

American Journal of Health, Medicine and Nursing Practice (AJHMN)





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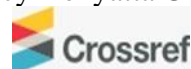
Factors that Influence Place of Delivery for Women of Reproductive Age in Narok South Sub County

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Submitted 06.3.08.2023 Revised Version Received 14.08.2023 Accepted 09.08.2023

Abstract

Purpose: The main objective of this study was to explore the factors that influence the place of delivery for women of reproductive age in Narok South Sub County.

Methodology: The study adapted a descriptive, cross sectional study design which focused on all women of reproductive age who delivered at home after antenatal hospital care visits in the last 24 months. The research was completed in Narok South Sub County, Narok County in Kenya. The target populace included all women with children below two years of age who gave birth at home yet attended antenatal care visits in a health facility in Narok North Sub-County. The study population included all women of reproductive age which were in the age bracket of 15 and 49 years from Narok south sub-county in Narok County. The study adapted two sampling techniques (purposive sampling and simple random sampling) first, purposive sampling was used to obtain women who have had delivered in the last 24 months and also key informants like TBAs and community elders. A sample of 30% of the targeted population was selected; this is coherent with the proposition by Mugenda and Mugenda (2009) that 30% of the population is deemed to be sufficient for statistical analysis in research. A semi structured questionnaire was utilized to gather data. The study utilized primary data only. The primary data was collected through semi structured questionnaires by visiting households with women of reproductive age who gave birth in the last 24 months in a non- hospital set up. Data was analyzed using excel and statistical package for social sciences SPSS version 22.0.

Findings: The study found that emergencies during delivery are well handled in a hospital setup and will greatly improve delivery outcome, the health of the mother and baby. The extended walking distance nearest health facility, the lesser the expectation of mothers to make use of skilled and trained delivery service. The absence of trouble-free transportation service to the nearest health facility is also an essential significant convolution. Source of information on reproductive health matters and more so about pregnancy, labor, and place of delivery can highly influence decision-making on the place of giving birth. Majority of women in rural areas receive advice on reproductive health matters from their 'mothers-in-law and extended family members. When pregnant mothers attend ANC they are taught about delivery and how to prepare for it.

Recommendations: County Education officers in liaison with social development officers to promote adult formal education to improve literacy levels, which will go a long way in influencing reproductive health decisions. County health management team, together with the reproductive health section to network with other relevant stakeholders to increase sensitization on utilization of hospital-based deliveries. Health education by all relevant stakeholders on the advantages of hospital delivery. Establish community health units and train community health volunteers and traditional birth attendants to be safe motherhood promoters.

Keywords: *Reproductive Age, Maternal, Delivery*

1.0 INTRODUCTION

One of the strategies to achieve SDG 3 on maternal health is to cut down the number of deliveries that take place at home or non-hospital setups. This will help manage complications likely to arise during child birth which is life threatening. Although numerous facilities have improved in the antenatal care they provide, numerous women are still not using the facilities for labor and childbirth and prefer to deliver in their home environments even after several visits to the antenatal clinic (Mrisho, Schellenberg, Moshi, Obrist, Mshinda, Tanner, Schellenberg, 2015).

Delivery at home is influenced by many factors including, the key decision maker in the family, the woman's level of education, parity, cultural practices and financial ability of the woman and family. A study in Bangladesh demonstrated the elements that impact preference to home delivery include but not limited to demographic and social factors, (Sarker, 2016). The autonomous factors leading to women uptake of child delivery care were maternal number of years, ANC checkup, complications in the time of delivery, level of information of the mothers, place of residence, and family economic status (Robinson, 2019).

According to WHO (2014), increasing maternal education status is always associated with a consistent and considerable decrease in the chance of home delivery compared with women with a low standard of education, for example, those with secondary education and above have a lesser chance of having a home birth. Chances of having a home delivery are six times greater for those with no education (Moyer & Mustafa, 2013).

In a study done in both Laikipia and Samburu counties in Kenya's arid and semi-arid land (ASAL) inhabited mainly by the pastoralist Maasai and Samburu communities by (Caulfield, 2016), respondents demonstrated that absence of formal schooling was the rationale for women not receiving health facility-based births. Despite the fact that cognizance of the extensive benefits of facility-based deliveries was being popularized by the Community health workers (CHWS) and other development partners, not a few respondents affirmed that only more educated or younger women gave birth in a hospital under the supervision of professional medical service providers.

