



LEVEL OF UTILIZATION OF MATERNAL HEALTH CARE SERVICES IN EASTLEIGH HEALTH CENTRE

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Abstract: World Health Organization approximates that every year about 210 million women conceive; approximately 30 million develop complications; and 515,000 die. KDHS 2008 shows that in Kenya, more women are dying of pregnancy and childbirth related causes than was the case in 2003. In 2008, reported maternal deaths were 488 per 100,000 live births compared to 412 per 100,000 live births reported in 2003. Utilization of maternal healthcare services is low in various parts of the country. This study therefore sought to determine the level of utilization of antenatal care, skilled delivery attendants and postnatal care services at Eastleigh health centre. The specific objectives of this study were to identify the socio-demographic characteristic of the antenatal and postnatal clients in Eastleigh health centre and to identify factors that affect utilization of antenatal care, use of skilled delivery attendants and postnatal care services in Eastleigh health centre. The study design of this study was hospital based cross-sectional study. The data was collected using questionnaires. The study population included all women who are in reproductive age group residing in the selected Eastleigh Area and attending the health facility for their antenatal care services. The sample size of this study was 129 women aged 15 to 49 years who attend Eastleigh health centre for antenatal care services. Random sampling was used and a systematic interval procedure was adopted. Available information on the data collected was checked for internal consistency and completeness and it was coded and analyzed using Statistical package for Social Scientist (SPSS) and presented in Tables, charts, Graphs and interpreted by rates and proportions. The study established that most of the mothers attending Eastleigh health centre sought for antenatal care from skilled providers. However, they only sought for ANC for 2 times only. In addition, the mothers had sought for ANC when they were between 6 and 9 months pregnant. Further, most of the mothers had delivered in a healthcare facility, although a good number had delivered at home. The study also found that the factors that affect the utilization of the maternal health care services include religion, employment status, income level marital status, age, and distance to the health care centre. In order to improve access to the free maternal health care, government should put up health services as close as possible to the community where the people live. In addition, the ministry of health should ensure that all health facilities have enough essential drugs to avoid cases where women are referred drugs from private pharmacy this contribute as a barrier to women. Further, Barriers such as long waiting time, lack of drugs, and inadequate number of staff need to be looked at by the hospital authorities so as to provide a good conducive atmosphere to the clients.

Key Words: Utilization, Healthcare Services, Skilled Delivery, Antenatal Care, Postnatal Care

Introduction

Worldwide, approximately 800 women die every day from preventable causes related to pregnancy and childbirth. In 2010, about 287,000 women died worldwide during and following pregnancy and childbirth. Though this is a decline of 47% from the 1990 level, it is still far from the 2015 Millennium Development Goal (MDG). The fifth MDG calls for a reduction in the maternal Mortality ratio by 75% between 1990 and 2015. Despite proven interventions that could prevent death or disability during pregnancy and childbirth, maternal Mortality remains a major burden in many developing Countries, and the maternal mortality disparity between developing and developed countries is very high. The maternal mortality ratio (MMR) in developing Regions is 15 times higher than in the developed regions (WHO & UN 2012) and sub Saharan African countries have the highest MMR in the world with an average of 500 maternal Deaths per 100,000 live births, accounting for half of the World's total maternal deaths (WHO & UNFPA 2012). Most women die because they give birth without the attendance of a skilled health worker. Evidence shows that high maternal, neonatal and child Mortality rates are associated with inadequate and poor utilization of maternal health care (Carroli, Rooney & Villar). As a result, the use of ANC, skilled delivery attendants and PNC are recognized as key maternal health services to improve health Outcomes for women and children (WHO et al, 2012). The antenatal period is critically important for reaching Women with interventions and information that promote Health, wellbeing and survival of mothers as well as their babies.

