

Full Length Research Paper

How do village women determine foetal status and foetal pose in Malawi?

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Accepted 16 February, 2010

In Malawi, 80% of the population lives within 8 km radius of a health care facility. However, most facilities lack drugs, personnel and laboratory equipment. Due to poverty, people cannot afford private hospital services; hence resort to home-based healthcare. There is lack of information on how pregnancy-related issues are managed at home. The study aimed at documenting traditional methods used in determining the status of the foetus and its pose. Focus group discussions, key informants, participant observations and questionnaire interviews data collection methods were used. Traditional Medical Practitioners, Traditional Birth Attendants, maternal and child health hospital staff and the general population were interviewed. Despite most respondents having low formal education, they exhibited knowledge of telling the status of foetus without using any equipment. 80.7% of respondents mentioned of kicking of the baby to indicate a live baby. Eight signs used to determine foetal pose were mentioned. Of these, the majority were related to the baby lying horizontally. Interventions are required to teach the rural masses on correct techniques hence ensuring safe motherhood.

Key words: Pregnancy management, maternal health, home-based healthcare, foetal management.

INTRODUCTION

High maternal mortality rates characterise Latin America, the Caribbean (Rodgers, 2004) and Africa. In Malawi, government has built numerous health centres to curb the problem such that about 80% of the population lives within 8 km radius of a primary health care facility (Malawi Government, 1993).

Since maternal and child health are a priority on Malawi government's development agenda, government has launched several initiatives one of which is Safe Motherhood Programme. The programme aims at reducing maternal mortality through utilisation of conventional health services.

Despite the political will, the healthcare facilities are marred with challenges. These include: lack of laboratory equipment and drugs and rude behaviour of hospital staff (Maliwichi-Nyirenda and Maliwichi, 2009). Although private hospitals provide adequate and better facilities, their

charges are exorbitant. Thus most people cannot afford this because the majority (65%) of Malawi's population live in poverty (National Economic Council et al., 2000). Consequently, most of the urban and rural population relies on home-based remedies for managing primary health care problems. 43% of births take place in a home (<http://www.measuredhs.com/pubs/pdf/FR175/09Chapter09.pdf>) (accessed 16th January, 2009), (Nolte, 1998).

With respect to antenatal health, most rural women seek care from traditional birth attendants (TBAs). It is alleged that such practices lead to maternal mortality because the pregnant women are not assisted by professional birth attendants. The pregnant women also die because of taking herbal preparations which are believed to be poisonous (The Nation, 2007). In addition, due to challenges faced by modern hospitals, there are insufficient resources to meet the demands of pregnant women. Consequently, many women die hence maternal mortality rates remain persistently high (984 maternal deaths per 100,000 live births – National Statistical Office, 2004).

Due to inaccessibility of modern healthcare facilities,

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most often, pregnant women go into labour with lack of knowledge on the status of the unborn baby. When there are complications, it is often too late to remedy the situation. As observed by Mead (1995) and Rodgers (2004), if the status of the foetus is not correctly diagnosed, there can be serious maternal risks.

There is knowledge among the villagers on how to diagnose different aspects of foetus. For example, in Zimbabwe, midwives use abdominal palpation to determine if there is a twin pregnancy or if a foetus is lying transversely (Sparks, 1990).

In Guatemala, trained traditional birth attendants assess foetal position during prenatal evaluation (Miller et al, 1995). In most Asian cultures, pregnant women are encouraged to be active to ensure the foetus is healthy. However, exercises are discouraged among Filipino pregnant women for fear that they might harm the baby and the mother (Joines, 1993).

This study investigated how rural people determine foetal status and foetal pose. Foetal position (American English: fetal) is a medical term used to describe the positioning of the body of a prenatal foetus as it develops. Foetal status refers to the condition of the foetus during pregnancy through onset of labour up to delivery. Foetal status and foetal pose are important in determining the well-being of the foetus. They also affect foetal movement, a useful but underutilised concept in foetal monitoring (Maputle and Mothiba, 2006).

MATERIALS AND METHODS

The study took place in Mulanje District, south of Malawi (Figure 1 a). The district borders Mozambique. It contains Mount Mulanje (also known as Mulanje Massif), the highest mountain in south-central Africa. The district is dominated by tea estates, one of the major foreign exchange earners for Malawi after tobacco. In addition to earning their living from subsistence farming, people of Mulanje work in tea and coffee estates.

