

**A STUDY TO DETERMINE THE IMPACT OF HEALTH EDUCATION
ON PREGNANT WOMEN WHO ATTEND OUTREACH
CLINICS IN KATETE DISTRICT**

BY

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**A dissertation submitted to the University of Zambia in partial fulfillment of the
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DECLARATION

I hereby declare that the work presented in this study for the Master of Public Health has not been presented whether wholly or in part for any other study programme and is not being currently submitted for any other masters programme. This work is entirely the result of my own independent investigation. The various persons and resources to which I am indebted are acknowledged.

Signed: _____

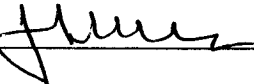


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APPROVAL

We, the undersigned have read this dissertation and approve for its examination.

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DEDICATION

This study is dedicated to my family for their support and encouragement during my years of study.

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ABSTRACT

This study was conducted to determine the impact of health education on pregnant women who attended outreach clinics in Katete District.

A comparative cross-sectional study with a structured interview schedule for the pregnant women and untrained Traditional Birth Attendants was conducted. A focus group discussion and a check list for trained traditional birth attendants who delivered the women were also used.

A total of 9,711 pregnant women were catered by outreach clinics. The three chiefs' administrative areas were used as clusters namely; Kawaza, Mbaombe and Kathumba. Two areas in each cluster were randomly selected using Central Statistics and Katete District maps. Six (6) outreach centres were in turn randomly picked from eighty (80) outreach centres that offered maternal health services.

One hundred and twenty seven (127) pregnant women were interviewed with their consent. Sixty eight (68) from Kawaza, forty five (45) from Mbangombe and fourteen (14) from Kathumba were interviewed. Fifteen (15) untrained Traditional Birth Attendants (UTBAs) were also interviewed: five (5) from Kawaza, four (4) from Mbangombe and six (6) from Kathumba. Ten (10) trained Traditional Birth Attendants (TTBAs) in Kawaza and three (3) in Mbangombe were also interviewed. Two (2) TTBAs had separate interviews in Kathumba.

Because of the small number of respondents interviewed in Kathumba, further analysis excluded Kathumba. Age was not associated with knowledge of significance of maternal health education in Kawaza ($p = 0.198$) nor in Mbangombe ($p = 0.226$). The knowledge of significance of maternal health education was similar in both areas ($p = 0.161$). Overall, 85 (75.2%) out of 113 respondents had knowledge of significance of maternal health education.

No difference in knowledge of high risk conditions was observed between Kawaza and Mbangombe ($p = 0.090$). Altogether 132 (61.1%) out of 216 respondents had knowledge of high-risk conditions. No association was observed between education and knowledge of high-risk conditions in Kawaza ($p = 0.111$) and in Mbangombe ($p = 0.367$).

The proportions of respondents in Kawaza (19.6%) and in Mbangombe (33.3%) who had a high-risk condition were not significantly different ($p = 0.124$). Overall, 25 (25.5%) out of 98 respondents in the study had a high risk condition.

Untrained TBAs attempted to deliver complicated labour. Trained TBAs delivered "high risk" labours.

There was an overwhelming willingness by all untrained TBAs to learn more about maternal health through health education. The trained TBAs desired a more coordinated effective system.

There is room to improve the health system to be more efficient and effective in maternal child health education.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND INFORMATION

Almost 80% of the rural communities in developing countries live in villages. Most African countries embraced by rural area carry out outreach activities to offset the lack of equity in the distribution of health services between urban and rural areas. Outreach activities include maternal child health services (Bergstrom et al. 1994).

Zambia is a developing country with a tropical climate. The projected population in 1996 was 9,281,895. Of this, Eastern province projected population was: urban 11,703 and rural 1,200,323. The population distribution was: urban 8.9% and rural 91.1% (DHS,1997).

At Zambia's political independence, health care services were provided by mission and mining hospitals. More hospitals and health centres were built. Only families living within their vicinity could access the provided health services. As a result, the majority of the population had no access to health care. The need to provide health care to such families necessitated carrying out outreach activities. Outreach posts in Zambia were established with the inception of the Expanded Programme on Immunization (EPI) in the early 1980s.

In 1992, the government of Zambia through its national policy introduced the Health Reforms in order to decentralise health services.

Particular emphasis was placed on district planning, implementation, monitoring and management of primary health care programmes (DHS, 1997).

In rural areas, some contributing factors to maternal deaths were geographical inaccessibility, economic barriers, cultural barriers and shortage of adequately trained and experienced staff (WHO/RTI/DGIS, 1996). An effective safe motherhood rural programme included tailored information, education and communication (IEC) messages (Miller, 1996).

Katete district in the Eastern province is served by one district hospital which is a level II general mission hospital, 15 rural health centres and over 80 outreach centres. The maternal child health outreach activities are planned and carried out by the staff of each health centre. These activities comprise health education, antenatal clinic, children's clinic and Family planning. The providers are midwives, nurses, community health workers and trained Traditional Birth Attendants of whom 108 trained Traditional Birth Attendants are active. Hospital outreach MCH services provided experiences for student midwives in some areas. The majority of pregnant women in the district have their antenatal care through outreach clinics. In 1998, first attendants at the rural health centres and outreach clinics were two thirds (6,581) against hospital attendance of 3,233 (Hospital Report, 1997).

There are many traditional beliefs surrounding pregnancy and labour.

Among these are beliefs that when a pregnant woman's vision becomes blurred (Chusi) a sign that she has been having sexual intercourse with other men. A pregnant woman who has oedema of feet is believed to have been cooking and adding salt to food while she was menstruating. If such a woman delivers and sees the placenta, she suffers from fits. The other belief is proving ones' womanhood by delivering vaginally. Culturally, one of the socializers into such beliefs is the Traditional Birth Attendant.

The Ministry of Health embarked on a training programme of Traditional Birth Attendants (TBAs) in 1973. Traditional Birth Attendants were trained all over the country. The main objective of the programme was to alleviate the staff shortage in rural areas and to control maternal deaths due to complications in labour and the puerperium (MOH report, 1982). It is important to look at why mothers die and then do something to prevent these untimely deaths (RU unit et al, 1997). Health education is carried out as part of every maternal child health activity and the pregnant women and trained Traditional Birth Attendants are expected to disseminate the information to the family members and the community. The use of TBAs has always unearthed the need to train them with consequent noticeable improvement in their delivery of services (WHO, 1996).

1.2 STATEMENT OF THE PROBLEM

Maternal health education conducted at outreach antenatal clinics is ineffective. Many of the causes of maternal deaths from the rural district are preventable (Hospital report,1997) . There are inadequate maternal health staff and no health education materials available to carry out a consistent health education programme with similar content. Traditional birth attendants are not involved in planning and implementing maternal health education. There is also poor dissemination of maternal health education to untrained traditional birth attendants. However, Traditional Birth Attendants conduct more than half of deliveries in the country particularly in rural areas (DHS, 1997). Trained Traditional Birth Attendants rarely attend outreach antenatal clinics in their catchment areas. They therefore, miss out on health education activities that are carried out at these clinics which may lead to loss of credibility by the communities that they serve. They are at times called to attend to women when the labour complication has already advanced which contributes to unnecessary maternal morbidity and mortality. In 1998 and 1999 some of the contributing factors to maternal deaths that occurred in the district were prolonged labour due to complications such as hand prolapse with transverse lie and previous caesarean sections because of cephalopelvic disproportion. It seems there are delayed life saving decisions by untrained Traditional Birth Attendants even where obvious complications are present. The leading causes of maternal

deaths recorded at St Francis hospital in 1997 were ruptured uterus and eclampsia. In the same year, three (3) hysterectomies due to ruptured uterus were conducted and eight (8) hysterorrhaphies. In 1998, eight (8) hysterectomies and eight (8) hysterorrhaphies were done (Hospital Report, 1997).

