Knowledge Attitude and Practice Towards Skilled Care Attendance among Women of Reproductive Age Group in Eritrea

Ghirmay A.Michael, MD, MPH 1, Andrew M. Kosia MD, PhD 1, Abdulmumini Usman MBBS, PhD 1, Prof Jacob Mufunda 2, Prof. Peter Nyarang'o 2.

Institutional affiliation:

- 1 WHO Eritrea Country Office Eritrea, Asmara.
- 2 Orotta School of Medicine, Asmara, Eritrea.
- Corresponding author: Dr Ghirmay A. Michael, email address:

Abstract

Introduction: Maternal Mortality Ratio (MMR) in Eritrea is one of the highest in the world. According to the EDHS of 1995, the MMR in Eritrea was 998 per 100,000. The MMR estimation of WHO/UNFPA/UNICEF for Eritrea is 630/100,000 live births. The Government of Eritrea in collaboration with its partners are implementing the Road Map for accelerating the reduction of maternal and neonatal mortality in Eritrea.

Objective: To assess the Knowledge, Attitude and Practice (KAP) on the utilization of maternal and child health information and services among women of reproductive age group.

Methods: A cross sectional community based study using standard questionnaire was conducted in three zones of Eritrea in April 2006 on 851 women in reproductive age group residing in 33 villages randomly selected. At 28% skilled care attendance rate and 95% confidence interval, the sample size was calculated to be 927. The response rate was 851 (91.8%) of the sample size.

Results: A total of 851 (92%) women were interviewed and majority 652 (76.9%) were Moslems and the rest were Christians. About two-third (59.3%) of the women had no formal education. 88.7% of the respondents were housewives. 13.6% of the total 788 respondents had at least one abortion. Excessive bleeding was one of the leading causes of maternal death. The symptoms of mothers at the time of death as mentioned by the interviewed women were excessive bleeding for 18.8%, fast breathing for 12.5%, fever for 6.3% and others for 62.5%.

Gash Barka zone hah the lowest skilled care attendance (SCA) (23.6%) as compared to the other two zones Northern Red Sea 39.3% and Southern Red sea (47.2%). Orthodox Christians had a higher level of SCA at birth (58.0%) as compared to (30.4%). Unmarried women have a higher level of SCA (66.0%) as compared to married women (35.3%). The study also elucidated that as educational level increases the SCA at birth also increases from 24.3% among uneducated women to 83.9% among those with grade 10-12. There was no significant change of SCA by age.

Conclusion: The study revealed that skilled care attendance at birth is still very low as compared to other countries and bleeding is the major cause of maternal death. Education of women is crucial for service utilization. It is recommended that husbands should be targeted for Behavioral Change Communication and women to be empowered to make a decision of their destiny.

Introduction

Maternal Mortality in Eritrea is one of the highest in the world. According to the EDHS 1995, the Maternal Mortality Ratio (MMR) was 998 per 100,000 live births 1. UNICEF, WHO and UNFPA estimates of MMR in Eritrea is 630/100,000 live births 2, and another study in 2004 revealed MMR to be 752/100,000 live births 3.

The major causes of maternal mortality and morbidity globally are pregnancy-induced hypertension, hemorrhages, obstructed labor, complications of abortions and sepsis. Abortions and their complications, obstructed/prolonged labor, puerperal sepsis and its complications, pre-eclampsia and eclampsia, and hemorrhages, all in order of frequency of occurrence are the main causes of maternal mortality in Eritrea and are contributing to about 75% of maternal deaths.

Service utilization for skilled attendance during delivery in Eritrea is very low, and the low delivery coverage is contributing to high maternal and infant (neonatal) morbidity and mortality. Maternal death in Eritrea happens during delivery (25%), and within 24 hours after delivery (45%) 3.

The major pillars of safe motherhood and the road to maternal health are quality antenatal care, skilled assistance during delivery, capacity to perform emergency obstetric care (EmOC), and family planning to reduce risk and prevent unwanted pregnancy amongst those at risk. It requires a coordinated multi-sectoral approach and response to these service delivery components effectively addressed to reduce maternal mortality.

However, modest strides have been recorded, although, at low pace, on maternal health service utilization between 1995 and 2002. Antenatal coverage has increased from 49% to 70%, and skilled assisted delivery in health facilities has increased from 21% to 28% and to 34 now (HMIS 2005) 4. How this has impacted on the maternal mortality ratio need to be investigated, but reports from hospital sources indicate that the same period could have witnessed a reduction.

