make sure the pregnancy goes well?

21. What are the reasons for doing these things?
22. Is there any special kind of food which should be eaten during pregnancy?

Why?

What does it do?

Is it good for you or for the baby?

23. Is there any food which should be avoided during pregnancy?

Why?
24. Do you think it is good to eat a lot during pregnancy?

Why?

25. How do you know if your pregnancy is going well?

26. How would you know that things are going wrong?

27. What would you do if this happened to you?
28. Is it dangerous to bleed during pregnancy?

Why?

What about swelling in pregnancy?

Why?

29. Which did you think is a woman’s most dangerous pregnancy?

First pregnancy:

subsequent pregnancies:

Why?
30. Have any of your relatives or friends had problems in childbirth?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Can you tell me about it, what happened?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

31. How would you know that your labour is going well?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

32. How would you know that things are going wrong?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

33. What would you do if this happened to you?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

34. How long should labour last?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
35. What would you do if it went on longer than that?

36. What about bleeding after childbirth?

Is it good for you or the baby?

37. Is there anything special women in your area do during the first weeks after the birth of the baby to treat the womb (uterus)?

What are the reasons for treating the womb?
Is it good for you or the baby?


38. Who would you like to be with you when you are in labour?


What about your husband/partner?


What about male midwives?
Locality: ________________________________

Date of interview: ______________________

1. Marital status: Married : ____________
   With stable partner: ____________
   Single parent : ____________

2. Age: ________________

3. Can you read: _________________________
   write: ____________________________
   sign name: _______________________

4. Education completed not completed
   primary ________ ________
   secondary ________ ________
   tertiary ________ ________
   other ________ ________

5. How do you earn your living?
   ___________________________________
   ___________________________________
   ___________________________________

6. Age of the youngest child (sibling): __

7. How many children do you want your partner to have? ________

8. Is it good for your partner to give birth to these children? ____________________________
   Why? ____________________________________________
   ____________________________________________
9. Is there anything special that men do in your area when they discover that their partners are pregnant?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

10. What do they do?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Why?

__________________________________________________________________________

__________________________________________________________________________

11. What are the reasons for these practices?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

12. Who would you like to assist your partner during pregnancy?

Why?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
13. What would make you take your partner to the clinic/hospital?_____________________________________________________
_____________________________________________________
_____________________________________________________

14. What would make you take your partner to the traditional doctor?_________________________________________________
_____________________________________________________
_____________________________________________________

15. At what stage would you take your partner to the clinic for the first time?
_____________________________________________________

16. At what stage would you take your partner to the traditional doctor for the first time?
_____________________________________________________
_____________________________________________________
_____________________________________________________

Why?
_____________________________________________________
_____________________________________________________
_____________________________________________________
_____________________________________________________

17. What did she/he do when you went?
a)nurse/doctor:
_____________________________________________________

b)traditional healer:
_____________________________________________________
18. Is there any special kind of food which should be eaten during pregnancy?

Why?

What does it do?

Is it good for the mother and baby?

19. Is there anything special that men in area have to do when they discover that their partners are pregnant?

What do they do?

20. Is there any food which should be avoided during pregnancy?
21. Do you think it is good to eat a lot during pregnancy?

Why?

22. How do you know if a woman’s pregnancy is going well?

23. How do you know if the pregnancy is not going well?

24. What would you do if these things happened to your partner?

25. Is it dangerous to bleed during pregnancy?
26. Which do you think is a woman’s most dangerous pregnancy?
First pregnancy:
Subsequent pregnancies:
Why? ____________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
27. Did any of your relatives or friends have problems in childbirth?

Can you tell me about it, what happened?

How will you know that your partner's labour was going well?

29. How you would you know that things are going wrong?

30. What would you do?

Why?
31. Who would you like to be with your partner during labour?

Why not you?

Why?

32. Who should assist a woman during labour and childbirth?

Why?

Why?

33. What about male midwives?

Why?

Why?

34. What can a man do to make his partner’s pregnancy go well or be easy?
35. What is the worst thing he can do?

36. How many years interval should there be between children?
(A)  Elder women

Locality: ________________________________

Date of interview: ________________________

1. Marital status: Married: ____________
   With stable partner: ______
   Single parent: ______

2. Age: __________________

3. Age at first pregnancy: ______________

4. Can you read: ______________
   write: ______________
   sign name: ______________

5. Education completed not completed
   primary ________   ________
   secondary ________   ________
   tertiary ________   ________
   other ________   ________

6. How do you earn your living?
   ____________________________________
   ____________________________________
   ____________________________________

7. How many children do you have:
   Alive: ______________
   Dead: ______________
   Miscarriages: ______________
8. Did you have any problems giving birth?
   Yes:_______    No:_______
   If yes, what problems did you have?

9. Who assisted you when you gave birth?
   Nurse/Doctor:__________________________
   Traditional attendant:__________________
   Family member:________________________
   Other:_______________________________

10. How many children should a woman have?
    Why?

11. Is there anything special that elder women in your area do when they discover their daughters are pregnant?
    Yes____________ No _________________
    If yes, what do they do?
12. What are the reasons for these practices?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

13. Is there anything you need to do in order to make sure the pregnancy goes well?
   Yes_______________  No_____________________
   Why?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

14. Who would you like to assist your daughter during pregnancy?
   Why?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

15. What would make you take your daughter to the clinic/hospital?
   Why?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
16. What would make you take your daughter to the traditional doctor?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

17. At what stage would you take your daughter to the clinic for the first time?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Why?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

18. At what stage would you take your daughter to the traditional doctor for the first time?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Why

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________
19. What did she/he do when you went?

   a) Nurse/doctor:

   b) traditional healer:

20. Is there any special kind of food which should be eaten during pregnancy?

   Why?

   What does it do?

   Is it good for you or for the mother and baby?
21. Is there anything special that women in your area have to do when they discover that they are pregnant? What do they do?

22. Is there any food which should be avoided during pregnancy? Why? What does it do?
23. Do you think it is good to eat a lot during pregnancy? 


Why?


24. How do you know if a woman’s pregnancy is going well?


25. How do you know if things are going wrong?


26. What would you do if these things happened to your daughter?


27. Is it dangerous to bleed during pregnancy?

Why?

What about swelling in pregnancy?

Why?

28. Which did you think is a woman’s most dangerous pregnancy?

First pregnancy:

subsequent pregnancies:

Why?
29. Have any of your relatives or friends had problems in childbirth?

Can you tell me about it, what happened?

30. How would you know that your daughter’s labour was going well?

31. How would you know that things are going wrong?

32. What would you do if this happened to your daughter?
33. What would you do if this happened to your daughter?

34. How long should labour last?

35. What would you do if it went on longer than that?

36. What about bleeding after childbirth?

Is it good for the mother and the baby?

37. Is there anything special women in your area do during the first weeks after the birth of the baby to treat the womb (uterus)?
What are the reasons for treating the womb?

Is it good for mother or the baby?

38. Who would you like to be with your daughter during labour?

What about her husband/partner?

Why?
39. Who should assist a woman in labour and childbirth?

Why?

40. What about male midwives?

Why?

41. What about male doctors?

Why?

42. What can a man do to make his partner’s pregnancy go well?
43. What is the worst thing he can do?

43. How many years interval should there be between children?

44. At what age is it good for a woman to have her first pregnancy?
45. Do most women in your area start having children at that age?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Why?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

46. Have you assisted in childbirth at any time?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Do you assist regularly?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Why?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________