World Health Organisation statistics show that Zambia has a ratio of 1:30 lifetime risk of maternal death (WHO, 1997). There is also a high maternal mortality rate, 649 per 100,000 live births (DHS, 1997). There has been little change also in maternal health indicators e.g. proper medical attention during pregnancy and hygiene conditions during delivery (DHS, 1997).

In Zambia, the Central Board of Health through the concept of health reforms has empowered districts through District Health Management Boards to plan according to the priority of district health problems and needs. A recent extensive survey carried out to describe the availability, use and quality of safe motherhood care in Zambia showed that all aspects of maternity care is in need of improvement and that IEC materials are not available (HE/RU/CH, 1997). Social scientists argue that poor results of a health education programme do not mean that the health education failed but that the wrong educational method was used, (Squares, 1980)

1.3 PURPOSE OF THE STUDY

Although maternal child health education at outreach clinics has been going on, there seems to be no study specifically carried out to assess the impact of these health education activities and the recipient's view about them. The purpose of the study was to establish whether maternal health education messages are effectively utilised by pregnant women who attend antenatal clinics at outreach centres. The study also sought to establish the practices and views of the traditional birth attendant who is most likely to attend to these women when in labour. The other target of the study was to determine if maternal health education messages are disseminated to untrained Traditional Birth Attendants. This information will be communicated to responsible health care authorities in the district and health education unit at Central Board of Health.

1.4 OBJECTIVES

1.5 GENERAL OBJECTIVE

To determine the impact of health education on pregnant women and their Traditional Birth Attendants

1.6 SPECIFIC OBJECTIVES

1. To assess the level of knowledge that pregnant women have about high-risk conditions during pregnancy and labour.
2. To find out the level of knowledge that TBAs have about high risk conditions during pregnancy and labour.

3. To identify actions that pregnant women take in order to prevent high-risk labour complications
4. To establish the prevalent traditional beliefs and practices associated with maternal death risks.
5. To determine the predisposing factors to maternal deaths.
6. To assess the willingness of UTBAs to receive health education on maternal health and safe motherhood.
7. To make comparison of cluster findings.
8. To recommend ways of effective maternal health education and safe motherhood at village level.

1.7 OPERATIONAL DEFINITIONS

For the sake of this study, the following terms were defined as:

1. **Pregnant women** - those receiving antenatal care at outreach clinics
2. **Traditional Birth Attendant** - incorporates both untrained Traditional Birth Attendant and trained Traditional Birth Attendant. These are persons assisting women during birth.
3. **Health Education** - Dissemination of information regarding maternal child health.
4. **Safe motherhood** - Practices without risks to maternal health particularly during pregnancy and labour.

5. **Maternal Condition - Complications of pregnancy and labour affecting puerperium as well.**
6. **High risk maternal condition - condition in pregnancy or labour that may lead to maternal death or disability**

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 BRIEF OVERVIEW OF MATERNAL HEALTH

The World Health Organisation states that at least 1,600 women die everyday from complications of pregnancy and childbirth. A further 50 million women suffer acute complications. For 18 million of these women, the result is long term disability (WHO, 1998). The main causes of maternal deaths especially in the developing countries were given as, severe bleeding 25%, Eclampsia 12%, obstructed labour 8% (WHO, 1997).

The maternal mortality rate for Zambia for the period 1990 to 1996 stood at 649 per 100,000 live births (CBoH, 1998). Zambia has a ratio of 1:30 lifetime risk of maternal death compared to Mauritius' 1:300, Hong Kong's 1:9200 and Spain's 1:9200 (WHO, 1997). Most of the risk factors are preventable.

2.2 TECHNIQUES OF HEALTH EDUCATION

Frequently, the adoption of the desirable health behaviour is problematic because of the difficulty of changing life styles (Anderson, 1979). "To change attitudes you have to have really good Information, Education and Communication (IEC) campaigns that contain messages that make people say, yes that's about me and it's talking about all the things I' am worried about" (Miller et al, 1996). Two approaches to such achievements provide a cognitive basis for choice and offer

decision-making skills. Any decision to modify life style is regarded as a matter of "free choice" for the individual. The other re-enforce modified behaviours already undertaken towards promoting health. Complementary techniques such as advertising are used (Anderson, 1979).

2.3 CHANNELS OF COMMUNICATION

In the 1960s, research in the United States showed that important individual differences in gender, age, culture, education, and psychological predisposition led to selective exposure, attention, retention and perception of mass media messages to heterogeneous audience. Research on political campaigns showed that mass media was effective for increasing awareness but that only interpersonal communication could persuade or motivate action. Noelle - Neumann's (1993) "Spiral of Silence" theory of opinion formation predicted a similar outcome that persistent exposure of a message on television can lead to its adoption (Piotrow, 1997). The other modern channel is the Internet.

2.4 INFLUENCE OF TRADITIONAL MIDWIFERY ON MATERNAL HEALTH EDUCATION

Traditional midwifery is practiced in many developing countries. The World Health Organisation states that traditional birth attendants deliver more than half the babies born in rural and low income urban areas of Egypt. They are also said to be the main source of health care

and advice for mothers in the communities they serve (WHO, 1996). Their importance in advocating for women' health at the community level to campaign for the eradication of harmful traditional practices is recognised (Okonofua, 1998). It has been stated that 60% of the deliveries are conducted at home by untrained relatives and friends (Graisie, 1992). This means that these untrained Traditional Birth Attendants also offer advice on maternal issues to the women that they serve. The Traditional Birth Attendant was recognised as an asset in implementing primary health care which was to provide acceptable, accessible and affordable health care using local resources (Hart et al, 1990). In Indonesia, volunteers also serve as major providers of maternal and child health at village level (Miller et al, 1996).

In Zambia, Traditional Birth Attendants have carried out traditional midwifery since pre-colonial times. Within their practice, there are many traditional beliefs surrounding pregnancy and labour. Culturally, one of the socialisers into such beliefs is the Traditional Birth Attendant. In view of the respect and trust given to them by communities they serve, their advice may be taken without question. In order to change the behaviour of at risk population it is necessary for educational programmes to use credible sources (Liskin et al, 1998). In the rural area the Traditional Birth Attendants and traditional healers are a credible source who always work closely with the people (Chirwa et al, 1989).

2.5 COMPONENTS OF HEALTH EDUCATION

Important information that is available in constructing the format and content of appropriate antenatal health education for women from rural areas is the practices of Traditional Birth Attendants because they have an impact on pregnant women's health (Lavsén et al, 1983).

In the rural African setting, traditional songs, dance and discussions are related to audience educational understanding and culture than lectures. Homophilous communication affords a more effective personalised communication. Maternal health messages communicated in such context are more easily understood and therefore motivate action. In order to have a consistent health education programme, adequate committed maternal health staff, maternal health education materials and effective communication techniques are essential.

2.6 COMMUNICATION IN MATERNAL HEALTH EDUCATION

Comprehensive systematic population communication programmes need adequate personnel and funding. Such a programme would involve target group involvement and participation throughout programme planning and implementation. It has been noted that effective communication begins with the audience, the client or consumer and continues over time as a process of mutual adjustment and convergence. It is also stated that audiences have different ways of thinking, different vocabulary and even different ways of interpreting drawings and photographs. In order to ensure reception of the intended

message, health education messages have to be based on information obtained from the target population. Pretesting the same message on the same group helps in having a more correct and effective designed messages (Piotrow et al, 1997).

Squares (1980) states that in programme evaluation, poor results may mean that the wrong educational method was used (Chirwa et al. 1990). Most regard evaluation to determine the effectiveness of health education programmes and their worth as vital (Chirwa et al. 1990).