Evidence-based antenatal care (ANC) is effective in reducing the unfavorable health outcomes during pregnancy and postpartum (Carroli et al., 2001). With this aim, the World Health Organization (WHO) recommends the introduction of standards of care and improvements in the ANC process (WHO, 2007). Evaluation of quality of care is a key component of the process, allowing the identification of the areas of opportunity and potential gains of introducing improvements. In low-resource settings, assessment of the quality of care is not conducted in a routine basis because it requires defined indicators and access to relevant clinical information. However, the rates of maternal and neonatal complications and deaths during pregnancy and delivery are higher than expected (Lazano et al., 2011). Maternal health is not only a woman's issue; a mother's health has a direct bearing on the health of the new-born as well. The majority of pregnancies are normal, but about 15 percent of all pregnant women experience life-threatening pregnancy-related complications. Complications of pregnancy and childbirth are among the leading causes of morbidity and mortality among Kenyan women. Recent estimates suggest that there are 488 maternal deaths per 100,000 live births (KNBS & ICF, 2010).

Hospital records and hospital-based studies conclude that the majority of these deaths are due to one or more preventable direct obstetric complications. Postpartum hemorrhage (PPH) is the most common causes of maternal deaths in sub-Saharan Africa. Other direct causes are puerperal sepsis/infections, hypertensive disorders, obstructed labor//ruptured uterus, and complications of unsafe abortions, major indirect causes are severe anemia, malaria HIV/AIDS, and tuberculosis. Also, for every woman who dies, 30 others are maimed by potentially lifelong disability such as obstetric fistula.

The 2008-09 Kenya Demographic and Health Survey(KDHS 2008-09) found that less than half (47percent) of all pregnant women make the recommended four or more ANC visits. Sixty

percent of urban women make four or more ANC visits compared with less than half (44 percent) of rural women. The data further shows that most women do not receive antenatal care early in the pregnancy; the median number of months at first visit is 5.7 (KNBS & ICF, 2010).

Tetanus toxoid injection is given to mothers to prevent neonatal tetanus, which previously was a major cause of infant mortality. Malaria is among the common indirect causes of poor maternal health outcomes and only 14 percent received intermittent preventive treatment (IPTp), defined as treatment with two or more doses of SP/Fansider, at least one of which was during an ANC visit.

Despite the high antenatal care attendance, the rate of delivery in a health facility is low. Only 43 percent of live births in the five years preceding the 2008-09 KDHS took place in a health facility (KDHS and ICF macro, 2010). Urban women (75 percent, versus 35 percent of rural women) and those with secondary school education and above were most likely to deliver in a health facility. The older a woman was when she delivered, the less likely that she delivered in a health facility.

The policy objective of maternal health framework of the health sector is to reduce health inequalities and reverse the downward trend in health-related outcome and impact indicators (NHSSP 11). Ensuring access to the Minimum Health Care Package is the central strategy to this end. This same policy statement describes the minimum package for reproductive health and rights.

The national reproductive health policy, enhancing reproductive health status for all Kenyans, October 2007, has the following; increasing equitable access to reproductive health services; improving the quality, efficiency, and effectiveness of service delivery at all levels; and improving responsiveness to client needs. Also, the Kenya vision 2030 highlights key goal in maternal health as to reduce the maternal mortality ratio from 488 deaths per 100,000 live births in 2008-09 to 147 deaths per 100,000 live births by 2012.

Statement of the Problem

More than 150 million women become pregnant in developing countries each year and an estimated 500,000 of them die from maternal mortality. Maternal mortality is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy irrespective of the site and duration of pregnancy from any acutely related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. The risk of maternal mortality is also related to the mother's previous health and nutritional status, issues of gender discrimination, and access to health services. Adolescent pregnancy carries a higher risk due to the danger of incomplete development of the pelvis, and there is a higher prevalence of hypertensive disorders among young mothers. Frequent pregnancies also carry a higher risk of maternal and infant death. Maternal health problems are also the causes for more than seven million pregnancies to result in stillbirths or infant deaths within the first week of life. Maternal death, of a woman in reproductive age, has a further impact by causing grave economic and social hardship for her family and community. Lack of access to modern health care services has great impact on increasing maternal death. Most pregnant women do not receive antenatal care; deliver without the assistance of trained health workers etc. The major determinants of maternal

morbidity and mortality include pregnancy, the development of pregnancy-related complications, including complications from abortion and, the management of pregnancy, delivery, and the postpartum period. The most common client concern during ANC visit is the waiting time to see a provider, the attitude of the provider toward them and the cost of services as major problems. The research answers the following questions related to utilization of maternal care services in Eastleigh health center:

1. What is the level of utilization of ANC, delivery and PNC service in Eastleigh health centre?
2. Which factors (such as availability of ANC, PNC, Delivery facility, infrastructure and resources that support level of utilization) related to antenatal health care service in Eastleigh health centre?"