A study by Pathak P.K (2013) in Nepal stipulated that the extent of education has an impact on maternal health-seeking behavior. In addition, the number of births in a health facility was about twofold for women who had a salary and were also educated compared to unemployed women. An analysis of demographic health surveys in six sub-Saharan countries mentioned that women with a more elevated level of earning were related with an expansion in the choice to look for healthcare (KDHS, 2014). In Malawi, Tanzania, and Ghana, living in metropolitan regions financially emancipated women and heightened the possibility of a lady having her latest delivery in a medical centre (Phiri, Torrid, Kuale, Byskor, Michell, Echoka, Fylkesnes, 2014).

KDHS (2014) also indicates that children born at home decrease with increased education to mothers, for example, 84% of the children whose moms do not have any formal education are born at home in contrast to 38% of those whose moms have attended some formal schooling. On the contrary, affluent and generally better-taught ladies and their relatives may have an expanded modern world glimpse, incomparable apperception with the modernized health care system, more confidence in conducting oneself with other people, and greater capability and enthusiasm to go outside as all of which can accelerate the use of competent medical services throughout prenatal period and child birth.

Maternal health education plays an important role to conquer the hindrances of reproductive healthcare and especially on awareness on dangers of home delivery and also about existing maternal services in health facilities, and these will help to decrease home births directed by TBAs and relatives and work on expanding deliveries in a well-being office attended by a professional health care provider. Based on scientific evidence, low levels of education and little knowledge of skilled birth participation in a health care expertness are firmly affiliated with low maternal health, especially on giving birth at home, particularly in developing states. Maternal loss of life among women in disregarded inhabitants is identified with giving birth at home. These deaths are preventable by making familiarity with safe parenthood and getting to health facility-based childbirth done by skilled professional birth specialists (Luwei, 2014).

Women in rural areas of Narok County are not an exemption since many are illiterate or with a very low level of education which worsens their reproductive health, and the same dynamics governing education as a factor in determining home delivery may also be operating among the Maasai. Education alone does not accomplish proper maternal health as it is tied to earnings. Earnings are an additional and crucial aspect that merges in numerous other ways with education as influences on health. Factual analysis regularly discovers that the effect of education on prosperity is at any rate as mind-boggling as the effect of salary.

Those with more years of schooling will, in general, have better health, wealth, and advantageous propensities. Education is a paramount mechanism for intensifying the health and well-being of individuals by reason of it decreases the demand for health care, the related expense of reliance, lost profit and human anguish Likewise, it advances and continues with solid ways of life and constructive decisions, supporting and continuing human improvement, human associations, individual, family and network prosperity (Phiri et al., 2014). Lack of education for ladies keeps them from settling on educated choices about their wellbeing and, sometimes, from realizing when to look for care (Kitui, Lewis, Davey, 2013).

The chances of home delivery are four times greater for births which are second and above compared to first order births and unplanned pregnancies are more likely to give birth at home in comparison to desired pregnancies (Phiri et al., 2014). Women who use modern family planning methods have 66% lower chances of home births compared to those who have never used any method (WHO, 2017). Women of higher parity in general utilize antenatal care services less regularly and more regrettable with regards to giving birth assisted by a professional health care provider, and in the early afterbirth period which is extremely significant and can forestall up to 75% or a greater amount of maternal death. Nevertheless, a large number of developing nations, not many mothers make at least one antenatal visit and even less give birth under the supervision of skilled health care professionals (Kitui et al., 2013).

Shiferaw, Spigt, Merijin, Yilma, Tekie (2013) carried out a survey to comprehend why women may keep on inclining towards home delivery notwithstanding when an emergency hospital based birth is accessible at insignificant expense in Ethiopia., The survey uncovered that 71% of women got prenatal care from a skilled proficient health care provider for their latest birth in the one year going before the study and in by and large just 16% of deliveries were helped by wellbeing experts, while a dominant part (78%) was attended by TBAS. Arranged spot of birth is impacted by understanding birth hazard and safety, socially regulating desires, faith, and confidence, past birth encounters, companion and family. First time births have generally been viewed as riskier than second or consequent births. There is frequently an assumption that they should occur in a hospital

setting, and that second or Subsequent births might then be safely arranged in non-hospital settings, which is always at home near traditional births attendants and relatives. (MOH Kenya, 2012).

Pregnancy and labor are related with solid cultural and social practices and believes henceforth social variables are significant determinants of take up of maternity care than different types of care. Ladies with no education and exposure to different societies generally incline toward TBAS or relatives since labor is viewed as a non-sickness and even current drugs has little to contribute. Professional health care providers treat poor ladies with less thought than more extravagant or increasingly educated ladies, less fortunate or less educated women may experience constrains in seeking health care for themselves if family members and especially spouses or mothers in-laws are intensively associated with decision making process where individuals from these less fortunate family units may support locally situated conveyance care. (Amina & Susan, 2016).