The purpose of this study therefore was to assess Knowledge, Attitude and Practice (KAP) of mothers towards Antenatal Care and Skilled Care Attendance (SCA) during pregnancy and childbirth and make

47

JOURNAL OF ERITREAN MEDICAL ASSOCIATION JEMA practical recommendations for the improvement of services and increase in skilled care attendance during pregnancy and childbirth.

Methods

The study was a community based cross-sectional among 851 women of reproductive age group in Gash Barka, Northern and Southern Red Sea Zones of Eritrea. The study population included all women of reproductive age group residing in the 848 randomly selected households in the 33 clusters of villages chosen randomly.

At 28% skilled care attendance and 95% confidence interval, the sample size was calculated at 927. A questionnaire was developed in English and translated to Tigrigna and translated back to English to confirm its consistency. Training of data collectors was done and pre-testing conducted.

The study was conducted over a period of one month in April 2006. A verbal consent was obtained from the study subjects to participate in the study after explaining the purpose of the study. A regular supervision was done through out the study period.

Rates, ratios, frequencies, tables and charts were used to present the results. EPI-INFO and SPSS version 12.0 was used to analyze the data.

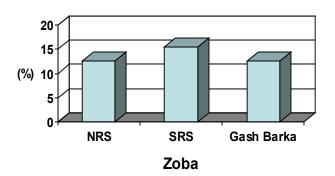
Results

A total of 851 mothers from three Zobas namely Gash Barka, Northern and Southern Red Sea Zone participated in the study. Majority of the mothers were house wives (88.7%) and with no formal education in 59.3% of the studied subjects. Only 3 mothers that is (0.4%) of the study subjects had higher education, education above 12th grade.

Majority of the mothers interviewed (94.5%) were married. The number of pregnancies (gravidity) per woman was inversely proportional to the level of education. Grand multi-parity (having children more than 4) was 38.6% among those who have no education and 13.8% among those who reached grade 10-12. Those who were employed had less grand multi-parity rate (16.0%) as compared to those who were not employed (34.9%). Moslems had a high grand multi-parity rate (36.0%) as compared to Christians (22.7%).

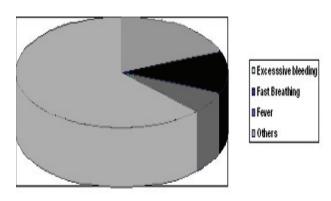
Abortion rate in the three Zobas is very high ranging from 12.6% in Gash Barka and Northern Red Sea Zobas to 15.4% in Southern Red Sea Zoba (Figure-1).

Figure-1 Abortion Rate By Zoba 2006



Out of the 603 mothers who responded, 26 (4.3%) have reported maternal mortality in their family. The major cause identified was excessive bleeding (18.8%), followed by fast breathing (12.5%) and fever (6.3%). The rest gave other different symptoms at the time of the death of the mother (Pie-Chart 1).

Chart-1 Symptoms at time of death of mother 2006



Gash Barka has the lowest SCA, only 64 (23.6%) of the total 271 interviewed said that they had SCA. Northern Red Sea has a SCA of 39.3% and Southern Red Sea 47.2%.

SCA at birth declines with increase in number of gravidity, among those who became pregnant for less than five times the skilled attendance at birth is 40.4% while in those who are pregnant for five and more skilled care attendance at birth is 31.8%.

Christian women used SCA services more frequenty (58.0%) than Moslem women (30.4%). at birth. Moreover, those who were not married used oftener SCA (66.0%) as compared to those who are married (35.3%). Employed women ((54.6%) used SCA attendance more than the unmarried ones (34.7%). Level of education has a marked influence on the skilled care attendance during childbirth. SCA during childbirth was higher in those who had no formal education (24.3%) as compared to those who had educational level ((83.9%) of 10th to 12th grade. However there is no significant difference among women of different age group concerning skilled care attendance during childbirth.

A significant number of women (40.6%) who preferred to deliver in a health facility have delivered at home. Majority of mothers who preferred to deliver at health facility, prefer to deliver in a hospital rather than in a health center, health station or a clinic. 89.2% of those who delivered in a health facility were attended by a skilled health worker (skilled being defined as physicians, midwives, nurses and health assistants who had a midwifery skill). Among those who delivered at home were attended to by a skilled health worker. This implies that a small proportion of home deliveries were attended by skilled health workers.