The study took place in Traditional Authorities (T.A.) Nkanda and Mabuka (Figures 1b and 1c). These T.As were selected because of their contrasting features. In T.A. Nkanda, the district hospital is far away while in T.A. Mabuka, it is closer. Due to time and financial constraints, only villages that were readily accessible were visited. Chipoka, Kanyandula, Kapesi, Likhomo, Mphuchila, Ngwezu and Sazola villages of T.A. Mabuka were visited. John, Kalima, Mbewa, Mwanakhu, Mwanero, Nakhonyo and Nankwakwala villages situated in T.A. Nkanda were visited. Data were collected through the following methods:

Focus group discussions

A total of four focus group discussions (FGDs) were conducted with people who had experience in maternal and child health care. The participants included local communities (30 respondents), Traditional Medical Practitioners (20), Traditional Birth Attendants (10) and Maternal and Child Health staff of Mulanje District Hospital (11), Mulanje Mission Hospital (9), and Lauderdale (1), Sayama (1) and Chambe (1) health centres. In each T.A., two FGDs were conducted. One comprised hospital staff while the other comprised the rest. The composition of each FGD varied depending on the number of respondents available in that area.

Local communities comprised general population who were mostly subsistence farmers. Traditional Medical Practitioners were healers who used traditional methods in delivery of their services while Traditional Birth Attendants were women specialised in undertaking home-based child delivery services

Questionnaire interviews

All Traditional Birth Attendants and Traditional Medical Practitioners in the study sites were interviewed because they were few and this study was very much linked to their work. For the general population, every adult found during the questionnaire administration period was interviewed. To maximise the number of interviewees, we interviewed any person we came across in each area. A total of two hundred and two respondents (142 females and 60 males) were interviewed.

Key informants

All people and institutions known to work in maternal and child health related issues was purposively targeted. In total, 12 key informants were consulted. These people were involved in in-depth interviews. This group of people were important because of the extensive knowledge it possess on the subject of pregnancy and child deliveries.

Data analysis

Themes emerging from the data were manually extracted and analyzed. Issues coming out of the themes were used to make inferences from the information that was obtained in questionnaire interviews.

Information from questionnaires was analysed using Statistical Package for Social Scientists (SPSS) computer programme version 8.0. The data were coded, entered into SPSS and analysed using descriptive statistics to determine frequencies.

Ethics and participants consent

Consent and permission for the study was sought from the Mulanje District Commissioner. Permission to interview hospital staff was obtained from the District Health Officer. At village level, the study was explained to the Traditional Authorities, Group Village Headmen and Village Headmen who gave their consent for the study, in addition to the participants. The participants gave verbal consent prior to the interviews.

RESULTS

There were 142 female and 60 male respondents for the questionnaire interviews. 91 respondents were aged between 20 and 34 years while 51 were aged at least 50 years. 46 were in the 35 - 50 age groups while 14 were less than 20 years old. There was a 100% compliance rate with respect to questionnaire administration as all respondents were administered the questionnaire in face to face interviews.