CHAPTER THREE

3.0 METHODOLOGY

3.1 STUDY DESIGN

A comparative cross-sectional study involving multigravida women who received antenatal care at outreach clinics in Katete rural, including both trained and Untrained Traditional Birth Attendants (TBAs) who attended to them was used. Outreach centres that had been served by only qualified staff and those served by both qualified staff and students were targeted. The method enabled precise measurement of association between the effectiveness of maternal health education against risks of actions of groups under study.

3.2 RESEARCH SETTING

The study was conducted in Katete rural district, which has a population of 197,410: 91.1% comprises the rural population. Over 80 outreach centres offer Maternal Child Health activities. It is estimated that out of the 10,660 pregnant women in the district 9,711 are catered by outreach antenatal activities. These women live in sparsely covered villages covering the district. The traditional administrative organisation falls under three chiefs namely; Mbangombe (Paramount Chief), Kawaza and Kathumba.

Farming is the main economic activity in the district both at commercial and subsistence level. The rural populace mainly grows maize and cotton. Clarke Cotton Company is one of the major buyers

of cotton in the district. Government maintains feeder roads.

3.3 STUDY POPULATION

The study population comprised all the women who attended antenatal outreach clinics in Katete rural district. It also comprised the trained TBAs and the untrained TBAs who were most likely to deliver them. The trained TBAs underwent formal training at health centres to equip them with modern midwifery knowledge and skills. At the end of six (6) weeks training, they were given birth attendants' delivery kits. Usually, trained TBAs had huts in the village where they conducted deliveries. One important criteria requirement for TBA training under the Ministry of Health was the community's choice. Before such training, some midwifery knowledge and practice was acquired from older TBAs.

3.4 SAMPLE SELECTION

The target population for this study were the multigravida women who had been attending outreach antenatal clinics in previous pregnancies including active trained and untrained TBAs.

The sample was divided into three (3) large clusters; Chiefs Kawaza area, Kathumba and Mbango'mbe (Annex 1). The two (2) numbers which were picked in each large cluster using the 1990 CSA (Central Statistics) and Katete District map to select 051 and 059 (Kawaza) : 050 and 036 (Mbangombe) and 087, 091 (Kathumba) areas by simple random method. Units were not all sampled due to money, materials

and manpower constraints. These areas are shown in Annex II. However, Mwandafisi shares borders with Chadiza District like area 059. In Kathumba, Mtandaza is in area 091 about 8 kilometers from Mozambique border. The sample of outreach centres selected comprised Mwandafisi and Dole, Chilundika (Kawaza), Chinkombe and Zinaka (Mbangombe) covered by Katete Boma district transport. Only Esaya (Kathumba) was sampled due to limitations stated. In order to have an adequate sample, all multigravida women attending the outreach antenatal clinics that the researcher was in attendance were included. From the sampled areas, only Chinkombe and Zinaka (Mbangombe) were served by hospital staff up to 1999. These were also served by students who are expected to give planned health education therefore making a comparison between clusters possible. Students used lesson plans prepared beforehand to give health education.

3.5 SAMPLE SIZE

A total sample of 200 pregnant women who attended outreach antenatal clinics was included and distributed as follows: Chief Kawaza, 45.3%; Chief Mbangombe, 43.9%; and Chief Kathumba, 10.8%. Also from the 3 clusters, 29 Trained Traditional Birth Attendants (TTBAs) were sampled divided into the 3 clusters as follows: Chiefs Kawaza 13; Kathumba 3; Mbangombe 13. Forty-eight (48) Untrained Traditional Birth Attendants (UTBAs) were divided as follows: Kawaza 22; Mbangombe 21; Kathumba 5. To arrive at the

above samples, the following calculations were used (Bradford, 1983):

Pregnant women:

Cluster sample

$$\begin{aligned}n &= \frac{p(1-p)(b-1)}{e^2} \\ &= \frac{0.5(1-0.5)(33-1)}{0.2^2} \\ &= 200\end{aligned}$$

Total cluster to be sampled

$$\begin{aligned}C &= \frac{P(1-P)D}{e^2 \cdot b} \\ D &= 1 + (b-1)e \\ &= 1 + (33-1)0.2 \\ &= 7.4 \\ C &= \frac{0.5(0.5)(7.4)}{(0.2)^2 \cdot 6} \\ &= \frac{1.85}{0.24} \\ &= 7.7\end{aligned}$$

P - Estimated proportion of pregnant women attending antenatal clinic

b - Number of responses in each cluster

c - Number of sample clusters

D - design effect

e - rho

95% confidence level

Trained TBAs

$$\begin{aligned}n &= \frac{P(1-P)}{e^2} \\ &= \frac{0.92(1-0.92)}{0.0025} \\ &= 29\end{aligned}$$

Untrained TBAs

$$\begin{aligned}n &= \frac{P(1-P)}{e^2} \\ &= \frac{0.86(1-0.86)}{0.0025} \\ &= 48\end{aligned}$$

However, sixty-eight (68) antenatal women in Kawaza, 45 in Mbangombe and 14 in Kathumba were interviewed. All the pregnant women attending antenatal clinic were included in the sample in order to have an adequate sample. Five (5) trained TBAs and five (5) untrained TBAs in Kawaza; three (3) trained TBAs and four (4) untrained TBAs in Mbangombe; two (2) trained TBAs and six (6) untrained TBAs in Kathumba were also interviewed.

3.6 DATA COLLECTION

Data was collected over a period of two months beginning 1st week of February and ending 4th week of March. Apart from Esaya, each centre was sampled once each month. Data was collected by the use of structured interview schedule questionnaire for antenatal women and untrained TBAs. This technique was used in order to facilitate communication and elicit correct information from the respondents.

Focus group discussions were used to collect data from trained TBAs to facilitate full discussion of responses. This was not possible in Kathumba where separate interviews were done.

3.7 ETHICAL CONSIDERATION

Ethical approval was sought from the Research Ethics Committee and was granted. Permission to access information from both the District Hospital and St. Francis Hospital was granted after written requests.

3.8 PILOT STUDY

The pilot study was conducted to pre-test data collection instruments before the main study to ensure clarity, precision and consistency of questions. The research instruments and corrections were made. Pre-testing of data collection instruments was carried out in Lusaka in order to prevent contamination of study population.

3.9 QUALITY CONTROL CHECKS

During data collection, the researcher at the end of each day went through the filled in questionnaires to ensure that all the information was properly collected and recorded.

Information was checked for completeness and internal consistency.

This was done to ensure collection of quality data.

3.10 DATA PROCESSING AND ANALYSIS

Before entering the data in the computer, it was entered on a master

sheet first. Open-ended questions were categorised and coded before processing on the computer. Data Analysis was done using SPSS software and EPI info. Frequencies cross tabulations and statistical tests were carried out.

3.11 PLAN FOR DISSEMINATION OF RESULTS

Relevant authorities responsible for policy making, planning and implementation of Maternal/safe motherhood health education will be given reports namely, Central Board of Health and District Health Management Team.

CHAPTER FOUR

4.0 PRESENTATION OF FINDINGS

4.1 INTRODUCTION TO FINDINGS

The findings are from data that was obtained from 113 pregnant women, 8 trained TBAs and 9 untrained TBAs. Further analysis excluded Kathumba because of the small sample. Percentages have not been reported in some of the tables because the denominators were less than 30 (Siziya, 1996).

4.2 SOCIAL DEMOGRAPHIC CHARACTERISTICS

(a) Pregnant women

Table 1: Socio-Demographic Data

AGE	KAWAZA TOTAL = 68 N (%)	MBANGOMBE TOTAL = 45	X ² , P-VALUE
15-24	26 (38.2%)	17 (37.8%)	X ² =0.06, df =2, P = 0.972
25 -34	32 (47.1%)	22 (48.9%)	
35 - 44	10 (14.7%)	6 (13.3%)	
EDUCATION	KAWAZA	MBANGOMBE	X ² =6.51, df =1, P = 0.011
None	35 (51.5%)	12 (26.7%)	
Primary/Secondary	34 (48.5%)	33 (73.3%)	

Table 1 shows that pregnant women aged between 25 - 34 years comprised 47.1% in Kawaza and 48.9% in Mbangombe. Those between 15 -24 years were 38.2% in Kawaza and 37.8% in Mbangombe. The distribution of age in Kawaza and Mbangombe was not significantly different (p=0.972).