It has been pointed out that since over 60% of the populaces of Africa are country based where, social standard and practices still apply a solid effect on regenerative medicinal services particularly in connection to pregnancy, delivery and child rearing, the suggestion is that women's commitments to maternal wellbeing are restricted (Njikam, 2014). Women are not permitted to completely settle on autonomous choices concerning their reproductive health matters and such restriction influences maternal results generally considering that some of these women are constrained to watch culturally affirmed activities, notwithstanding when such an issue undermines their safety. It has been seen that most ladies are starting to underline the restricting limit of their parenthood exercises in connection to childbearing (Grimshaw, 2013).

Regardless of social change and modernization, the Maasai people still emphatically hold fast to their socio-cultural practices as it identifies to delivery and post-natal care of the woman and newborn some of which be described as obnoxious. In the Maasai culture it is believed that a woman giving birth must be in a warm spot and it's not warm in the hospital and relatives are always there at home to shield the woman giving birth and the child from any harsh weather like cold. It is also believed that one delivers quicker when you are in a warm place thus the preference to deliver at home. And that After delivery, any harsh environment affects the woman and child. After delivery herbs are administered to the mother from the mandate which is always warm. Being naked in front of male health care professionals or opposite sex is a taboo in the Maasai culture, another main reason for not giving birth in a hospital set up.

Women prefer to give birth at home as hospital-based births require women to be uncovered, which is seen to be disgraceful. When giving birth at home, a portion of the TBAs cover the woman with a blanket or sheet so that women's nakedness cannot be seen making the women feel more comfortable with the TBAs than being in a hospital set up for delivery. The disgrace of being exposed is exacerbated if the medical attendant or specialist is male. A few women due to cultural believes can go back home without treatment if they visited the hospital and found a male health care provider. Many will not go to a health care facility since they prefer not to be helped by male health care providers reason being male health workers should not see their private parts. In the Maasai culture, a male isn't permitted to deal with of the mother during the time of giving birth. (UK, 2015).

Maasai women are not allowed to make any birth arrangements when they discover that they are gravid since in the Maasai people conceiving and giving birth is viewed as a characteristic occurrence and it is forbidden to prepare any birth arrangements making hard the availability of

logistics during delivery a problem and finally giving birth at home becomes the only option available. Some women favor home delivery due to being exposed to new birthing position, for example lithotomic contrasted with hunching down. Home deliveries for such women guarantee retention of wanted birth practices.

In Nepal, cultural practices surrounding child birth exist and the situation is complicated by social norms that leave women undervalued and disapproved, particularly those from lower standings and certain ethnic groupings, a trend reflected in the utilization of maternity services (Gangue, 2017). In most cultures the placenta is viewed as an extraordinary piece of birth since it has been the child's life support for such a number of months thus some parents like to see and touch the organ. In certain societies, parents plant a tree alongside the placenta on the child's first birth day. The placenta may be eaten by the neonate's family members ceremoniously or generally for nourishment, the biggest number of family's newborn does this normally denoting the precise area in which labor and child birth happens as a very significant factor (Cindi-lee, 2007). Women in rustic regions of Narok County have a solid connection to the customary maternal practices during home births directed by TBAs and relatives such as singing certain songs when a boy child is born and disposal of the placenta for different sexes of the neonate.

The abnormal state of maternal deaths in upcoming nations has been credited incompletely due to the non-accessibility of services and halfway to low utilization of these services when they are accessible. Access to quality health care during prenatal and childbirth is an exceptionally essential factor in clarifying the differences in maternal deaths and bleakness among developing and the industrialized world. Approximately 90% of maternal loss of life could be kept away if satisfactory care is given during this significant period (Rajedra, 2014). Right around 75 percent of women who pass on during labor and childbirth would be alive in the event that they approached the medications for avoiding pregnancy and birth difficulties (WHO, 2015).

Members of the Pokot community in Kenya incline towards TBAS in light of the fact that they are less expensive and are more accessible and also available, given the poor road system and absence of reliable methods of transport, accessibility to a health facility is also very difficult since most do not have financial ability (Chauthary, 2012). Most of the women don't have access to great quality maternity services during pregnancy and child birth particularly women who are less fortunate, uneducated and live in the rustic zones. Less than 50% of the women in developing nations get sufficient health care during this period or not long after child birth, notwithstanding that most deaths happen during this period. Access means services are obtainable and at ones disposal when they want them. Good services recommend that health workers have satisfactory clinical abilities and important equipment and supplies and that referral frameworks function effectively to guarantee that women with complexities get fundamental treatment (Turin, 2010).