Materials and Methods

The study was conducted at Eastleigh health center which is level 3 health facility under the ministry of local government that is located at kamukunji Sub County in Nairobi County. The health centre provides all serves to the community within that locality. The facility has a workforce of clinical officers, nurses, laboratory staff, pharmacy staff and subordinate staff employed by ministry of local government and ministry of health.

This was a hospital based cross- sectional study. The study population included all women who are in reproductive age group residing in the selected Eastleigh Area and attending the health facility for their antenatal care services. Fisher et al. (1998) formula was used to calculate the sample below:

$$n = \frac{Z^2 pq}{E^2}$$

Where n=minimum sample size, z = standard deviation corresponding to 95% confidence interval (z= 1.96), p= Prevalence (0.5), q(1- p) =0.5, d= type 1 error (alpha =0.05)

$$n = \frac{1.96^2 * 0.5 * 0.5}{0.05 * 0.05}$$

$$n = 384$$

Since the total population (N) is less than 10000 in this case the (N = 130), the finite correction (nf) was required.

$$nf = n / 1 + (n/N)$$

Where; *nf*=the final sample size, when population is less than 10,000, *n*=the sample for populations of 10,000 or more, *N*=the size of the total population from which the sample is drawn

$$nf = 384 / 1 + (384/130)$$

$$nf = 97$$

The study subjects were women aged 15 to 49 years who attend Eastleigh health center for antenatal care services. Random sampling technique was used in the selection of the sample size. Data was collected using a pretested questionnaire. Available information on the data collected was checked for internal consistency and completeness and it was coded and analyzed using Statistical package for Social Scientist (SPSS) and the results presented in Tables, charts, Graphs and interpreted by rates and proportions.

Results and Discussions

The sample size of this study was 129 women aged 15 to 49 years who attend Eastleigh health centre for antenatal care services, out of which 120 responses were acquired. This represents a 93.02% response rate. According to Babbie (2002) any response of 50% and above is adequate for analysis thus 93.02% is even better.

The study established that most of the mothers attending Eastleigh health centre were aged between 20 and 34 years and hence they were within the reproductive age. The findings show that age is an important factor in determining the use of skilled assistance, early antenatal care visits and more than four antenatal visits. Older women are less likely to utilize maternal health services compared to younger ones. This finding is similar to a study by Ochako (2003) in which young women are more likely to seek skilled assistance in health facilities in comparison to older ones. This can be explained by the fact that for older women, pregnancy is not considered as an illness hence having experience makes them think that they can give birth on their own at home (KNBS, 2010).

The study also found that most of the of the mothers attending Eastleigh health centre were married and living together with their husbands. Married women are more likely to seek maternal health care services when compared to those that are formerly married and those that have never been married. This can be explained by perception whereby women who are not married are shy or ashamed to be noticed by others especially during queuing for services (KNBS, 2010).

It was established that most of the mothers visiting healthcare facilities in Eastleigh were Muslims. According to studies by Shaikh and Hatcher (2004) observed that Muslims have low utilization of maternal healthcare services. In relation to their level of education, the study established that most of the mothers attending Eastleigh health centre were uneducated. Most of the people living in Eastleigh are Somalis and people from the northern eastern region of Kenya whose literacy index is very low. The finding of a strong education effect is consistent with findings from elsewhere in the World (Letamo & Rakgoasi, 2003). There are a number of explanations for why education is a key determinant of health service use. Education is likely to enhance female autonomy so that women develop greater confidence and capability to make decisions about their own health (Raghupathy, 1996). It is also likely that educated women seek out higher quality services and have greater ability to use health care inputs that offer better care (Celik & Hotchkiss, 2000).