Kawaza had 51.1% compared to 26.7% with no formal education and these proportions were significantly different ($p=0.011$).

(b) **Traditional Birth Attendants**

In Kawaza two (2) UTBAs had no formal education while three (3) had primary education. Three (3) were aged between 35 and 44 years and two (2) 45 years and above.

In Mbangombe all 3 UTBAs received no formal education and were all aged 45 years or above.

4.3 AGE OF RESPONDENTS IN RELATION TO HOW RESPONDENTS PERCEIVED SIGNIFICANCE OF MATERNAL HEALTH EDUCATION

TABLE 2

AGE OF RESPONDENTS IN RELATION TO HOW RESPONDENTS PERCEIVED SIGNIFICANCE OF MATERNAL HEALTH EDUCATION IN KAWAZA

Age	HOW RESPONDENTS PERCEIVE MATERNAL HEALTH EDUCATION					Total
	No help	Do not know what help they have received	Comes late to all antenatal clinics	No health education at all	Know significance	
<25	2	7	0	0	16	24
25+	5	3	1	1	32	42
Don't know	0	2	0	0	0	2
Total	7	12	1	1	48	68

Table 2 shows that nine (9) respondents out of twenty four (24) aged below 25 years saw no benefit in maternal health education including ten (10) out of thirty two (32) aged 25 years and above. Two (2) who could not tell their age did not know what help they had received.

TABLE 3**AGE OF RESPONDENTS IN RELATION TO HOW RESPONDENTS PERCEIVED SIGNIFICANCE OF MATERNAL HEALTH EDUCATION IN MBANGOMBE**

Age	HOW RESPONDENTS PERCEIVED MATERNAL HEALTH EDUCATION					Total
	No help	Do not know what help they have received	Comes late to all antenatal clinics	No health education at all	Know significance	
<25	3	2	0	0	12	17
25+	0	3	0	0	25	28
Total	3	5	0	0	37	45

Table 3 shows that five (5) respondents out of seventeen (17) below the age of 25 years saw no benefit in maternal health education including three (3) out of twenty eight (28) aged 25 years and above.

4.4 ASSOCIATION BETWEEN AGE AND KNOWLEDGE OF SIGNIFICANCE OF MATERNAL HEALTH EDUCATION

TABLE 4

ASSOCIATION BETWEEN AGE AND KNOWLEDGE OF SIGNIFICANCE OF MATERNAL HEALTH EDUCATION

AGE	KAWAZA		MBANGOMBE		TOTAL
	KNOWLEDGEABLE	NOT KNOWLEDGEABLE	KNOWLEDGEABLE	NOT KNOWLEDGEABLE	
< 25	16	10	12	5	43
25+	32	10	25	3	70
TOTAL	48	20	37	8	113

$$X^2 = 1.66$$

$$df = 1$$

$$p = 0.198$$

Fisher exact 2 tailed

$$p = 0.226$$

Table 4 shows that 48 (70.6%) out of 68 in Kawaza had knowledge of significance of maternal health education. In Mbangombe 37(82.2%) out of 45 were knowledgeable.

There was no association between age and knowledge in Kawaza ($p = 0.198$) and

Mbangombe ($p = 0.226$). No significant difference was observed in the knowledge

level of significance of maternal health education between Kawaza and Mbangombe

($X=1.97$, $df=1$, $p=0.161$). Overall, 85(75.2%) out of 113 respondents had knowledge

of significance of maternal health education.

4.5 Educational Level in relation to lack of knowledge about high risk conditions during pregnancy and Labour

	Kawaza	Mbangombe	Kawaza	Mbangombe	Kawaza	Mbangombe
Pregnancy	45.7	36.4	31	23.1	25	0
Labour	54.5	45.5	40	40.7	50	0

Fig 1: Educational Level in relation to lack of knowledge about high risk conditions during pregnancy and Labour

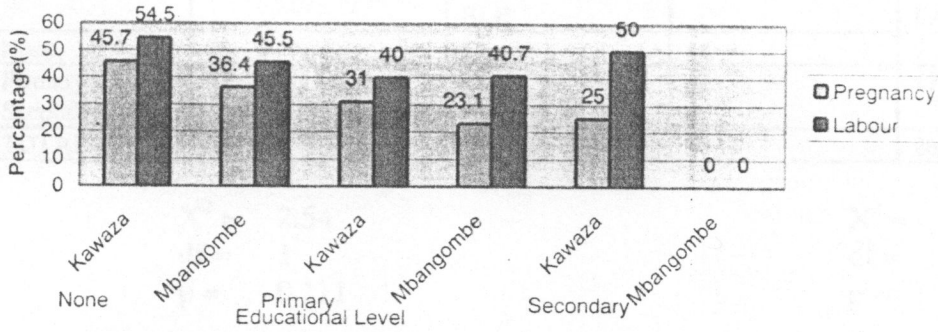


Figure 1 shows that in Kawaza 45.7% with no education did not know any high risk conditions compared to 31.0% with Primary Education and 25.0% with Secondary Education. In Mbangombe 36.4% with no education did not know any high risk conditions compared to 23.1% with Primary Education. All respondents with Secondary Education mentioned at least one high risk condition.

4.6 ASSOCIATION BETWEEN EDUCATION AND KNOWLEDGE OF HIGH RISK CONDITIONS

TABLE 5

ASSOCIATION BETWEEN EDUCATION AND KNOWLEDGE OF HIGH RISK CONDITIONS

EDUCATION	KAWAZA		MBANGOMBE		TOTAL
	KNOWLEDGEABLE	NOT KNOWLEDGEABLE	KNOWLEDGEABLE	NOT KNOWLEDGEABLE	
None	34	34	14	9	91
Primary/ Secondary	42	24	42	17	125
TOTAL	76	58	56	26	216

$$\begin{aligned} X^2 &= 2.54 \\ df &= 1 \\ p &= 0.111 \end{aligned}$$

$$\begin{aligned} X^2 &= 0.81 \\ df &= 1 \\ p &= 0.367 \end{aligned}$$

Table 5 shows that from 134 responses in Kawaza, 76(56.7%) were knowledgeable of high-risk conditions while in Mbangombe 56 (68.3%) out of 82 respondents were knowledgeable. There was no association between education and knowledge of high-risk conditions in Kawaza ($p = 0.111$) and in Mbangombe ($p=0.367$). No difference in knowledge of high risk conditions was observed between Kawaza and Mbangombe ($X=2.87$, $df=1$, $p=0.090$). Overall,132 (61.1%) out of 216 had knowledge of high risk conditions.