Lack of vehicles particularly in remote regions and horrible roads can make it incredibly hard for women to arrive at close by health facilities. Walking is the only method of transportation in any event even for women in labor (World Bank, 2011). In many instances, accessibility is described in relation to distance or time spend to reach a health facility and financial access. Rural areas are presumed to have access to hospital care if the travel time is less than 30 minutes. Studies affirm that transportation challenges contributed essentially to the underutilization of maternal services.

In Tanzania, for instance 84% of women who delivered at home planned to give birth in a health facility, yet didn't due to distance and absence of means to hospital (Teplitskaya, Dutta, Pascal,

Zetianyu, 2018). In Malawi, 90% of women preferred to give birth in a health facility, however just 25% of them did, the most significant explanation given by 53% of women was that they realized they were in process of giving birth and never had enough time to get to the health facility (Ssembatawa, 2014).

Even when finances are certainly not a core obstacle considering that Kenya now have been offering free maternal care services in all government facilities for the last seven years, women are regularly incapable of getting expertise maternal healthcare when they require it. Africa faces a health-worker crisis: overall, there are just 13.8 nursing and midwifery personnel for every 10,000 individuals (Garry, 2016). In the most unfortunate countries, this proportion is lower than 1 for each 100,000 individuals. Likewise, this care may not be accessible when it is most needed. A study in Malawi found that solitary 13% of facilities had 24-hour midwife assistance, a noteworthy peril for ladies who face complexities from labor, childbirth or neonatal emergencies at night. The geographic uniqueness in placement of health workers further entangles the problem of access. The health-worker average doesn't give a full image of the deficiency in rustic zones, where there are far less health workers than in urban zones. For instance, South Africa's rustic regions represent around 46 % of the populace however just 12 % of doctors and 19 % of nurses (Saraladevi, 2009).

Poor road infrastructure, framework and transportation present another obstacle to successful reproductive healthcare particularly in rural areas, health facilities are frequently excessively far away or generally out of reach. Regularly there are no roads to the closest health facility, or existing roads are obstructed or blocked as a result of poor road quality, landscape, catastrophic events or the rainy stormy season. The Overseas Development Institute (ODI) revealed that in rural Zimbabwe, transportation issues were reported in 28 per cent of maternal deaths, contrasted with 3 per cent in Harare (Nicholas, 2013). Tunisia has made great walks in escalating maternal health care and decreasing maternal deaths related to child delivery at nonhospital environs, however there has been less progress in rustic regions. This can be especially risky for women experiencing obstetric complexities, where delays in arriving at health facilities where medical care is guaranteed can have perpetual outcomes.

Titaley (2010) explored the perspective of community constituents and health care laborers about pre-birth care services and utilization of delivery care services in six villages of West Java Province, Indonesia and discovered that the utilization of traditional birth attendants and home delivery were ideal for some community members in spite of the accessibility to close by health Centre's in the village.

Physical distance and money related confinements were two weighty hardships that kept community members from seeking maternity services in a health care set up, respondents reported that trained delivery attendants are just went for women who went through obstetric complexities. The obliged openness of health care providers was similarly detailed by occupants in remote zones. In rustic settings the health care provider mostly the only health care provider in that village, every now and again goes out of the village. The community perceives the activity of both village midwives and traditional birth attendants as fundamental for giving maternal health care services benefits thus see no quintessence of looking for antenatal services and giving birth from health facilities.

According to Narok County integrated development plan 2018-2022, overarching objective is to improve local health systems in order to provide universal healthcare, by offering all people

comprehensively, high-quality healthcare services for prevention, treatment, and rehabilitation. Narok south sub county has, 4 health centers, 27 dispensaries, and 3 community units which make up the health care delivery system, owned and managed by the government. A health facility is typically 15 kilometers away (km). The ratio of doctors to people is 1:40,000, and that of nurses is 1:15,000. According to prevalence, the top five diseases are upper (NCIDP, 2018). Geographical asses coupled with poor road network and means of transport can hinder health service seeking during labor and giving birth. This will lead to complications and even maternal mortality.

Lack of birth preparedness and inadequate counseling during ANC probably contributes to home deliveries, an attitude which can be from pregnant women themselves on seeking hospital based delivery and it can also be from the health care providers towards the clients. According to (Chaunc, 2012), 65.78% were not satisfied with the health staff during ANC visits. 63.15% women did not have a discussion about place of birth during ANC visit, (53.68%) had no discussion even in the family.