Concerning decision making for delivering in the health facility, predominantly it was a joint decision by

JOURNAL OF ERITREAN MEDICAL ASSOCIATION JEMA the mother and her husband (66.9%), while two thirds reported that they decided by themselves and one half said that the sole decision making power was that of their husbands. The decision by husband to deliver at health facilities is higher among Moslems (18.4%) as compared to 1.9% among orthodox Christians. Decision making power to deliver at health facility is higher among employed women (73.8%) as compared to those who are not employed (56.0%).

The three main reasons given for choice of delivery were cultural belief, distance and lack of transport facilities to reach the nearest health facilities. Gender and attitude of health workers does not seem to affect the utilization of the health services.

Very low percentage (1.5% in Gash Barka, 0.0% in Northern Red Sea, and 1.5% in Southern Red Sea) mentioned health workers attitude to be a barrier for the utilization of health services. Gender influence was 0.5% in Gash Barka, 2.3% in Northern Red Sea and 0.7% in Southern Red Sea. A small number mentioned gender and attitude of health workers to be the barrier for utilization of health services, 20.3% of women in Gash Barka, 12.5% in Northern Red Sea and 7.0% in Southern Red Sea zones suggested that the gender of the health worker should be female if they are to use the health services.

Knowledge of the advantage of delivering at health facilities was high in all three Zobas ranging from 78.9% in Gash Barka to 86.7% in Southern Red Sea Zone. Northern Red sea Zone scored 83.8%. The knowledge among Moslems was 81.0% and among Christians 91.8%. The knowledge of the advantages of delivering at health facility increased with education, from 78.2% among those who were not formally educated to 93.1% among those who ha reached 10-12th grade.

The prevalence of FGM in the three Zobas as compared to the EDHS 2002 was declining, ranging from 50.0% in women less than 25 years of age up to 69.9% among women 35 years and above. The practice was higher among Moslems (71.9%) as compared to 40.2% among Christians. Gash Barka had the lowest FGM rate 53.1% as compared to Northern Red sea which was 65.2% and Northern Red Sea 73.0%.

Discussion

SCA during pregnancy and childbirth is crucial for the survival of mothers and children. Despite the increase in physical access to health services, the utilization of the services including skilled care attendance is still very low. This is a similar phenomenon in most developing countries including Eritrea.

Abortion rate in the three Zobas studied was very high. This can be attributed to the low contraceptive prevalence rate (CPR) that Eritrea has. This tended to lead to unwanted pregnancies and ultimately abortions.

The disparity between religions, educational background, marital status and employment showed that utilization of health services is dependent on wide spectrum of socio-cultural, economic and political context of the population. This requires a systematic and tireless effort to bring about sustainable positive

changes in the community.

Women have to be empowered to make a decision of their own lives, as elucidated in this study and various studies in other countries, men (husbands) made a greater influence in the decision of where to deliver. This requires involvement of men in the reproductive health programs to orient and bring about a positive behavioral change towards utilization of health services. Moslem husbands have to be targeted for IEC and BCC activities in the communities.

The other main barriers for women not to use the existing health services are cultural beliefs, distance of the health facilities and lack of transportation facilities. This entails the need for a concerted effort for making health services not only physically but economically and culturally accessible to all women of Eritrea.

The perceived quality of health services according to the women of reproductive age group which were interviewed during the study, will improve with change in the gender and attitude of the health workers providing delivery services, improving privacy and cleanliness of the health facilities and provision of transportation services. These issues have to be so as to improve the utilization of the health services available.

The knowledge about the advantage of delivering at health facilities is high, but utilization is still low.

Conclusion

Skilled care attendance at birth is still very low in Eritrea. Many factors are contributing to the sustained low skilled care attendance, some of which are deep socio-cultural belief that a mother should deliver at her own home, distance and lack of transportation facilities to reach the health facilities, attitude and gender of health workers, perceived poor quality of services and lack of decision making power of the mothers.

The factors which are barriers and are affecting the utilization of the existing health services should be addressed systematically if the skilled care attendance at birth is to improve.

References:

- Eritrean Demographic and Health Survey, Macro-Incorporation, 1995.
- WHO/UNICEF/UNFPA global estimation on maternal mortality, 2004.
- Dr. Mismay G. Doctoral Thesis on maternal mortality in Eritrea determinants and factors, 2004.
- 4. Ministry of health of Eritrea, Health Management Information System (HMIS) report 2005.