4.7 SOURCE OF INFORMATION AND PRESENCE OF HIGH RISK CONDITION

TABLE 6

SOURCE OF INFORMATION AND PRESENCE OF HIGH RISK CONDITION

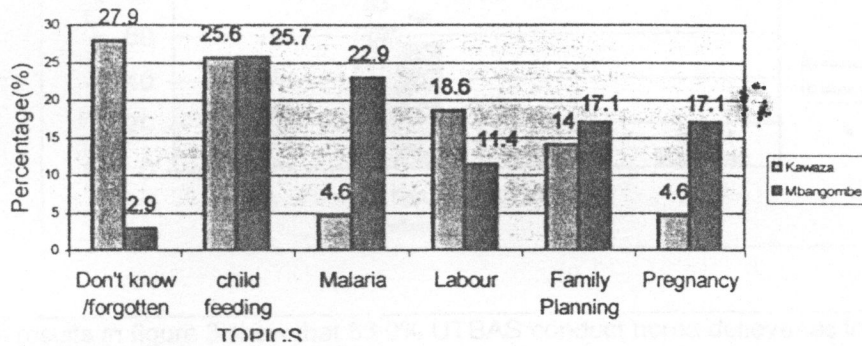
SOURCE OF INFORMATION	KAWAZA		MBANGOMBE		TOTAL
	HAD A HIGH RISK CONDITION	HAD NO HIGH RISK CONDITION	HAD A HIGH RISK CONDITION	HAD NO HIGH RISK CONDITION	
Friend relative	4	7	3	9	23
Boma/hospital	2	16	6	9	33
Health care	0	4	2	3	9
TTBA	1	4	0	0	8
Multiple sources	4	14	3	4	25
TOTAL	11	45	14	28	98

The results in Table 6 show that 7 out of 23 respondents whose source of information was friends or relatives had a high-risk condition. Eight (8) of 33 whose source was Boma or hospital had a high risk condition and 7 out of 25 with multiple source of information had a high risk condition. Levels of high-risk conditions were not significantly different between Kawaza (11/56 or 19.6%) and Mbangombe (14/42 or 33.3%), ($X^2 = 2.37$, $df=1$, $p=0.124$). Overall, 25(25.5%) out of 98 respondents in the study had a high risk condition.

4.8 Frequency Histogram Showing Topics Covered at Outreach Clinics

	Don't know /forgotten	child feeding	Malaria	Labour	Family Planning	Pregnancy
Kawaza	27.9	25.6	4.6	18.6	14	4.6
Mbangombe	2.9	25.7	22.9	11.4	17.1	17.1

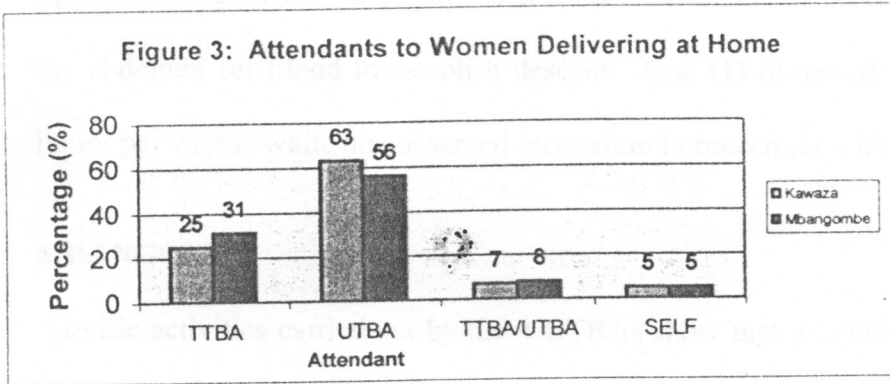
Figure 2: Frequency Histogram Showing Topics Covered at Outreach Clinics



The findings in figure 2 show that child feeding/care scored 25.6% in Kawaza and 25.7% in Mbangombe. Respondents who did not know or had forgotten subjects discussed at antenatal clinics scored 27.9% in Kawaza and 2.9% in Mbangombe. Pregnancy had 4.6% in Kawaza and 17.1% in Mbangombe

4.9 Attendants to Women Delivering at Home

	TTBA	UTBA	TTBA/UTBA	SELF
Kawaza	25	63	7	5
Mbangombe	31	56	8	5



The results in figure 3 show that 63.0% UTBAS conduct home deliveries in Kawaza and 56.0% in Mbangombe. TTBAS conduct 25.0% deliveries in Kawaza and 31.0% in Mbangombe. Self deliveries scored 5.0% in both clusters.

4.10 HOW UNTRAINED TRADITIONAL BIRTH ATTENDANTS DETERMINED A COMPLICATION DURING LABOUR

KAWAZA

Specific activities carried out by the 5 UTBAs show that 3 UTBAs inspected the abdomen for blood to establish descent. One (1) observed for blood or liquor per vagina while one observed meconium in breech presentation.

MBANGOMBE

Specific activities carried out by the 4 UTBAs show that 3 UTBAs inspected the abdomen in order to establish descent. One conducted vaginal examination and abdominal inspection.

4.11 SUMMARY OF FOCUS GROUP DISCUSSION WITH TRAINED TRADITIONAL BIRTH ATTENDANTS

KAWAZA

Five (5) TTBAS understood maternal death risk as abnormal lies and witchcraft. All were called to attend to both normal and complicated labour. The community knew that they could refer complicated labour to hospital. Delay in seeking TTBA services by the community before complications occur was a major problem for example due to lack of knowledge by UTBAs. Some of the TTBAS did not attend outreach clinics and all were not involved in planning of maternal health education.

MBANGOMBE

Three (3) TTBAS understood maternal death risk as abnormal lies, STDs, anaemia, cord prolapse and postpartum haemorrhage. All were called to attend to both normal and complicated labour. One TTBA did not mind

delivering, cases with hand prolapse or breech. There was delay in seeking TTBA services because UTBAS attempt to conduct complicated delivery first. Some TTBAS did not attend outreach clinics and all were not involved in planning of maternal health education.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 INTRODUCTION TO DISCUSSION

A comparative descriptive study was conducted in order to determine the impact of health education on pregnant women who attended outreach clinics in Katete District. The study involved 113 pregnant women, 8 trained Traditional Birth Attendants (TTBAs) and 9 untrained Traditional Birth Attendants (UTBAs).

The claim of safer birth for countrywomen is supported from different times and places. In the USA, a rural midwife who practiced in Maine between 1778 and 1812 recorded only four maternal deaths and few potentially fatal complications. In the healthy community of Juniper Hill in the English Midlands between 1880 and 1890 complications of birth were rare and no mother's life was lost (Tew, 1994). Health education's primary purpose is to promote health. The goal was to establish whether educational level, age and culture affected the reception, interpretation and utilisation of maternal health education.

5.2 EDUCATION AND KNOWLEDGE

The level of education in both clusters was not associated with knowledge about high-risk conditions, although maternal mortality in Africa is lower in communities where women have had opportunities for secondary education.

This result contradicts the notion that exposure to formal education increases understanding and application of health messages. Effective delivery of health education is also important. Results showed that 13.0% of respondents in Kawaza saw no benefit in maternal health education and 6.7% in Mbangombe. Sixty three percent (63%) of respondents in Kawaza stated that they received health education at each outreach clinic while 37% did not. Seventy eight percent (78%) in Mbangombe stated that they received health education and 22.0% did not. In Kawaza the topic most discussed was child feeding/care (25.6%) and in Mbangombe the most discussed topic was also child feeding/care (25.7%).

However, the effect of this on child health may be questionable. According to national statistics 53.0% of children below five years are stunted and 5.0% wasted (CSO, 1998). Although caused by many factors, malnutrition either in children or women of childbearing age leads to increase in mortality and morbidity.

In a recent survey 46.0% of women gave late realisation that they were in labour as the reason for delivering at home (Chilufya, 2000). This is in line with trained Traditional Birth Attendant's concern that women found with complicated labour sometimes do not inform their birth attendants early that they are in labour.

The information on the percentage of respondents who received health education and the topics discussed at outreach centres' was compared

with respondent's knowledge of high-risk conditions during pregnancy and labour. The common conditions mentioned in all areas during pregnancy were transverse lie, breech and vaginal bleeding. In labour those commonly mentioned were: transverse lie and retained placenta. Although only 4 respondents mentioned lack of progress of labour (Kalamatila) in this section the majority mentioned it under risk traditional practices as resulting through a husband or wife having extra marital sex while the woman was pregnant. Retained placenta although a common phenomena according to both untrained Traditional Birth Attendants and trained Traditional Birth Attendants believed to be caused by witchcraft was rarely mentioned by pregnant women. Among rarely mentioned conditions were malaria, self prescribed drugs and hand prolapse.