The role of any health care provider is to inspire women to deliver in a formal health facility by giving women information on advantages of health facility delivery which is not done by most of the health care workers. The decision on spot of delivery is mostly taken up by the spouse and not the women. This is of concern in light of the new target of free approach where the health functionaries have to enable the couple to make an informed choice on place of delivery (WHO, 2015). Low quality of services including poor treatment by health providers additionally makes a few women hesitant to utilize health services (WHO, 2014) most of births in developing countries happen without a skilled attendant to help the mother and some of this could be attributed to an attitude women have towards health care providers.

The WHO built up a lot of subjective instruments for investigating community attitudes and basic decision making identified with maternal wellbeing and health. In every one of the three East African nations Kenya, Uganda and Tanzania a significant number of community individuals stated worries concerning the interpersonal communiqué skills and relational abilities of midwives in health care facilities and how pregnant women are handled. Skilled health care attendants at the facilities were constantly depicted as physically and emotionally offensive, oppressive, careless, cruel, impatient, unsympathetic and insulting. In general, skilled health care attendants are recognized as more skilled than TBAS and were valued for their capacity to spare lives, however there repeatedly poor treatment of the wellbeing workforce to women served as a significant barrier to looking for facility based care (FCI, 2012) hence women fearing to deliver in hospitals and preferring TBAS.

In spite of the efforts of the different progressive governments both national and worldwide at decreasing the pace of maternal mortality and morbidity everywhere throughout the world, there is still high occurrence of maternal mortality among the women of reproductive age particularly in sub-Saharan Africa. Purposes behind this could be connected to poverty, poor decision making, poor basic leadership, perceptions, demeanors, attitudes and practices of the individuals with respect to pregnancy and delivery. Socio-cultural and financial components have added to the expanded frequencies of maternal mortality among the people of Maasai community of Narok county.

As far as financial activities are concerned, the Maasai women are mostly found in the informal sector, particularly, in the areas of non-farming activities such as cattle and other domestic animals

keeping which involves moving from one area to another looking for greener pastures. This has most likely added to their low social and financial status. The circumstance depicted above may not be detached with the people's low support or inability to use the available various modern reproductive health services by the Maasai women. Notwithstanding the poor social and money related status, the way of life of this people is another strong factor which has been found to influence pregnancy and delivery outcome among this specific group. (Njuguna, Njoroge, Muruka, 2017).

A research done in new Papua Guinea in 144 women found that 11 of them gave birth in a health facility, 27 of them delivered unattended, 12 were attended by husbands and relatives. Women who attended a health facility tended to have a higher household income than their counterparts. Labour complications were the reason for using a health facility. A study in Bangladesh which has 90% home deliveries showed that demographic and social-financial elements were the most significant perspectives that influence women receiving safe child delivery care in a health facility (Sarker, 2016).

Maternal health in low income nations has expanded deliberations in the course of the last 15-20 years from countries which have achieved to eliminate preventable causes of maternal deaths. Presentation of registration frameworks and giving solid reasons for loss of life are fundamental both for monitoring maternal health and energizing activities which will eventually result in increased maternal knowledge on dangers of home birth and research on health workers to improve maternal health care delivery. A nation like Singapore which have reported accomplishment in decreasing maternal mortality have utilized orderly, gradual approaches, frequently attached to multi sectoral endeavors like roads connections, education and schooling, monetary status, water and sanitation.

Boosting maternal wellbeing needs a sensibly well working health system and this commonly requires the decrease of destitution and consistent investment in the health system. (World Bank, 2006. In China socio economic and demographic inequalities have remained an issue in accessing safe motherhood. There were incredible contrasts in the maternal health care among richer and the less fortunate regions and among urban and rural zones similarly as in maternal and newborn child health status. In urban regions, women had an average of 6.4% pre-birth visits in correlation with 3.2% visits in rustic areas. Moreover 92% of urban ladies gave birth in hospital and 61% went to post-natal care, just 41% and 50% of rural women did so respectively.

Maternal mortality rate (MMR) in more extravagant east coast region was underneath 21 while more unfortunate remote west the MMR came to as high as 114.9 per 100000 live births. The reasons for not visiting the hospital during delivery was that most of the women felt that the care was unnecessary or worthless and require a lot of financial input which constitutes 42% for not visiting a hospital, lack of time taking 17%, transportation logistics 15%, other reasons other than the above accounted for 4%. There was a relationship between frequencies of pre-birth visits and the spot of giving birth. The women who gave birth in public health facilities had an average almost twice as many antenatal visits as the women who gave birth in private facilities or at home. An aggregate of 35% of women who gave birth outside of public health facilities had not gotten pre-birth care by any stretch of imagination. In correlation, 5% of the women who gave birth in general health facilities had not utilized pre-birth care (Margolis, 2015).