The study revealed that most of the respondents had more than 3 births in the last five years. This can be attributed to the fact that most of the respondents were Somalis who have not adopted the use of family planning methods.

Utilization of Maternal Health care services

The use of antenatal care can help to diagnose pre-existing health problems or to detect health complications while use of care during and after delivery can treat complications that may arise during childbirth hence leading to reduction of maternal mortality. The study found that most of the mothers attending Eastleigh health centre sought for antenatal care from skilled providers.

Table 1: Antenatal Care Services

| | Frequency | Percent |
|-------------------------------------|-----------|---------|
| Yes, by skilled provider | 94 | 78.33 |
| Yes, by traditional birth attendant | 11 | 9.17 |
| No ANC | 15 | 12.50 |
| Total | 120 | 100 |

However, most of the mothers attending Eastleigh health centre sought to ANC for 2 times. The study found that most of the mothers had sought for ANC when they were between 6 and 9 months pregnant. Health professionals recommend that the first antenatal visit should occur within the first trimester of pregnancy and continue on a monthly basis through to the 28th week and fortnightly up to the 36th week or until birth (Ministry of Health, 2004).

Studies show that the health and, to a large extent, the survival of the mother before and after delivery is determined by the skills of the birth attendant, sanitary conditions of the place of delivery and the hygienic procedures followed during delivery. The study also revealed that most of the mothers had used skilled delivery attendant. The study also found that most of the mothers had delivered in a healthcare facility, although a good number had delivered at home. In relation to postnatal care, the study established that most of the mothers had attended post natal care.

Factors Affecting the Utilization of Maternal Healthcare Services

The second objective of this study was to identify factors that affect utilization of antenatal care, use of skilled delivery attendants and postnatal care services in Eastleigh health centre. The study established that most of the mothers in this study were housewives, although a good number were employed and others self employed. A study by Machio (2008) focused on demand for maternal health care services in Kenya and concurs with our findings whereby it was found out that employment had a positive relationship with the use of antenatal care services.

Table 2: Present Occupation

| | Frequency | Percent |
|-----------------------------|-----------|---------|
| housewife | 75 | 62.50 |
| Self-employed | 15 | 12.50 |
| Central government employee | 12 | 10.00 |
| Employee | 18 | 15.00 |
| Total | 120 | 100 |

The study also most of the respondents' families had an income ranging between Ksh 11,000 and 15,000 per month. Cost constraints have been found to be a barrier in seeking maternal health services (Letamo & Rakgoasi, 2003) and hence high income has a positive impact on utilization of maternal health services since women from rich households are able to afford transport and any other costs related to the health services.

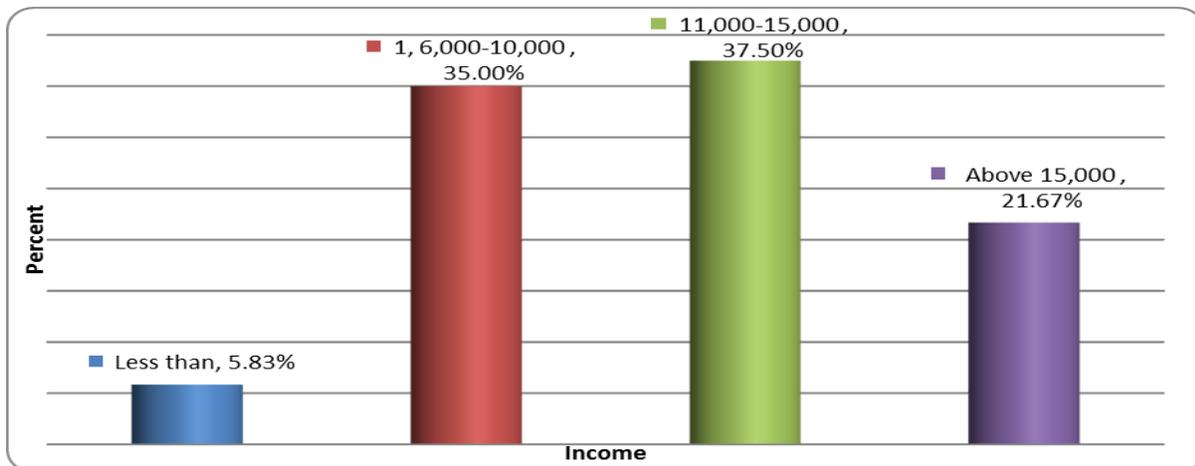


Figure 1: Level of Family Income per Month

In relation to whether they paid any fee for the maternal services in the hospital, the study found that mothers attending Eastleigh health centre paid some fee for ultrasound, lab services, drugs not available in the facility. The study also established that to most of the mothers, it was quite difficult to find money to meet the cost of maternal services.