5.3 AGE AND KNOWLEDGE

Results showed that all age groups had equal chance of acquiring the same level of knowledge on significance of maternal health education. In both clusters a higher number of respondents who were knowledgeable were aged 25 years or more contradicting the notion that older women are expected to have higher gravida and therefore more exposed to health education sessions. The above finding also contradicted Noelle -Neumann's (1993) "Spiral of Silence" theory that predicted that persistent exposure to a message can yield desirable results.

5.4 KNOWLEDGE AND PRACTICE

In Kawaza, among respondents who indicated their source of information as friend and relative 4 out of 11 had a high-risk condition i.e 1 grand multiparity, 2 drinking traditional medicine to accelerate labour and 1 self-delivery. From Boma or hospital staff 2 out of 18 had a high risk condition ie grand multiparity and 1 previous caesarean section who took traditional medicine to accelerate labour but was delivered by caesarean section again. Most often one caesarean operation requires another. 1 out of 5 respondents whose source was a TTBA indicated a high risk condition i.e self-delivery. Under multiple sources, 4 out of 18 had high risk conditions i.e 2 grand multiparity delivered by UTBAs, although one had previous caesarean section, one (1) delivered herself four times because the TTBA stays far. A recent survey recommended the need to train more TBAs and to sensitize the under privileged on the importance of planning for their deliveries (Chilufya, 2000).

There were similar findings in Mbangombe ie. grand multiparity delivered by UTBA, self delivery and drinking traditional medicine to accelerate labour. TBAs emphasised that this practice exposed women to complicated labour. In total 5 had grand multiparity, 2 self delivery and 7 drinking traditional medicine to accelerate labour. From the findings, there was no source of information with an outstanding number of those with high risk conditions.

5.5 CULTURE AND PRACTICE

Although their bodies are biologically programmed, to give birth unaided, women in many societies have felt the need for a helper and companion to support them throughout labour, so that some system of birth attendants has become an integral part of their cultures (Tew, 1994). In Kawaza 63% of attendants to women who delivered at home were UTBAs. TTBAs attended to 25% of home deliveries with 5% of the women delivering themselves. This is in line with recent survey findings that UTBAs conduct 74% of births given at home (Chilufya, 2000).

In Mbangombe 56% of attendants to women delivered at home were UTBAs and 31% were TTBAs. Five percent (5%) of the women delivered themselves. With the high risk involved in our environment this figure of self-deliveries seems to be too high. One reason given for self-delivery was absence of someone to call a TTBA.

Out of five (5) of untrained Traditional Birth Attendants in Kawaza three (3) determine complications during labour by abdominal inspection. One (1) by blood and liquor presence per vagina and one (1) by watching out for meconium in breech presentation. This information shows that the UTBA does not carry out abdominal palpation to determine fetal lie and presentation. Trained Traditional Birth Attendants said that they are called by untrained Traditional Birth Attendants to attend to cases of hand prolapse, footling breech, retained placenta and postpartum haemorrhage. The commonest risk

factor stated by trained Traditional Birth Attendants was mal presentation. These factors predispose rural women to a high risk of maternal death or disability. For example the risk of vaginal breech delivery is primarily due to the fact that the passage of the unmolded head through the birth canal is rapid. This situation is aggravated by the fact that cephalopelvic disproportion with breech deliveries become functional at a very late stage. Therefore, even where midwives are autonomous practitioners, they are forbidden by law to attend to women classified as 'at risk' (Tew, 1994). In an informal discussion, Mindola Health centre Charge Nurse reported that the centre received many cases of ruptured uterus from UTBA's.

In Mbangombe, three (3) of UTBA's determined complications by abdominal inspection during labour and one (1) performed a vaginal examination to determine descent. The results showed that the UTBA did not carry out abdominal palpation to determine fetal lie and presentation during labour.

5.6 WILLINGNESS BY UTBA's TO RECEIVE MATERNAL HEALTH EDUCATION

All 15 untrained Traditional Birth Attendants (UTBA's) expressed their total willingness to increase the knowledge that they had on maternal care through maternal/safe motherhood health education. They had preference to receive it in groups. The majority (9) gave the outreach clinic as the best place to hold the discussions as part of the MCH health education sessions. Three (3) UTBA's interviewed at Chilundika

village (Kawaza) preferred to have the sessions at their village church. Others said that the health centre was appropriate.

Four (4) UTBAs gave female health staff only as most acceptable to hold maternal health discussions freely with. The trend of women preferring other women in issues pertaining to maternal care is declining in Zambia as in other societies. Five (5) said that any health staff was acceptable and six (6) would hold discussions freely with nurses/midwives. Some TBAs stated that health education discussions should be held every three months. This period is in line with that given in the TBA training manual that the health team must have regular contact with the TBAs through supervision and continuing education at least every three months. Such interventions are supported by most social scientists who agree that behaviour change requires interpersonal communication. The findings show that all TBA respondents were ready to support maternal/safe motherhood health education. This is more favourable than one of the findings that the AIDS education campaign in Zambia was constrained by lack of support from traditional healers (Chirwa et al, 1990).

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSION

The study was done to determine the impact of health education on pregnant women who attend outreach clinics in Katete District.

The information from the study show that obstacles to yielding results by maternal health education are contributed by the practices of the pregnant women, their Traditional Birth Attendants and District Health Management such as having no health education materials. Other factors like improvement of women's education fall under the Ministry of Education.

The researcher also found out that:

1. The health educator and the topic for discussion were decided upon just before the session began.
2. There was no significant disparity in level of knowledge of maternal high-risk conditions between Kawaza and Mbangombe respondents.
3. Child feeding/care was discussed most often
4. Education was not associated with knowledge of high risk conditions
5. The pregnant women informed their Traditional Birth Attendants late that they were in labour.

6. The pregnant women found with high risk conditions did not give or show any concern that they would be delivered by untrained Traditional Birth Attendants.
7. The untrained Traditional Birth Attendants mostly used sight to detect complications which may therefore be noticed in their late stages.
8. The trained Traditional Birth Attendants expressed that they had skill to deliver breech, hand prolapse, retained placenta.
9. The willingness of untrained Traditional Birth Attendants to receive maternal health/safe motherhood education was overwhelming.
10. Altogether, 75.2% and 61.1% of respondents had knowledge of significance of maternal health education and of high risk conditions respectively.

6.2 RECOMMENDATIONS

1. District assessment of priority maternal health problems in each area and implementation of a well planned health education programme.
2. Involvement of grassroot maternal health stakeholders from planning to evaluation of maternal health education programme.
3. Formation of Traditional Birth Attendants Association to enhance greater harmonisation of practice.
4. All UTBAs to attend outreach clinic maternal health education at least every 3 months.
5. Find out whether staff levels at outreach clinics affect planned delivery of health education.
6. Improve maternal child health education materials