Kenya's total health use as a percentage of the gross domestic product (GDP) has stayed stable at 4.3% for a number of years with accentuation given to straightforwardly financed healthcare while out-of-pocket installments establishes 42% which is underneath 15% of what is required. The public health sector is the central provider of basic healthcare and serves 66 percent of the populace who can't manage the cost of private healthcare. The rule objective of the public sector service provision, as communicated in the National Health Policy, is “to give exhaustive and coordinated essential health care services in a decentralized and equitable design”(Dana, 2013).

Statement of the Problem

Maternal well-being isn't just required to provide humanitarian tranquility and financial productivity. In addition, it cuts down costs and excess baggage on relatives, communities, specialists in health and specifically reproductive wellbeing, and the national treasury. In Narok County alone, data collected from 30 health facilities showed a 67% increase in women seeking ANC services in health care facilities between the year 2013 and 2015 (from 6,187 in 2013 to 10,326 in 2015) (Narok County Hospital Department of health records management 2016).

The number of deliveries performed by a professional health care provider in Narok County went up from 9,370 in 2013 to 14,486 in 2015 (a general increase in the number of deliveries performed by a health professionals from 20.1% in 2013 to 34.8% in 2015), these are according to the county health data framework. December 2018, 7,604 women went for ANC services, 2,277 only delivered in a hospital set up and 5,327 delivered in a non-hospital setup. Therefore, this study sought to investigate the factors that influence place of delivery for women of reproductive age in Narok South Sub County. The results would help improve planning and provision of hospital-based maternity services to women of the reproductive age in Narok County.

2.0 LITERATURE REVIEW

Theoretical Review

Social Cognitive Theory

Social intellectual hypothesis by Bandura proposes that human behavior is driven by inner forces and external influences. It further explains human behavior in three dimensions: particular components, surrounding influences, and behavior regularly interacting to produce an action. A basis of the social cognitive theory is that individuals learn not only through personal experiences but also from observing the actions of others and the outcome of these actions. In relation to home delivery, a woman who consciously decides to deliver at home could be controlled by personal factors such as experiences during previous births and environmental influences such as cultural-economic influence and infrastructure of that locality.

Research Gaps

Home delivery cases are high in Kenya, just like many developing countries. Home delivery contributes to adverse maternal outcomes. Socio-demographic and health system factors appear to determine hospital-based maternity services uptake. Studies on ANC uptake and hospital-based maternity services utilization have been done in various parts of Kenya. Previously defined determinants of ANC and hospital-based maternity use should be interpreted in relation to the context of these studies. While there are several studies documenting factors related to utilization of antenatal care and hospital-based maternity in Kenya, studies exploring utilization of hospital-

based maternal services and ANC care in Narok County are scarce and fragmentary despite its role in promoting maternal and neonatal health.

3.0 METHODOLOGY

The study adapted a descriptive, cross sectional study design which focused on all women of reproductive age who delivered at home after antenatal hospital care visits in the last 24 months. The research was completed in Narok South Sub County, Narok County in Kenya. The study area was chosen for this research because Narok south sub county is the highest contributor to maternal morbidity and mortality associated with complications during delivery in Narok County. The target populace included all women with children below two years of age who gave birth at home yet attended antenatal care visits in a health facility in Narok North Sub-County.

The study population included all women of reproductive age which were in the age bracket of 15 and 49 years from Narok south sub-county in Narok County. The study adapted two sampling techniques (purposive sampling and simple random sampling) first, purposive sampling was used to obtain women who have had delivered in the last 24 months and also key informants like TBAs and community elders. A sample of 30% of the targeted population was selected; this is coherent with the proposition by Mugenda and Mugenda (2009) that 30% of the population is deemed to be sufficient for statistical analysis in research. A semi structured questionnaire was utilized to gather data. The study utilized primary data only. The primary data was collected through semi structured questionnaires by visiting households with women of reproductive age who gave birth in the last 24 months in a non- hospital set up. Data was analyzed using excel and statistical package for social sciences SPSS version 22.0.

4.0 FINDINGS

The findings revealed several factors that contribute to the place of delivery for women. These include; distance from the health facility, availability of transport to the health facility, spouse influence at home, and lack of finances. Major contributing factors were; lack of transportation at the time of delivery (31.0%) and the notion by the respondents that delivery is not a disease (30.0%). Merely 3.1% of the respondents gave birth at home due to their volitions.

