

ORIGINAL RESEARCH PRESENTATIONS

FACTORS CONTRIBUTING TO HOME DELIVERY IN KONGWA DISTRICT, DODOMA-SEPTEMBER, 2008

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ABSTRACT

Objectives

To determine factors contributing to home delivery in Kongwa District.

Methods: A community-based cross-sectional study was conducted in September 2009 in which women of child-bearing age were interviewed. The variables mainly included: accessibility of maternal health care, practicing TBA's, existence of beliefs, traditional practices and reasons for home delivery.

Results: Of the 400 respondents, majority (92.5%) had information about the presence of a Government health facility that provides maternal health care including delivery services. Two thirds of the respondents were found living more than 5 km away from the health facilities. Carts, bicycle and walking were the means of transport used by about 89% of the Pregnant Women in the District. Only a minority(9.5%) never attended the health facility for maternal health care.

TBA's were known to almost 90% of respondents. 65% of the respondents had once delivered at home from where 62% were assisted by TBA's, 34% by mothers, and 4% by husbands. The main reasons for home delivery included natural habits (57.7%) and unsatisfactory maternal health care (53.8%).

Conclusion: The proportion of women delivering at home in Kongwa district is high reflecting an inevitable high maternal mortality

ratio. Natural Habits, traditional practices and unsatisfactory maternal health care are the main factors contributing to the problem. Deliberate initiatives focusing on community-based maternal health education and improving the quality of maternal care in health facilities are needed to counteract these factors in order to scale up health facility deliveries and reduce maternal death.

INTRODUCTION.

The continuing rise of maternal mortality ratio (MMR) is mostly affecting the developing countries. It is estimated that 47% of global maternal mortalities occur in Africa with highest levels in sub-Saharan countries. 85% are direct results of complications arising during pregnancy, delivery or puerperium. In these countries, home deliveries are over 60% taking place largely in rural areas with unskilled attendants.

About 35% of women in developing countries receive no antenatal care during pregnancy; almost 50% give birth without skilled attendants and 70% receive no postpartum care. Tanzania is among the sub-Saharan countries with high maternal mortality ratios ranging from 578-960 per 100,000 live births. Of all deliveries only 53% occur in health facilities, the rest are home deliveries without skilled attendants.¹

Home delivery refers to childbirth taking place outside health facility, either at home or on the way to the health facility, without attendance of a skilled health service provider. Various factors such as social-economic conditions, delays

in providing adequate obstetric care and poor accessibility to maternal health care have been implicated in home deliveries and high maternal mortality in developing countries among which is Tanzania.

Although childbirth is a natural phenomenon, it is associated with risks and unforeseen complications which may result in death. Home delivery may only be possible in uncomplicated labours, once there are complications; these mothers need to be referred immediately to a nearby health facility. Very unfortunately, when complications arise, it is too late or the mother is so weak that she cannot deliver safely. As a result, such mothers die before, during or after delivery. If they happen to survive, they end up with missing babies or/and severe disabilities. Since it is difficult to predict the complications which may arise during child birth, *home delivery carries a high risk*. The high Maternal Mortality Ratios in Rural Tanzania like Kongwa District could be attributed to deliveries taking place without being attended by skilled health service providers either at home or on the way to a health facility.

There is a close relationship between high maternal mortality ratio and home deliveries, delay in recognizing the problems in pregnancy and late seeking of maternal health care. ² In most rural areas as it is in Kongwa District, women who deliver at home are assisted by Traditional Birth Attendants (TBA's), family members, friends or neighbours. Worse still, the deliveries are conducted in unhygienic environments predisposing the mothers and babies to postpartum and Neonatal sepsis. (ref)

METHODOLOGY

Study type

The study was descriptive cross-sectional.

Study variables.

Dependent Variables were: Age of respondent, Marital status, Education of the respondent and

Occupation of the respondent. Independent variables were: Accessibility of maternal health services, Practicing Traditional Birth Attendants (TBA's), reasons for home delivery, Existence of beliefs and traditional practices.

Sample size:

Since there was no known proportion, the standard proportion of 50% and allowed error of 2.5% were used to get the sample size of this study= 400

Study population:

The study population was the Women of childbearing age [15 – 49 years] except school girls (Primary and secondary school).

Sampling technique.

Study units were obtained from the community. All divisions were involved in the study. The sampling frame was the wards of Kongwa District. Two wards were picked randomly from each Division.

Lists of villages from each Ward were developed; thereafter one village from each ward was selected randomly by replacement. The number of women to be interviewed (sample units) were calculated from the known women of bearing age in the selected village as per 2002 National Census).

