Mathematical Analysis of the Roles of Traditional Birth Attendants in Kassena - Nankana East District in Upper East Region of Ghana

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Abstract

The purpose of the study was to analyse the roles of Traditional Birth Attendants (TBAs) in the Kassena - Nankana East District of the Upper East Region of Ghana. Primary data was collected by interviewing thirty (30) TBAs using a structured questionnaire coupled with personal interviews. The data collected was analysed using descriptive statistics with the help of Statistical Package for the Social Sciences (SPSS) and Microsoft Excel. The results showed that almost all the thirty (30) TBAs interviewed had enough knowledge in nutrition and medication; personal hygiene; exercise and breastfeeding. They claimed to perform the following roles: maternal delivery, antenatal care, family planning and education of pregnant and nursing mothers. Also, most members in their communities patronized their services and the reasons given were: financial constraints, bad nature of roads leading to health centres and long distances to health centres. The results showed that almost all the thirty (30) TBAs interviewed had enough knowledge in nutrition and medication; personal hygiene; exercise and breastfeeding. They claimed to perform the following roles: maternal delivery, antenatal care, family planning and education of pregnant and nursing mothers. Also, most members in their communities patronized their services and the reasons given were: financial constraints, bad nature of roads leading to health centres and long distances to health.
centres. Absence of delivery posts, lack of electricity, lack of respect by members of their communities and financial constraints were their challenges. The study revealed that TBAs play a key role in reducing maternal mortality in the Kassena-Nankana East District. It is therefore recommended that, the work of TBAs should be given adequate attention. Government and other stakeholders must give TBAs financial assistance to motivate them and acquire the necessary equipment in carrying out their duties. Rural electrification project should be extended to all the rural areas of the district to help in the service delivery of the TBAs. The government through the Ministry of Health must provide health posts for TBAs’ service delivery in the various villages within the district.

**Keywords:** Traditional Birth Attendants, Maternal Mortality, Maternal Mortality Ratio, Maternal Health Care

**Introduction**

Pregnancy and child birth are natural processes in every woman’s life. According to the Tenth International Classification of Diseases, maternal mortality is defined as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes” (WHO, 2004). Maternal mortality ratio is the number of women who die as a result of childbearing in a given year per 100,000 live births (WHO, 2004). A number of factors have been identified as the major causes of maternal mortality in developing countries: anaemia, haemorrhage, eclampsia, infections, abortions and complications of obstructed labour (Bisika, 2008). Maternal mortality is highest in Sub-Saharan Africa, where the lifetime risk of maternal death is 1 in 16, compared with 1 in 2800 in developed countries (WHO, 2005). In most rural areas of developing nations particularly, many women prefer to deliver within the family setting or in a setting provided by TBAs (WHO, 1998). A Traditional Birth Attendant is a person who assists a pregnant woman during child birth and initially acquired her skills by delivering babies herself or through apprenticeship to other traditional birth attendants (WHO 1992).

Leedam (1985) argued that a TBA learns her skills through apprenticeship that involves both observation and imitation in contrast to the didactic style of education of professional midwives typical of biomedical systems. Cotter et al (2006) revealed that health workers leave patients by themselves during labour pain at the health centres unlike the TBAs who stay with and help them bear their pains. Bergstrom and Goodburn (2001) asserted that traditional birth attendants
have been the main health care service providers in Africa as they attend to the majority of deliveries in rural areas of developing countries. Senah (2003) indicated that 585,000 women die annually from pregnancy related complications, and instructively the World Health Organisation pointed out that the global Maternal Mortality Ratio (MMR) stands at around 400 deaths per 100,000 live births, resulting in more than half a million maternal deaths each year (WHO, 2007). Ghana Demographic Health Survey Report prepared by the Ghana Statistical Service (GSS) found out that only 46% of births were delivered in health facilities in Ghana and (54%) occurred at home (GSS, 2003). For the fact that majority of births occur outside the health centres in Ghana, the paper sought to analyse the roles of traditional birth attendants (TBAs) in Kassena - Nankana District of Ghana in ensuring safe deliveries to reduce maternal mortality.