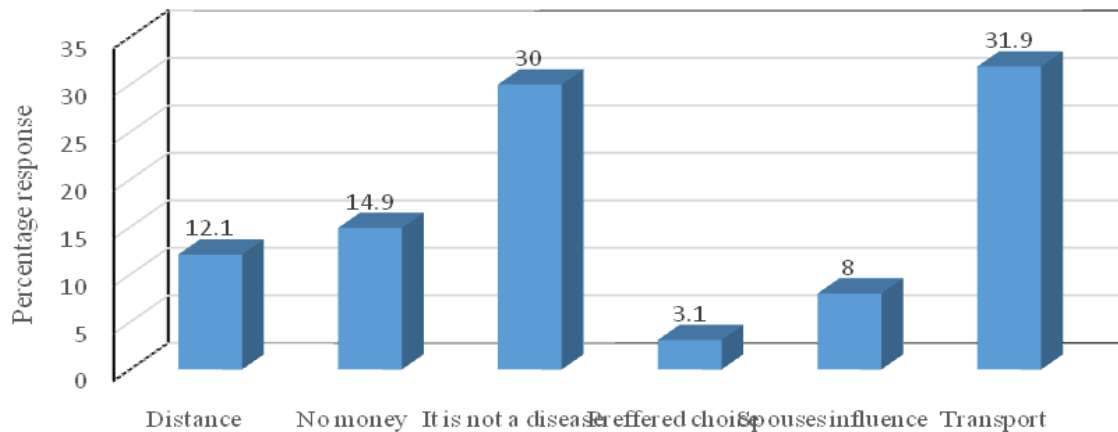


Figure 1: Factors Influencing Home Delivery

Sources of Information on Where to Deliver

In their choice for where to deliver, women get information from; Mothers in law, traditional birth attendants, spouses, and extended families. Main source of information is mother in law (96.0%). This is followed by information from extended family (92.9%). A good percentage of the respondents (79.9%) make their own decision on where to deliver. There was a significant difference in the sources of advice ($t = 3.12$, $P = 0.036$).

Table 1: Respondents Source of Information on Where to Deliver

Source of Advice	Get Advised	Not Advised
Mother in law	310 (96.0%)	13 (4.0%)
Traditional birth attendant	287 (88.9%)	36 (11.1%)
Spouse	139 (43.0%)	184 (57.0%)
Self	258 (79.9%)	65 (20.1%)
Extended family	300 (92.9%)	23 (7.1%)
T Value	3.12	
P Value	0.036	

Effects of Respondents' Education Level on Delivery at Home

To establish the influence of respondents' education level on the number of children born at home, Pearson correlation analysis was carried out and tested at 95% confidence interval. All the three factors (Age, Education, and distance) had a significant positive relationship with the number of children delivered at home ($r = 0.574$, 0.677 , and 0.534 respectively). The result indicated that elderly respondents and those staying longer distances from health facilities had a significantly higher number of children delivered at home than young persons and those living near the health facilities.

Table 2: Relationship between Numbers of Children Delivered at Home with Respondents' Age, Education and Distance to a Health Facility

Respondents Information	Numbers of Children Delivered at Home	
	r - Value	P -Value
Age of respondents	0.574	0.0001*
Highest education level	0.677	0.0001*
Distance to a health facility	0.534	0.0001*

Effect of the Religion of the Respondents on Delivery at Home

The result of this study showed that the religion of the respondents had a significant effect on their choice to deliver at home. This was analyzed using one-way Analysis of Variance (One-way ANOVA), which recorded $F = 0.20.743$, $P = 0.0001$. The mean number of children delivered at home by Catholics was 1.27, Protestants, 2.75, while Muslims had a mean number of 5.00 children delivered at home.

Source of Income as a Factor in Delivery at Home

An evaluation of individual source of income as a factor in the determination of delivery at home was carried out using one-way ANOVA. Result showed a significant influence of income on home delivery ($F = 62.022$, $P = 0.0001$). Those who were employed respondents had a mean of 1.83 children delivered at home, while casual laborers had a mean of 5.75 children.

Table 3:1 Number of Deliveries at Home by Respondents Different Income Sources

Source of Income	Mean Number of Children Delivered at Home (Mean ± SE)
Unemployed	1.74 ± 0.06a
Employed	1.83 ± 0.17a
Self-employed	2.04 ± 0.06ab
Housewife	3.13 ± 0.08b
Casual laborer	5.75 ± 0.50d
Student	3.67 ± 2.16c

Mean values denoted by similar letters are not significantly different at $P \leq 0.05$. Mean separation using Turkeys HSD

Influence of Ethnicity on Delivery at Home

The study was mainly focused on the Maasai community however other ethnic groups were also included. These were Kalenjin (33) and others (32). Therefore, the influence of ethnicity showed that the mean number of children delivered at home by Maasai women was 2.27, Kalenjin, 3.76 while another ethnic group was 5.13. Using One-way ANOVA showed there was a significant difference in the number of children delivered at home by ethnicity ($F = 154.294$, $P = 0.0001$).