Tools

Structured Kiswahili version questionnaires comprising closed and open ended questions were used to interview eligible women. The questionnaires were pre-tested outside the study area before use.

Data analysis

Data were sorted manually, summarized and analyzed by computer using Excel / SPSS

RESULTS

Socio – Demographic Characteristics of Respondents

A total of 400 women in Kongwa District

participated in the study. 165 respondents (41.3%) were in the age group 25 – 34 years and 277 (69.3%), which is more than two thirds, had formal education. Married participants constituted 65% and 392 (98%), who were the majority of respondents, were peasants by occupation. Refer to Table 1.

Table 1: Socio-demographic characteristics of respondents (n=400).

Characteristics	n (%)
Area of residence (village)	
Msunjilile	82 (20.5)
Mautya	102 (25.5)
Norini	67 (16.75)
Mageseni	67 (16.75)
Vihingo	52 (14.0)
Manyata	52 (13.0)
Age group (years)	
15 - 24	150 (37.5)
25 - 34	165 (41.3)
35 - 49	85 (21.2)
14	
Marital status	
Single	97 (24.3)
Married	260 (65.0)
Others	43 (10.7)
Level of education	
Formal	277 (69.3)
Informal	123 (30.7)
Occupation	
Peasant	392 (98.0)
Employed	8 (2.0)

Accessibility of Maternal Health Service

Majority (370) which is 92.5% of women had information about the presence of Government health facilities while 30 (7.5%) had information about Private health facilities and TBA's.

About 177 (44.3%) respondents were living 5 – 10 km from a health facility. Figure 1 Regarding the means of transport used to reach health facilities, 227 respondents (56.8%) used cart and bicycle. A small number of respondents 47 (11.8%) used a car/bus to reach a health facility. Of the 400 interviewed respondents, about 184 (46%) spent more than 1 – 2 hours to reach the nearest health facility.

In terms of cost of transport incurred by respondents to reach a health facility, 168 (42%) spent about 1000 – 5000 TSh., 95 (23.8%) said they could not afford the cost of transport. **Cost of transport was the only significant predictor of where to seek delivery services ($p < 0.001$).** Table 2 shows the results.

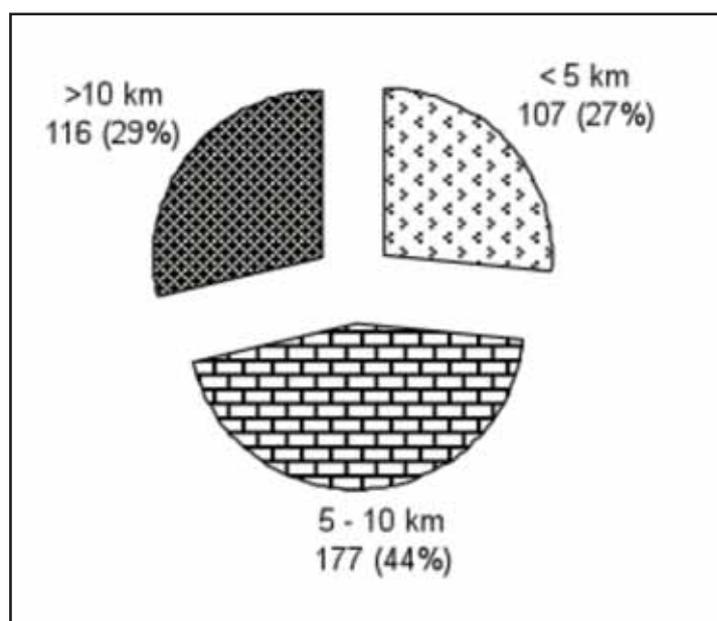


Figure 1: Distribution showing distance from nearest health facility (n = 400).

Table 2: Relationship between place where delivery services were sought and selected respondent characteristics (n=400)

Characteristics	Total	Place delivery services sought			χ^2	P-value
		GHF (n=370)	PHF (n=15)	TBA's (n=15)		
Distance from health facility (km)						
< 5 km	107	100 (27.1)	4 (26.7)	3 (20.0)		
5 – 10 km	177	157 (42.4)	10 (66.7)	10 (66.7)		
> 10	116	113 (30.5)	1 (6.7)	2 (13.4)	8.101	0.088
Means of transport						
Car/bus	47	44 (11.9)	3 (20.0)	0 (0.0)		
Cart/bicycle	227	213 (57.6)	5 (33.3)	9 (60.0)		
On foot	126	113 (30.5)	7 (46.7)	6 (40.0)	5.706	0.222
Time spent to reach health facility (hrs)						
< 1hour	63	58 (15.7)	3 (20.0)	2 (13.3)		
1 – 2 hours	184	171 (46.2)	9 (60.0)	4 (26.7)		
> 2 hours	153	141 (38.1)	3 (20.0)	9 (60.0)	5.254	0.262