Foetal status

People appeared to be able to tell the health status of the

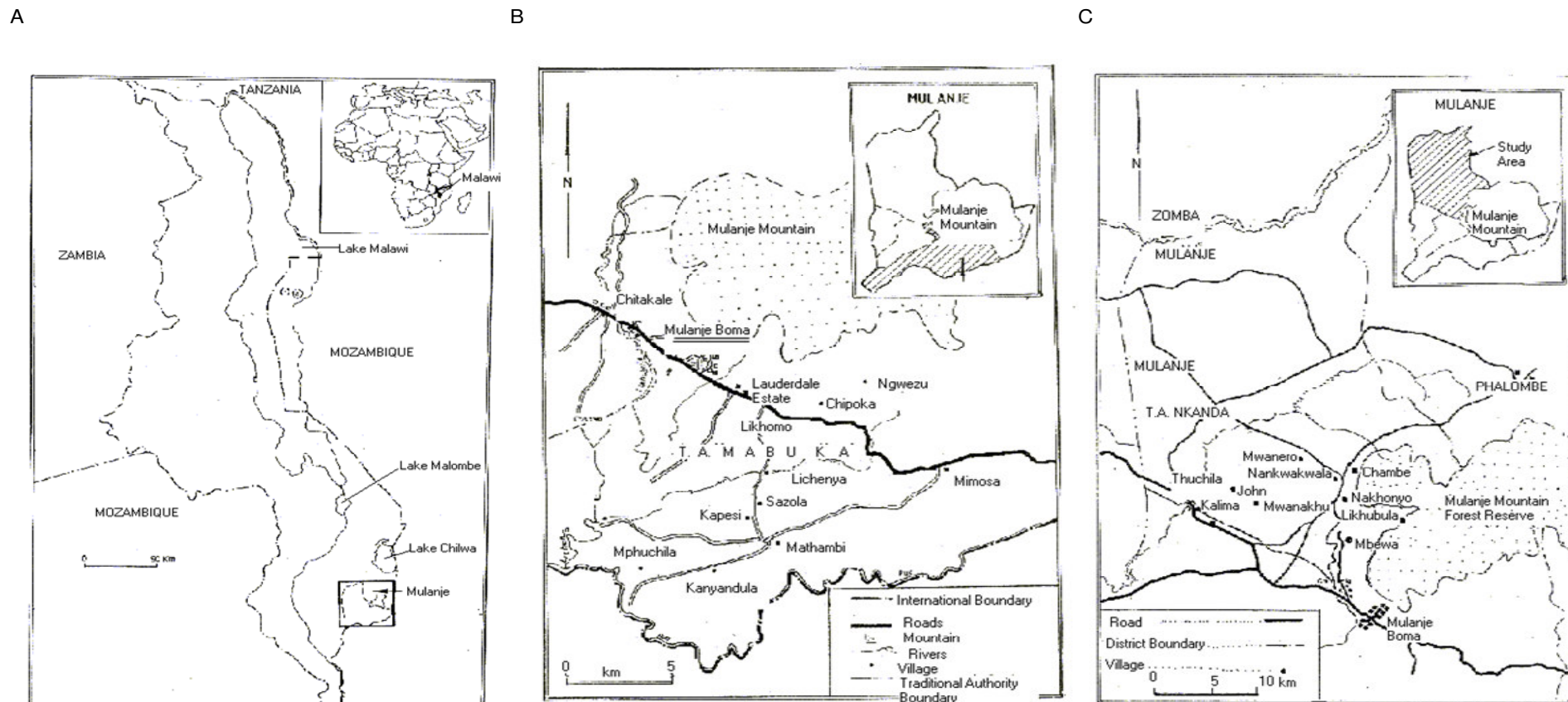


Figure 1. Map of study area showing location of Mulanje district in Malawi (A), Traditional Authority Mabuka (B) and Traditional Authority Nkanda (C).

unborn baby (while in the mother's womb) without using any equipment. Out of the 57 respondents who managed to answer on this issue, 46 (80.7%) stated that kicking of the baby shows that the baby is fine while 1% mentioned enlargement of mother's stomach and 1% cited itching of mother's body as an indication that the baby is fine. Nine respondents (15.8%) however indicated that it is difficult for a layperson to tell about the status of an unborn baby.

Foetal pose

Most of the respondents did not seem to know how to determine foetal pose. Out of the 40 people that answered this question, the majority (32.5%) indicated that it is only the western doctors who are able to determine foetal pose while 30% of the respondents did not know how to tell the unborn baby's position. 25% of the respondents were, however, able to mention signs that

are used in telling the pose of an unborn baby. Out of those knowledgeable, 12.5% are mentioned of signs related to the baby lying horizontally (Table 1).

DISCUSSION

World Health Organization has regarded home as a suitable place for child delivery (Fateme et al.,

Table 1. Some signs used to determine foetal pose.