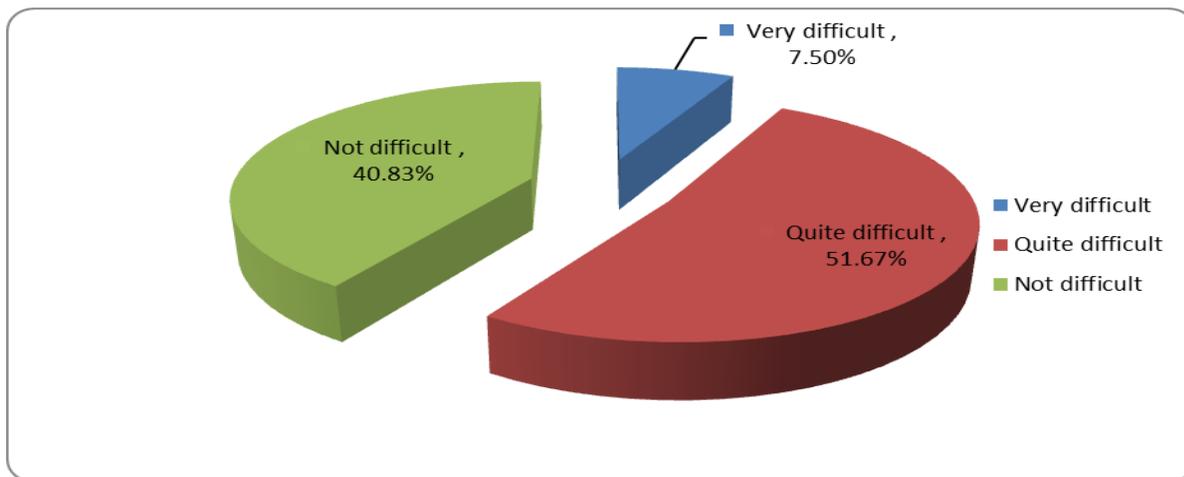


Figure 2 Difficulty in meeting the Cost of Maternal Services

The study also established that most of the mothers took between 35 mins and 1 hour to walk from their home to the health facility. According to Ikamari (2004), women nearer to health facilities are more likely to use them during delivery. In terms of physical accessibility, urban dwellers are more likely to deliver at hospitals while their rural counterparts use traditional birth attendants. The study also revealed that most of the mothers took one hour to see the

doctor/nurse. In addition, the study also found that most of the mothers were attended to by nurses, CHW and clinical officers.

Table 2: Time from Home to the Health Facility

| | Frequency | Percent |
|-------------------|------------------|----------------|
| Less than 30 mins | 37 | 30.83 |
| 35 mins – 1 hour | 48 | 40.00 |
| 1 hour – 2 hours | 26 | 21.67 |
| Over 2 hours | 9 | 7.50 |
| Total | 120 | 100 |

The study also found that majority of the mothers were satisfied with the examination and check-up done by the health provider. According to Sharma, Sawangdee and Sirirassamee (2007), patient satisfaction can be improved by more overall communication, especially by social conversation, positive feelings, partnership-building conversation and positive talks with the patients. This author also noted that conveying negative feelings/attitude or information to the patients can reduce patient satisfaction. This is because patients are more likely to accept advice and instructions when the service providers endow them with more information, more positive feedback and less negative feedback.

It was established that the healthcare center had regular water supply and functional toilet. However, there was irregular electricity supply and not all necessary equipment for maternal services were available.