<i>Cost of transport (Tshs)</i>						
< 1000	166	148 (40.0)	9 (60.0)	9 (60.0)		
1000 – 5000	168	163 (44.1)	1 (6.7)	4 (26.7)		
5000 +	66	59 (15.9)	5 (33.3)	2 (13.3)	32.38	0.000

**GHF* – Government health facility

**PHF* – Private health facility

**TBA's* – Traditional Birth Attendants

Level of satisfaction on delivery services provided

335 (83.8%) of respondents, which is the majority, recommended that the services provided were satisfactory. About 38 (9.5%) of all respondents said they don't know the quality of services provided by the health facility. Table 3

Regarding medical supplies related to childbirth, majority i.e. 313 (78.3%) of respondents said medical supplies were available. Figure 2

Table 3: Opinion on the quality of services provided by the health facility and selected characteristics (n=400)

<i>Characteristics</i>	Total	Nature of quality			χ^2	P-value
		Satisfactory	Not satisfactory	Don't know		
<i>Level of education</i>						
Formal	277	227 (81.9)	24 (8.7)	26 (9.4)		
Informal	123	108 (87.8)	3 (2.4)	12 (9.8)	5.251	0.072
<i>Occupation</i>						
Peasant	392	329 (83.9)	26 (6.6)	37 (9.4)		
Employed	8	6 (75.0)	1 (12.5)	1 (12.5)	0.552	0.759
<i>Distance from health facility (km)</i>						
< 5 km	107	88 (82.2)	9 (8.4)	10 (9.3)		
5 – 10 km	177	148 (83.6)	8 (4.5)	21 (11.9)		
> 10	116	99 (85.3)	10 (8.6)	7 (6.0)	4.918	0.296
<i>Means of transport</i>						
Car/bus	47	40 (85.1)	4 (8.5)	3 (6.4)		
Cart/bicycle	227	193 (85.0)	14 (6.2)	20 (8.8)		
On foot	126	102 (81.0)	9 (7.9)	15 (11.9)	1.892	0.756

<i>Time spent to reach health facility (hrs)</i>						
< 1hour	63	52 (82.5)	3 (4.8)	8 (12.7)		
1 – 2 hours	184	152 (82.6)	18 (9.8)	14 (7.6)		
> 2 hours	153	131 (85.6)	6 (3.9)	16 (10.5)	6.312	0.177
<i>Cost of transport (Tshs)</i>						
< 1000	166	130 (38.8)	16 (59.3)	20 (52.6)		
1000 – 5000	168	145 (86.3)	7 (4.2)	16 (9.5)		
5000 +	66	60 (90.9)	4 (6.1)	2 (3.0)	9.184	0.168

Existence of practicing TBA's

Majority of respondents 315 (78.8%) knew who TBA's are. About 362 (90.5%) said they had TBA's in their village. Of these TBA's, majority 352 (97.2%) were conducting deliveries. More than half i.e. 198 (56.3%) of TBA's conducting deliveries were trained.

Regarding home deliveries, it was observed that, out of 400 study subjects, 260 (65%) reported to have delivered at home or on the way to a health facility. Of those who had delivered at home or on the way to health facility, about 160 (62%) had been delivered by Traditional Birth Attendants.

Beliefs and traditional practices regarding home deliveries

Nearly two thirds i.e. 259 (64.8%) of all respondents had taboos or traditional practices related to pregnancy. Of 259 respondents with taboos or traditional practice related to pregnancy, about 163 (62.9%) had traditional ceremonies after childbirth especially after the first childbirth.

Table 5 shows relationship between level of education and beliefs or traditional practices regarding home deliveries. There was no statistical significance between respondents with formal and informal education regarding the taboos/traditional practices ($p>0.05$)