Foetal position	Indicator	Frequency (N = 40)	
		Number of respondents	% of respondents
Horizontal	Head felt in the sides of mother's stomach; breathing and kicking heard in both sides; pain felt in ribs	5	12.5
Facing down	Kicks felt near navel, kicks felt on both sides of the ribs	2	5.0
Straight	Legs felt up and head down	1	2.5
Breech	Legs felt down and head up	1	2.5
Standing	Stomach enlarges upward and becomes smaller downward; beating felt on upper side of stomach	1	2.5
Facing up	Failure of mother to breath	1	2.5
Normal	Kicking felt on both sides of ribs	1	2.5
Sleeping on sides	Feeling heavy on one side of the rib	1	2.5

2009). Therefore it is imperative that there are sufficient resources and expertise during home deliveries and entire pregnancy period. This study has shown that despite 57% of the respondents have only attained primary school; while 38% were illiterate, they were knowledgeable of issues related to foetal status and foetal pose. This reflects how wide the indigenous knowledge base is; people are well informed even though they never went far with academic education.

Foetal status

Indication of a live baby by its kicks and enlargement of mother's abdomen conform to signs used by western doctors in diagnosing the health status of the foetus during antenatal check ups. Use of foetal movement to ascertain that the baby is fine is also applied in other countries like South Africa (Maputle and Mothiba, 2006). However, the other signs used (itching of mother's body) can be misleading as itching can result from a variety of health conditions. It is important that hospital personnel teach women on important signs to use in monitoring foetal well-being (Maputle and Mothiba, 2006). Admission by a substantial proportion of respondents about the difficulty of telling the status of the unborn child shows that pregnant women live in uncertainty on the health status of the foetus until the baby is born.

Although this study did not come across any use of traditional medicine, other studies have documented use of medicinal plants to guarantee a healthy mother and foetus. For example, Cosminsky (1977) recorded use of herbs and teas among Mexican women while Nolte (1998) recorded use of herbs among Malawian women.

Foetal pose

Some of the signs that are used traditionally to determine

foetal pose, match those used in modern hospitals e.g. in diagnosis of breech foetus. This scenario is similar to the one observed by Itina (1997) who found that most Traditional Birth Attendants in south-eastern Nigeria are knowledgeable of clinical features used in diagnosing pregnancy-related aspects. However, as indicated in this study, some of the signs that are used are rather confusing in that similar indicators mean different poses. For instance, baby kicks that are felt on both sides of the ribs either indicate that the baby is facing down lying horizontally or lying in normal state. This implies that sometimes a pregnant woman may be regarded fine while in reality there are complications like risky baby pose. This would make home-based child delivery complicated in that the situation may only be noticed during child delivery. At this time it might be too late to make proper arrangements for hospital referral, hence make the delivery risky; unless the people have the capacity to correct such conditions. For example, in Ecuador, when there are complications, the Traditional Birth Attendants are able to correct them (Baquero et al., 1981).

The study findings underscore the importance of strengthening the links between the home-based child deliveries that are often done by Traditional Birth Attendants and child deliveries done in modern hospitals. An effective and properly managed hospital referral system that acknowledges the co-existence of these two forms of health-care systems can contribute to safe home child-deliveries especially where modern health facilities are limited.

Conclusion

Government has made substantial investment in ensuring that free modern healthcare facilities are readily accessible. However, the facilities face numerous challenges which make people, particularly in rural areas, resort to home-based remedies. This paper has shown that village

people have techniques which they use in order to ascertain foetal status and foetal pose without using any equipment. While substantial number of respondents admitted that it is difficult to determine foetal status and foetal pose, some of the techniques used may be misleading. There is need for government and other stakeholders to make interventions to home-based maternal healthcare to ensure safe motherhood. For techniques that may be misleading, there is need to put intervention programmes to discourage their use. The programmes should also educate the rural masses on the good techniques that ensure safe motherhood. A wide knowledge of signs related to foetal pose and status shows that people have a wide knowledge and experiences on pregnancy-related issues, and that they are able to handle them effectively to some extent.

ACKNOWLEDGEMENTS

The authors would like to thank United Nations Educational and Scientific Council (UNESCO) people and plants programme for funding this work. We are grateful to Dr Robert Hoeft, Professor Eston Sambo, Dr Paul Munyenembe and Dr Stanley Khaila for the professional and intellectual support provided. We also thank Mulanje District Commissioner's Office, Mulanje District Hospital staff, Traditional Birth Attendants, Traditional Medical Practitioners, chiefs and people of Mulanje district for the valuable information provided.

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