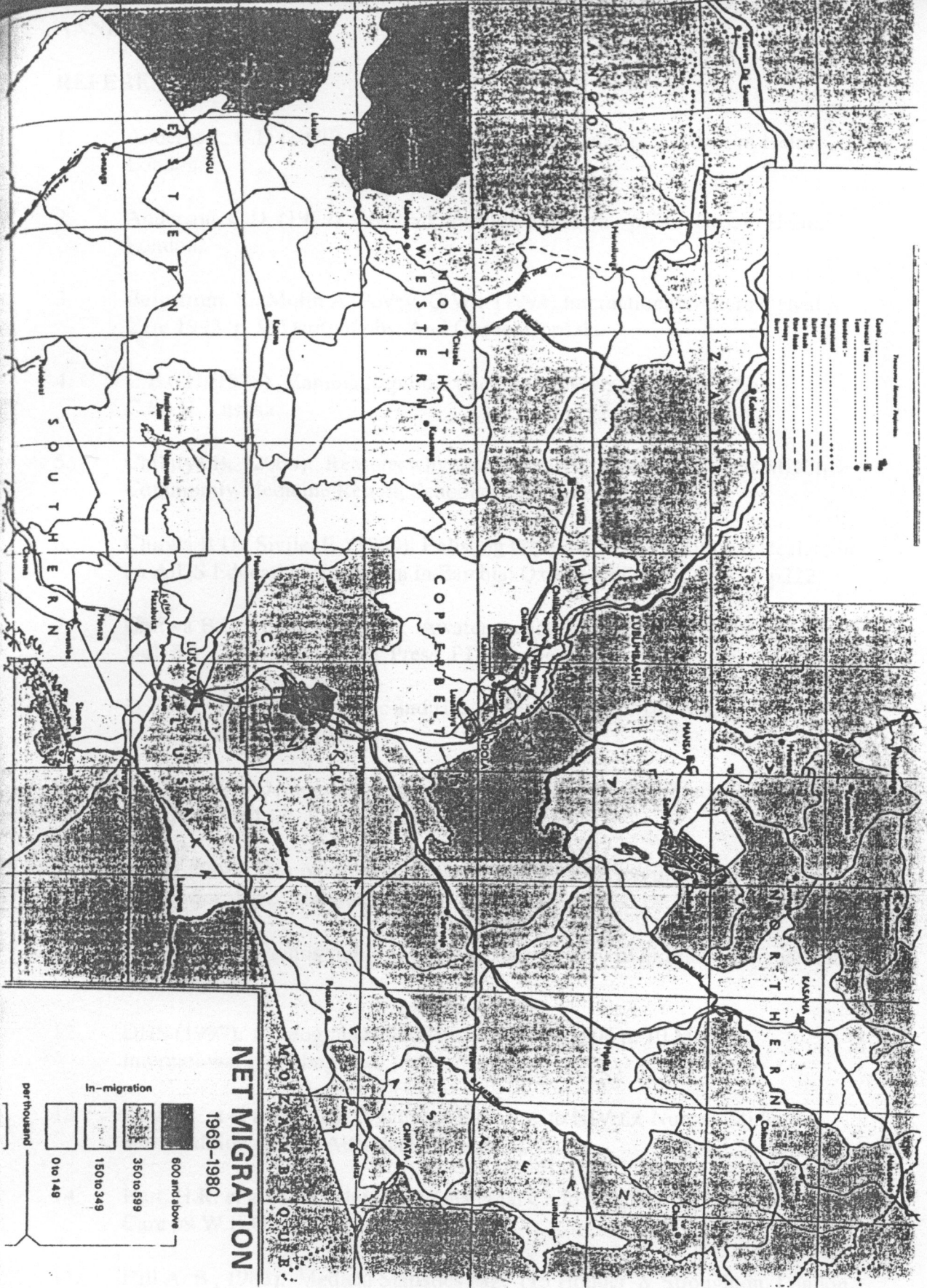
6.3 LIMITATIONS

1. Data collection was started in February because of the delay in the disbursement of research funds.
2. Availability of untrained Traditional Birth Attendants on same day was not possible since data collection was done in the farming season. Some streams were flooded and some TBAs were interviewed in their villages. Some TTBAAs are not active and other areas had no TTBAAs.
3. Five (5) outreach centres were sampled instead of six (6) because of the use of district health office transport and MCH outreach programme and limited funds.
4. Big clusters were chosen because of limited resources.
5. Some of the randomly selected CSO areas were difficult to reach because of long distance.
6. A quasi experimental design could not be used because of inadequate time and limited resources



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ANNEX IV

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Dean's Office
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Your Ref:
Our Ref:

The District Director of Health
DHMT
KATETE

Dear Sir/Madam

Re: **Request to access information from your records Lyamba Sitwala.**

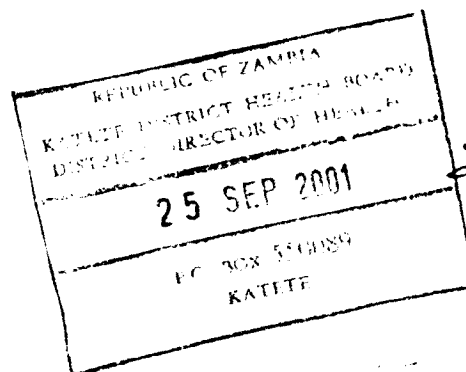
This is to introduce Ms Lyamba Sitwala, Master of Public Health (MPH) student in the Department of Community Medicine, School of Medicine, University of Zambia.

Ms Lyamba is carrying out a research study on **"Impact of Health Education to Pregnant Women who attend outreach clinics in Katete District.**

I am hereby requesting for permission to access her information in form of records in maternity and records Department and any other assistance she may require.

Yours faithfully

Prof K S Baboo
MPH COORDINATOR



S. BANDA
A/DDH.



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Dean's Office
P.O. Box 50110
Lusaka, Zambia

Your Ref:
Our Ref:

The Executive Director
St Francis Mission Hospital
Private Bag 11
KATETE

Dear Sir/Madam

Re: **Request to access information from your records Lyamba Sitwala.**

This is to introduce Ms Lyamba Sitwala, Master of Public Health (MPH) student in the Department of Community Medicine, School of Medicine, University of Zambia.

Ms Lyamba is carrying out a research study on **"Impact of Health Education to Pregnant Women who attend outreach clinics in Katete District.**

I am hereby requesting for permission to access her information in form of records in maternity and records Department and any other assistance she may require.

Yours faithfully

Prof K S Baboo
MPH COORDINATOR

~~H-9a~~
SNO.
For CD
NURSING OFFICE
ST. FRANCIS HOSPITAL
Private Bag 11
KATETE

QUESTIONNAIRE

STRUCTURED INTERVIEW SCHEDULE FOR PREGNANT WOMEN

DATE----- QUESTIONNAIRE NUMBER-----

INSTRUCTIONS TO THE INTERVIEWER

1. No name should appear on this questionnaire
2. Information given will be considered confidential
3. Indicate the answer to the question by ticking () in the box provided and write the response to open-ended questions in the space provided.
4. Please ask all questions
5. Get consent before you start

----- ONLY

SECTION A: DEMOGRAPHIC DATA

1. How old are you?

- 1. 14 years and below -----
- 2. 15 years-24 years -----
- 3. 25 years-34 years -----
- 4. 35 years-44 years -----
- 5. 45 years and above -----

2. What is your marital status?

- 1. Single -----
- 2. Married -----
- 3. Divorced -----
- 4. Widowed -----
- 5. Separated -----
- 6. Any other, specify _____

3. What is your religion?

- 1. Christian -----
- 2. Watch Tower -----
- 3. Moslem -----
- 4. Any other, please specify -----

4. What educational level did you attain?
1. None -----
2. Primary -----
3. Secondary -----
4. College -----
5. University -----
5. Where do you live?
- village, chief-----
6. How far is your village from the nearest outreach centre?
- hours walking distance.