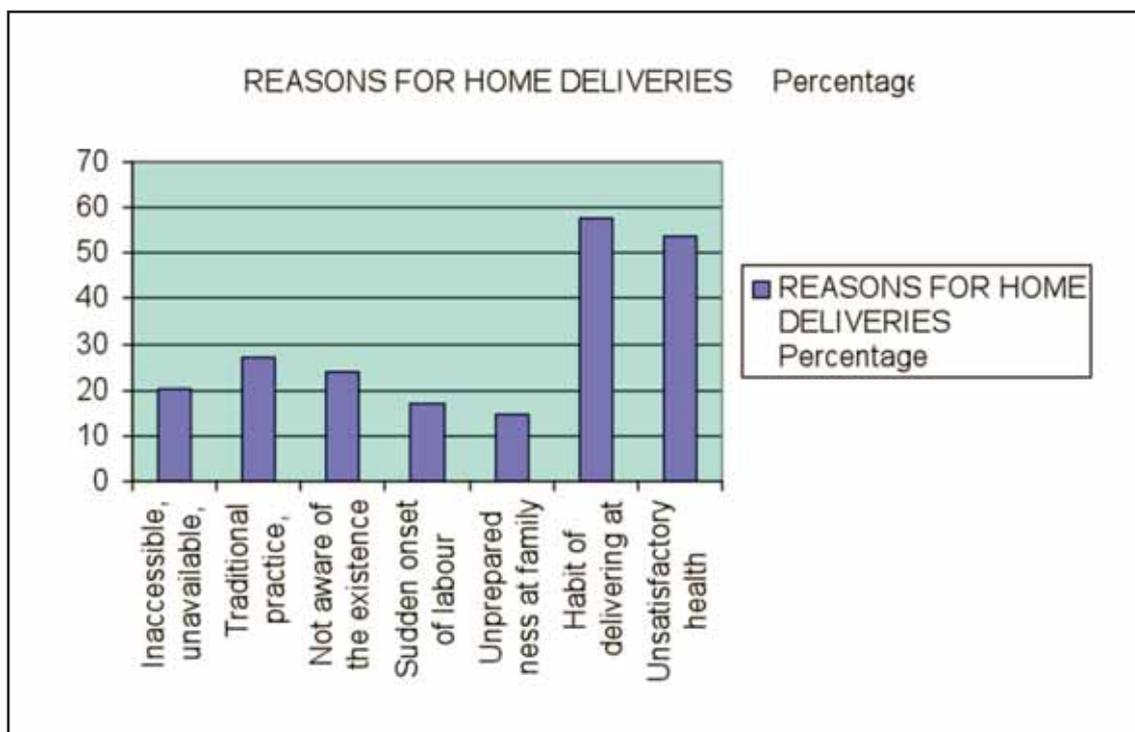
Table 5: Relationship between taboos/traditional practice and level of education (n=259)

Believes /traditional practice	Level of education n (%)		Total
	Informal	Formal	
Traditional ceremonies after childbirth especially first childbirth	104 (63.8)	59 (36.2)	163
Still birth related to ritual broken by a woman during pregnancy	46 (68.7)	21 (31.3)	67
Pregnant women don't like to be examined by male staff	31 (65.9)	16 (34.1)	47
Trust on traditional medicine taken orally, rubbed over the abdomen	30 (73.2)	11 (26.8)	41
Manipulation of the birth canal	61 (66.3)	31 (33.7)	92
Preference of squatting position to lithotomic	22 (78.6)	6 (21.4)	28
Prolonged labor related to infidelity of husband during pregnancy	18 (66.7)	9 (33.3)	27
Disposal of placenta and cord ceremonies only possible at home environment	45 (77.6)	13 (22.4)	58
Hospital environment are for indoor people and terrifying for rural women	69 (65.7)	36 (34.3)	105
Pregnant women should not be delivered by young unmarried girl	21 (77.8)	6 (22.2)	27

* *Multiple responses on the taboos/traditional practice*

Reasons for home delivery

More than half of respondents i.e. 150 (57.7%) and 140 (53.8%) delivered at home due to the habit of delivering at home and unsatisfactory health services given at the health facilities respectively.



DISCUSSION

Childbirth taking place at home or on the way to health facility is still common in rural areas as observed in this study.

It is an important problem because such deliveries are associated with maternal and neonatal morbidity and mortality

Accessibility of maternal health services.

This study's findings correlate with the study done by family health International in Tanzania which found that 80% of women live more than 5km from health facility and that walking is the main means of transport even for pregnant women. The findings also correspond to the study done by PRICE (1984)¹³ in Tanzania which found that 84% of women who deliver at home intended to deliver in health facility but could not do so because of distance. And also

in agreement with study done in Zambia in 2003 which pointed out people just do not have the money to pay the transportation costs.¹⁴

These findings indicate that, although health facilities are available in most of the rural areas, it is still difficult to utilize the services, most likely due to distance and cost of transport. To avoid such costs and disturbances, women decide to give birth at home and only facilities and other life threatening complications.