**Material and Methods**

Kassena - Nankana East district is one of the eighteen districts of the Upper East Region of Ghana. The district is located bordering Builsa District to the south east, the regional capital Bolgatanga to the East and Kassena - Nankana West district to the South western part of the Upper East region of Ghana. It has an estimated population of 130,388 with males constituting 48.5% and the females 51.5% (Ghana Statistical Service, 2000). The district has two hospitals at Navrongo and twelve (12) health centres/posts. Convenient sampling was the sampling technique used for the study since the TBAs were living at various locations away from each other making accessibility difficult. Thirty (30) TBAs were selected from a total of forty-one (41) TBAs in all the thirteen (13) communities in the district and interviewed using a structured questionnaire. The data collected was analysed using descriptive statistics with the help of Statistical Package for the Social Sciences (SPSS) and Microsoft Excel.

**Data Analysis, Results and Discussions**

**Demographic Characteristics of Respondents**

- **Ages of Respondents**

The TBAs were mainly matured women who were most likely to have life experience in child birth and maternal health care as shown in table 1 below:

<table>
<thead>
<tr>
<th>Ages of respondents in years</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>30</td>
<td>25</td>
<td>71</td>
<td>51</td>
<td>13.9</td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2013.*
• **Sexes Of Respondents**

The TBAs were mostly females as shown in figure 1 below:

**Figure 1: Sexes of Respondents**

![Pie Chart](image)

*Source: Field Survey, 2013*

• **Marital Status of Respondents**

80% of the respondents were married, 6.7% divorced and 13.3% widowed (See Figure 2)
Figure 2: Marital Status of respondents

Source: Field Survey, 2013

- Educational Levels Of Respondents

Figure 3: Educational Levels of Respondents

Level of Knowledge and Roles Performed by the Traditional Birth Attendants

Almost all the 30 Traditional Birth Attendants interviewed claimed to perform the following roles: maternal delivery, antenatal care, family planning and education of pregnant and nursing mothers. They also claimed to have enough knowledge in nutrition and medication; personal hygiene and sanitation; exercise and breastfeeding as shown in table 2 below:

**Table 2: Roles performed by TBAs in promoting maternal health care.**

<table>
<thead>
<tr>
<th>Form of Educational and Advisory Service</th>
<th>Frequency</th>
<th>Percentages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition and Medication</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>Personal Hygiene and Sanitation</td>
<td>27</td>
<td>90</td>
</tr>
<tr>
<td>Exercise</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>29</td>
<td>96.67</td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2013.*

Patronage of Services Offered by the Traditional Birth Attendants

All the 30 respondents asserted that there was a very high patronage of services offered by them in the district by their community members. The following were the reasons (See Fig 4)

**Figure 4: Reasons why services offered by TBAs are preferred to the normal health care**

*Source: Field Survey, 2013.*
Challenges Faced by TBAs in the Performance of their duties in the District.

(i) Absence of delivery posts

(ii) Lack of electricity in some villages

(iii) Lack of respect for Traditional Birth Attendants due to their low level of education.

(iv) Financial constraints due to the low economic status of clients

Conclusions and Recommendations

In conclusion, almost all the 30 Traditional Birth Attendants interviewed asserted to have enough knowledge in nutrition and medication; personal hygiene; exercise and breastfeeding. They claimed to perform the following roles: maternal delivery, antenatal care, family planning and education of pregnant and nursing mothers. Also, most members in their communities patronized their services and the reasons given were: financial constraints, bad nature of roads leading to health centres and long distances to health centres. Absence of delivery posts, lack of electricity, lack of respect by members of their communities and financial constraints were their challenges. The District Health Director admitted that the Traditional Birth Attendants were playing a key role in reducing maternal mortality in the Kassena - Nankana East District. It is therefore recommended that, the work of TBAs should be given adequate attention. Government and other stakeholders must give TBAs financial assistance to motivate them and acquire the necessary equipment in carrying out their duties. Rural electrification project should be extended to all the rural areas of the district to help in the service delivery of the TBAs. The government through the Ministry of Health must provide health posts for TBAs’ service delivery in the various villages within the district.

References


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