SECTION B: OBSTETRIC DATA

7. What number is this pregnancy?
-
-
8. Did you attend antenatal clinic in all these pregnancies?
1. Yes -----
2. No -----
9. If No, what were the reasons?
-
-
-
-

10. Where did you go for your antenatal clinic in the previous pregnancies?

- 1. Health centre -----
- 2. Outreach post -----
- 3. Trained traditional birth attendant -----
- 4. Hospital -----
- 5. Any other, please specify -----

11. What is the gestation of your present pregnancy?

- 1. 1st trimester -----
- 2. 2nd trimester -----
- 3. 3rd trimester -----

12. How many months were you when you first attended the antenatal clinic in this pregnancy?

- 1. 0- 3 months -----
- 2. 4-7 months -----
- 3. 8-10 months -----
- 4. Above 10 months -----

13. How many antenatal visits have you attended in this pregnancy?

- 1. One -----
- 2. Two -----
- 3. Three -----
- 5. Four -----
- 6. Five and above -----

14. Who conducts the antenatal clinic/examination?
1. Midwife -----
 2. Environmental technician -----
 3. Trained traditional birth attendant -----
 4. Any other, please specify-----
15. Is health education given at each antenatal clinic that you have attended?
1. Yes -----
 2. No -----
16. What topics are covered?
1. Family planning -----
 2. Abnormalities in pregnancy -----
 3. Abnormalities in labour -----
 4. Any other, please specify-----
17. Do you like health education sessions?
1. Yes -----
 2. No -----
18. If No, what don't you like about health education sessions?
1. Talks take too long -----
 2. Topics are not relevant to pregnancy -----
 3. Topics are not interesting -----
 4. Topics are difficult to understand -----
 5. Any other, please specify-----

19. Has the health education given at the outreach clinics helped you?

- 1. Yes -----
- 2. No -----

Explain response-----

20. What are the high risk conditions during pregnancy that you are aware of?

- 1. Fits -----
- 2. Transverse lie at term -----
- 3. Previous cesarean section -----
- 4. Breech -----
- 5. Early rupture of membranes -----
- 6. Any other (specify) _____

21. What are the high risk conditions during labour that you are aware of?

- 1. Labour lasting 24 hours -----
- 2. Early rupture of membranes -----
- 3. Transverse lie -----
- 4. Continuous painful contractions -----
- e. Any other, please specify-----

22. What is the source of information on high risk maternal conditions?

- 1. Friend/relative -----
- 2. Health centre -----
- 3. Hospital staff -----
- 4. Radio -----
- 5. Trained traditional birth attendant -----
- 6. Any other, please specify-----

30. How many times have you delivered at the hospital?

----- times

31. Why did you deliver at the hospital?

-----

32. What type of transport do you use to take you to the hospital or to health facility in case of an emergency?

-----

33. What outstanding traditional practices contribute to maternal deaths in your area?

-----

34. What do you think should be done in order to prevent these maternal deaths?

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**STRUCTURED INTERVIEW SCHEDULE QUESTIONNAIRE FOR
UNTRAINED TRADITIONAL BIRTH ATTENDANTS**

DATE----- QUESTIONNAIRE NUMBER-----

INSTRUCTIONS TO THE INTERVIEWER

1. No name should appear on this questionnaire
2. Information given will be considered confidential
3. Indicate the answer to the question by ticking () in the box provided
and write the response to open-ended questions in the space provided
4. Please ask all questions
5. Get consent before you start

1. How old are you? -----
 - a. 24 years and below -----
 - b. 25-34 years -----
 - c. 35-44 years -----
 - d. 45 years and above -----

2. What is your tribe?
 - a. Chewa -----
 - b. Ngoni -----
 - c. Nsenga -----
 - d. Any other, please specify-----

3. What educational level did you attain?
 - a. None -----
 - b. Primary -----
 - c. Secondary -----
 - d. College -----
 - e. University -----

4. Where do you live?

----- village, chief-----

5. How long have you been a traditional birth attendant?
- a. Less than 5 years -----
 - b. 5-9 years -----
 - c. 10-14 years -----
 - d. 15-19 years -----
 - e. 20 years and above -----
6. Do you prefer to deliver your relatives yourself?
- a. Yes -----
 - b. No -----
7. If yes, give reasons
-
-
-
8. Have you had any experience with a woman who developed complications during labour in the last 3 years?
- a. Yes -----
 - b. No -----
9. If yes, what were the complications?
-
-
10. What did you do?
- a. Called a trained traditional birth attendant -----
 - b. Took her to hospital -----
 - c. Kept her until delivery -----
 - d. Any other, please specify-----

11. How would you determine a complication during labour?

- a. By abdominal examination -----
- b. By vaginal examination -----
- c. By general condition of the woman -----
- d. By time labour lasts -----
- e. Any other, please specify-----

12. Have you ever called for a traditional birth attendant when caring for a woman during labour?

- a. Yes -----
- b. No -----

Explain response-----

13. What is safe motherhood?

-----

14. What is your source of information on maternal health/safe motherhood?

- (a) Trained traditional birth attendant
- (b) Nurses
- (c) Pregnant women who attend outreach clinics -----
- (d) Friends
- (e) Any other, please specify-----

15. Would you like to receive more health education messages on maternal health/safe motherhood given by a trained health personnel?

- a. Yes -----
- b. No -----

16. If yes, what is the best way that health education on maternal health/safe motherhood can be given to you?

17. Where can health education on maternal health/safe motherhood be given to you?

18. Who is the most acceptable person to give health education on Maternal health/Safe motherhood to you?

19. What outstanding traditional practices contribute to maternal deaths in your area?

20. What do you think should be done to prevent maternal deaths in your area?

FOCUS GROUP DISCUSSION GUIDE FOR TRAINED TRADITIONAL

BIRTH ATTENDANTS

1. What do you understand by maternal death risk?
2. Are you called to care for women in labour in your area?
Give conditions that you have been called to attend to.
3. If you are called to attend to complicated labour, give your views about this.
4. Is there delay in seeking your services before complications occur? If yes, give your views about what contributes to these delays.
5. How many maternal deaths have occurred in your catchment area as a Trained traditional birth attendant due to such delays?
6. Could most of these maternal deaths been prevented? If yes, explain how.
7. What traditional practices contribute to maternal deaths in your area?
8. Do you attend outreach clinics in your catchment area?
9. Are you involved in planning maternal health education in your district?

END OF DISCUSSION - THANK THE PARTICIPANTS

FOCUS GROUP DISCUSSION

QUESTIONS	PLACE: Mwandafisi DATE: 8 th - 15 th March TIME: 12:00 - 13:00 hours GROUP: 5 TTBA's INTERVIEWER: Researcher	PLACE: Chinkombe ORC Mbangombe DATE: 22 nd March TIME: 12:00 - 13:30 hours GROUP: 3 TTBA's INTERVIEWER: Researcher
What maternal death risk is	Abnormal lies which lead to even stillbirths sometimes, witchcraft	Abnormal lies, STDs anaemia, cord prolapse PPH
Whether called to attend to women in labour and conditions found	Yes - normal and complicated labour	Yes - normal and complicated labour
Views concerning being called to attend to complicated labour	The community know that they are trained and are under Government and would take the women to hospital. TTBA's experience transport problems especially from hospital	One TTBA does not mind because she is able to deliver hand prolapse and breech but has sent some with inadequate outlet to hospital
Whether there is delay in seeking TTBA services before complications occur and views	Yes - a very big problem due to lack of knowledge by UTBA's, lack of faith in TTBA's that they can do what the hospital can do. UTBA's first try until all is impossible. Fear of being asked for tokens.	Yes - UTBA's attempt to conduct complicated delivery first.
Maternal deaths in area due to such delays since 1998.	Nil	Nil
If such maternal deaths could have been prevented and how?	N/A	N/A
Traditional practices contributing to maternal deaths in area	Witchcraft, use of traditional medicine, extra marital sex leading to "Kalamatila" or "cisi"	Traditional medicine to accelerate labour, preference for traditional medicine first when sick.
Whether TTBA's attend outreach clinics	Yes (Mwandafisi) No (Dole)	One TTBA stopped because nurses do not allow them to examine women with them
Whether involved in planning of maternal health education	No	No

INFORMED CONSENT

Dear Participant,

We require data on your views regarding impact of health education to you. The objective is to determine how effective the health education that you receive is.

1. Participation in this study is voluntary. You are free to withdraw at any stage of the interview if you want.
2. All the information given will be confidential.
3. The information you give will be used by policy makers and planners to improve MCH health education programme. Benefits to participants are long term.

I hereby called participant understand the guidelines of this study and that I am willing to be interviewed. I hereby consent to participate.

Dated this Day of year

Signed
Participant

Signed
Interviewer

Note to the interviewer: If the participant does not know how to read and write, indicate 'agreed' on the space provided for the participant's signature.