Table 4:2 Number of Deliveries a Home by Respondents' Ethnic Group

Ethnic Group	Mean Number of Children Delivered at Home (Mean ± SE)
Maasai	2.27 ± 0.04a
Kalenjin	3.76 ± 0.12b
Others	5.13 ± 0.38c

Mean values denoted by similar letters are not significantly different at $P \leq 0.05$. Mean separation using Tukeys HSD

Influence of the Source of Advice on Delivery at Home

Advice on the individual place to deliver had a slight effect on the decision on where to deliver. Respondents who were advised by mothers-in-law (310 of the respondents) experienced a high number of deliveries at home (mean 2.65 children) than those getting advice from other relatives. This shows the influence of the mother in-laws in delivery decision-making.

Table 5:3 Number of Children Delivered at Home by Respondents Advised by Different Sources

Source of Advice	No. of women Advised	Number of Children (Mean ± SE)	Minimum	Maximum
Spouse	139	2.04 ± 0.05	1	3
Mother-in-law	310	2.65 ± 0.07	1	9
Traditional birth attendants	287	2.43 ± 0.05	1	4
Self	258	2.39 ± 0.05	1	4
Extended family	300	2.56 ± 0.06	1	9

Influence of Distance to the Health Facility on Delivery at Home

Using Pearson correlation analysis, the findings revealed that the distance to health facility significantly influence women giving birth at home ($r = 0.534$, $P = 0.0001$). Women who were staying far away from health facilities gave birth at home compared to those near the facility.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

In this study participants said that giving birth is not a disease that one should visit a health facility. Those mothers who indicated that they experienced complication during labor and delivery in their recent pregnancy were most likely going to utilize skilled services when giving birth. (Phiri et al., 2014). On the distance to the nearest health facility, majority in rural parts of Africa live between 80 to 200kms, away from the nearest health facility. Only a handful live within 20 kilometers. This does tally with a study by (Titaley 2010) that most rural residents live far from health facilities. In Kenya, the Pokot community also are unable to access hospital delivery due to distance (Chauthary 2002). In Tanzania (Teplitskaya et al., 2018) also noted that 84% of those women who gave birth at home had organized to give birth in a health facility, but due to distance they could not.

The extended walking distance nearest health facility, the lesser the expectation of mothers to make use of skilled and trained delivery service. The absence of trouble-free transportation service to the nearest health facility is also an essential significant convolution. These findings are homogenous with the recommendations of studies carried out in Nepal, Zambia, and Ethiopia, wherein physical distance to maternity facilities and lack of geographic access were detailed as obstacles to place of delivery. (Amano et al., 2012).

Source of information on reproductive health matters and more so about pregnancy, labor, and place of delivery can highly influence decision-making on the place of giving birth. Majority of women in rural areas receive advice on reproductive health matters from their 'mothers-in-law and extended family members. When pregnant mothers attend ANC they are taught about delivery and how to prepare for it. In a study done by (Mutiso 2008) 29.3% of those women who went to ANC were never taught about labor and delivery, and 14.7% were never taught about the importance of hospital delivery and the dangers of non-facility births. Studies also report that women, especially from rural areas, seek and receive information on childbirth from the mothers, mothers-in-law, TBAs, and spouses. (Campbell et al., 2016)

Conclusion

The study concluded that regardless of the government effort to provide free maternal services in Kenya, stable source of income, formal education with the right knowledge about reproductive health and geographical access, are the determinants of place of delivery among women in rural parts of Narok County. This takes the relevant stakeholders, including the National government inter ministries, and Ministry of Health and sanitation, needs to be aware to these population tally in their decisions concerning reproductive health care in rural Kenya.

Recommendations

County Education officers in liaison with social development officers to promote adult formal education to improve literacy levels, which will go a long way in influencing reproductive health decisions. County health management team, together with the reproductive health section to

network with other relevant stakeholders to increase sensitization on utilization of hospital-based deliveries. Health education by all relevant stakeholders on the advantages of hospital delivery. County government department of health to create a complementary community-based approach of maternal health education through home visits that aim to decrease home-based deliveries and generate demand for facility-based deliveries. Establish community health units and train community health volunteers and traditional birth attendants to be safe motherhood promoters.

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