Existence of practicing TBA's

Of all women who were interviewed, about 90.5% agreed that TBA's exist in their villages and almost all women (97.2%) knew that TBA's conduct deliveries in their villages. Although their help is only limited to uncomplicated labors, women still like them probably because they are familiar, they are polite and they are recognized

and flexible in payment. Furthermore, TBA's do not ask for medicine, new clothes, soap or items like gloves, cotton wool necessary during childbirth as often happens in health facilities. This finding indicates that TBA's will continue to practice despite their services carrying high risks of complications simply because they are easily accessible and friendly.

Believes and Traditional Practices Related to Pregnancy and Child Birth

Of all the respondents, nearly two thirds (64.8%) had taboos or traditional practices related to pregnancy and childbirth.

These findings are in agreement with other previous studies done in Zambia (2003) ¹⁶and other African countries which describes clearly that, over 60% of rural women have strong adherence to traditional practices, customs and taboos. Some of these practices like drinking herbs and inserting stuff in the birth canal delay access of the pregnant women to maternal health care. To some women in the African community, it is a taboo to be delivered by a young unmarried girl (Nurse Midwife), so they opt to deliver at home where older traditional birth attendants would attend to them.

This finding shows that ignorance is still a problem of most of pregnant women and that emphasis should be directed towards community based maternal health education.

Reasons for home delivery

Women who deliver at home have reasons which should not to be ignored. Of all home deliveries i.e. 260 (65%), about 62% were conducted by TBA's; 34% by mothers and in-laws and 4% by husbands. The main reasons given by more than half of the women who delivered at home were: habit of home delivery (57.7%) and unsatisfactory health services (53.8%).

These findings are contrary to MDG 5 which insists that, all childbirth should be assisted by skilled attendants at 80% by 2005, 85% by 2010 and 90% by 2015, **and** higher than the results from the National survey (TDHS) which found that, 53% of all births take place at home. Of these, 31% are assisted by relatives, 19% by TBA's and 3% without assistants

CONCLUSION

Maternal Health Services in Kongwa District are provided mainly by government health facilities. About two thirds of women live more than 5km away from health facilities.

Almost all women in Kongwa District know about Traditional Birth Attendants. More than half of deliveries that take place at home are conducted by TBA's followed by mothers and a small proportion by husbands. Taboo and traditional practices exist among women in the District and cause women to diverge from the road **to maternal health**.

This study has shown that majority of women continue to deliver outside the hospital setting without skilled births attendants. Such home deliveries take these women on the **road to maternal death**. Therefore appropriate interventions have to be initiated to counteract these factors, which contribute to home delivery and its consequences in Kongwa District

Recommendations:

1. Community awareness needs to be raised on maternal health seeking behavior and families and community in general need to be prepared for means of transport or transport costs
2. Community-based health education should continue to focus on discouraging some of the non-beneficial traditional practices, and promote modern evidence-based practices.

3. Practicing TBA`s should be advised and encouraged to direct or counsel their clients (pregnant women) to attend nearby health facilities once they are consulted for help.
 4. Health facility should be a functional unit for maternal health care equipped with skilled and motivated staff, essential drugs and supplies to provide basic and comprehensive obstetric care.
 5. The infrastructure and environment of the health facility should be friendly and inviting.
 6. The government and policy makers should deliberately motivate health staff and facilitate intersectoral collaboration among other stakeholders to counteract crosscutting issues.
- Family care International (FCI), Safe motherhood Inter- Agency Group (IAG) 2002, PRICE
- World health report on home deliveries related maternal deaths. Dakar, 2002 October
- Nepal National Demographic Survey March 2008 Vol.1
- World Health Organization Health topics www. Afro. Who. Int/drh/index. Html accessed on 12 April 2008
- Zambia Demographic Health Survey (2003)
- Nada Chaya, Population Nation International, 2005
- The National Road Map Strategic plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania, MoH April 2008 (3-5)

REFERENCES

- Mohan N. Maternal Mortality in Islamic and Arabic Countries Journal of health, 2005 volume 4 No. 1
- Adhikari I, Maternal Mortality at alarming level in Nepal, world disaster report December 2006
- Tanzania Demographic Health Survey 2004/05, Tanzania Reproductive and child health report= 2004/05
- WHO, mother Baby Package, Safe motherhood division of family planning
- MDG, World Report 2005
Tanzania Reproductive and child health Report – 2004/05
- Keshab p, How to make the women like safe, Kathmandu University medical Journal 2006 September-December.
- Nassah B., Mati; J. Kasondi J. Contemporary issues on maternal health
- Safe motherhood Newsletter of worldwide services issue 25, 1999
- Maternal mortality in Africa 2006 Volume 83, 6th June
- World health Organization bulletin volume 83 Number 6, 2005
- Dar es Salaam initiative for Reduction of maternal and perinatal mortality report 2007.