

Socio-Demographic Factors Associated With Choice Of Place Of Delivery Among Women Attending Antenatal Care At Tassia Kwa Ndege Hospital Embakasi East, Nairobi Kenya

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Abstract:

Background: Maternal health is a global public concern that is crucial in the development of any nation. Efforts are made to increase access to quality maternal health care. Nairobi County constructed new hospitals within densely populated areas to bridge the gap to healthcare access and reduce the strain on the already existing health facilities that are overcrowded. Tassia kwa Ndege Hospital in Embakasi East Constituency was one of the new hospitals constructed to address this gap.

Material and methods: A cross-sectional study design was adopted utilizing quantitative data collection methods. The sample comprised 290 respondents selected through systematic random sampling from those who were seeking antenatal care services at Tassia kwa Ndege hospital. Data was analyzed using SPSS, with descriptive statistics and Chi-tests employed to establish association socio-demographic factors associated with the choice of place of delivery

Results: The study found that there was an association between socio-demographic factors and the influence on the choice of place of delivery. Socio-demographic predictors included Age, education, parity, marital status.

Conclusion: The study demonstrates socio-demographic influence on the choice of place of delivery among mothers in the study area.

Key Word: Delivery, Maternity, Antenatal Care, Tassia kwa Ndege

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I. Introduction

High rates of maternal mortality are a critical factor in maternal health with a significant impact in society. Globally, about 295,000 maternal deaths occurred in 2017 within Sub-Saharan Africa and Asia accounting for 86%, Sub-Saharan Africa alone accounted for nearly two-thirds (WHO,2021). A considerable number of women die from pregnancy or child birth related complication across the world (Njuguna et al.,2017). According to Afulani. (2018) Skilled birth attendants are mainly found within health facilities, Despite, this only about 60% of women accounted for those who gave birth within these facilities (UNICEF,2021).

In 2020, Maternal deaths worldwide among women of reproductive age 15-49 stood at 287,000 (WHO,2023). Maternal morbidity and mortality are a global public health concern. Increasing accessibility to quality health services is a global effort among many countries with the goal of realizing the right to best possible healthcare during pregnancy and childbirth while reducing inequalities in reproductive health. Maternal health is therefore deemed as a key indicator for human health. Generally, good health and in particular maternal health, plays a major role in poverty alleviation and human development. Maternal healthcare service utilization is crucial for improving maternal health that has the potential to reduce morbidity and maternal mortality. Globally, there have been many efforts to curb pregnancy related morbidity and mortality cases and to better the quality of maternal care during and after pregnancy.

In Sub-Saharan Africa, pregnant women have a risk of losing their lives from preventable complications of pregnancy estimated at 1 woman among every 22 pregnant women compared to more developed countries that stands at 1 in 7,300 (Alkema *et al.*, 2016). This shows that maternal mortality is still a huge burden in the sub-Saharan Africa region and thus needs to be addressed with urgency. A large number of maternal mortalities within developing countries is linked to low level of maternal healthcare, as shown by the low levels proportions of clients who attend the focused antenatal care services and the low number of maternal deliveries attended by skilled healthcare practitioners. Together with this is lack of proper selection of place of delivery as guided and recommended by qualified health care workers.

In Kenya, the statistic is not any different with significant socio-economic and socio-demographic influence. According to the Kenya Demographic and Health Survey, about 61% of women gave birth aided by Skilled Birth Attendants (SBAs), these statistics showed a significant influence by both economic and socio-demographic factors (UNICEF,2021). Only 30% of women in the lowest wealth quintile gave birth in health facilities, compared to 93% of women in the highest wealth quintile.