Table 3: Health facility Infrastructure and Equipment

| | Frequency | | Percent | |
|---|------------------|-----------|----------------|-----------|
| | Yes | No | Yes | No |
| water supply | 119 | 1 | 99.17 | 0.83 |
| functional toilet | 118 | 2 | 98.33 | 1.67 |
| regular electricity power | 45 | 75 | 37.50 | 62.50 |
| all necessary equipment for maternal services | 34 | 86 | 28.33 | 71.67 |

The study established that most of the respondents were unsatisfied with the attitude of the personnel/ staff administrating the free maternal health care in the facility. The study revealed that deliveries through midwives in the healthcare centre was good. In addition, the study found that staffing/ availability of personnel in the health facility to offer the free maternal health care was not adequate. Further, the study established that the level of accessibility of free maternal health care by pregnant mothers in the facility. Additionally, the study found that upon experiencing signs associated with pregnancy most mothers sought advice/treatment from health facility, although a good number purchased medicine from pharmacy/ shop.

Table 4: Action taken when experiencing signs associated with pregnancy

| | Frequency | Percent |
|--|------------------|----------------|
| Seek advice/treatment from health facility | 57 | 47.50 |
| Seek advice/treatment from TBA | 14 | 11.67 |
| Purchase medicine from pharmacy/ shop | 43 | 35.83 |
| Seek prayers from religious leaders | 6 | 5.00 |
| Total | 120 | 100.00 |

Conclusion

This study concludes that most of the mothers attending Eastleigh health centre sought for antenatal care from skilled providers. However, they only sought for ANC for 2 times only. In addition, the mothers had sought for ANC when they were between 6 and 9 months pregnant. Further, most of the mothers had delivered in a healthcare facility, although a good number had delivered at home. Additionally most of the mothers had attended post natal care

The study also concludes that employment status and income level affect the utilization of the maternal health care services. The study also established that to most of the mothers, it was quite difficult to find money to meet the cost of maternal services. Further, most of the mothers were attended to by nurses, CHW and clinical officers. Other factors that affect the utilization of maternal healthcare services include religion, marital status, age, and distance to the health care centre.

Recommendations

In order to improve access to the free maternal health care, government should put up health services as close as possible to the community where the people live. This could be done by training more midwives as well as Community Health Workers who serve as the critical link between communities and health facilities in Kenya, and assign them to manageable households at community level by doing so more women will be reached with information on the importance of the maternal health boosting the levels of uptake.

The ministry of health should ensure that all health facilities have enough essential drugs to avoid cases where women are referred drugs them from private pharmacy this contribute as a barrier to women. There should also emphasize on high quality services rendered at health facilities. This requires health systems to have an adequate trained staff, a regular supply of drugs, equipment, and other supplies. Functioning referral systems and transport are also necessary to ensure that women in need of higher-level care get it quickly. Besides the ministry of health should enforce standards and protocols for service delivery, management, and supervision and use them along with feedback from clients to monitor and evaluate service quality.

The hospital authorities can ensure that services are provided at convenient hours, in a comprehensive non-fragmented manner, with privacy and respect and responsive to women's needs, preferences, and cultural beliefs. This can be done through strengthening mechanisms to

evaluate the quality of services, incorporating both the clients and the providers through training of the Community Health Committees whose role is oversight and governance in the community tier in healthy.

The hospitals' managements should improve on free maternal health care awareness and to incorporate it among the community agendas during dialogue days, action days and other community discussions; this will help to improve the utilisation of free maternal health services among women.

Barriers such as long waiting time, lack of drugs, and inadequate number of staff need to be looked at by the hospital authorities so as to provide a good conducive atmosphere to the clients.

The service providers need create a supportive environment in which clients are sufficiently informed, confident and encouraged to voice their opinions as well. This will help to strengthen the client-service provider relationship, enhance client's satisfaction.

Areas for Further Research

Further research is recommended in the area of determinants of utilization of free maternal health care in other parts of the Country, because many of the studies reviewed that despite the introduction of the free maternal health care utilization of the services at still very low and the maternal deaths are on the increase. For Kenya to achieve the millennium development goal 4 & 5 all the hindering factors must be address first. Research should cover rural and urban areas or various social set-ups.

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