Several initiatives have been introduced to improve access to maternal care. In Kenya, a number of efforts have been fronted to encourage more women mainly those from rural and low-income households to give birth in health facilities, these include free maternal health services, health education, health facility equipping and construction of health facilities. However, the statistics on women getting attended to at health facilities is still do dire (Say&Raine,2007). Studies have been undertaken to examine socio-economic aspects associated with the influence on the choice of place of delivery. Understanding the socio-demographic factors that exert influence on the choice of place of delivery is essential for healthcare providers and policymakers in providing maternal health care services. Therefore, addressing socio-demographic disparities may help improve on service delivery and policy development in maternal healthcare

The aim of the study was to assess socio-demographic factors that influence the choice of place of delivery among mother in Tassia kwa Ndege. This information will influence decision making and policy development with regards to maternal healthcare.

II. Material And Methods

This cross sectional study was carried out on women attending antenatal care at Tassia kwa Ndege Hospital. A total of 290 respondents > 18years and less 45 years were in this study.

Study design: The descriptive cross-sectional study design

Study location: This was carried out in Tassia kwa Ndege, Embakasi East, Nairobi, Kenya.

Study Duration: June 2022 and August 2022.

Sample size: 290 respondents

Sample size calculation: The formula applicable for sample size calculation on this study is Fisher's formula. Since the target population is <10,000, the sample adjustment was done using the following formula to calculate the finite population correction factor and a sample size of 314 was obtained after factoring a 10% buffer for non-respondents.

Subjects and selection method:

Women within the reproductive age between 18-49 years were targeted in the study. Systematic random sampling conducted to collect data from 290 women attending antenatal care at Tassia kwa Ndege Hospital. Participants in the study included women seeking antenatal care services at Tassia kwa Ndege hospital. This design was most appropriate in obtaining a snapshot of the factors likely to influence the choice of place of delivery.

Inclusion criteria

1. Women in their third trimester (28weeks gestation)
2. Those who have attended at least 2 antenatal care visits at Tassia kwa Ndege.
3. Ages 18-49 years.

Exclusion criteria:

- 1) Women attending antenatal care at different health facilities and
- 2) Women with less than 2 visits at Tassia kwa Ndege hospital
- 3) Women who did not reside within the study area
- 4) Women less than 18 and above 49 years.
- 5) Non-consenting mothers were excluded from the study,

Procedure methodology: Before data collection, permission was sought from AMREF ethics and research committee (ESRC), AMREF university school of graduate studies, NACOSTI, County health offices. Data was collected using a structured questionnaires after informed consent as sought. This method was chosen to ensure privacy and confidentiality among respondents. The questionnaire included socio-demographic characteristics such as Age, marital status, parity, education level, religion, head of family and decision maker.

Statistical analysis

Statistical analysis was performed using SPSS version 30. Data was analyzed through descriptive statistics, Inferential statistics and Chi square tests were used to study the association between categorical socio-demographic variables and the choice of place of delivery. The results were represented with a statistical significance take at 5%.

III. Results

A total of 290 mothers gave consent to participate in the study and completed the questionnaire (Table 1) below describes demographic characteristics of study participants. The influence on choice of place of delivery was assessed among mothers seeking antenatal care services at Tassia kwa Ndege hospital.

Table 1: Demographic Characteristics Influence on choice

Variable	Frequency	Percentage	Statistical significance
Age			
15 - 19	18	6.2	$\chi^2 = 21.586$, df 5, $p < .001$
20- 24	138	47.6	
25-29	88	30.3	
30- 34	32	11.0	
35-39	12	4.1	
40 and above	2	0.7	
Education			
Primary	55	19.0	$\chi^2 = 14.060$, df 3, $p < .003$.
Secondary	158	54.5	
More than Secondary	76	26.2	
illiterate	1	0.3	
Marital status			
Divorce/Separated	2	0.7	$\chi^2 = 3.320$, df 2, $p < .190$
Married/Living together	177	61.0	
Never Married	111	38.3	
Number of Children			
1-3	116	40	$\chi^2 = 23.861$, df 6, $p < .001$
4-8	8	2.7	
No child	166	57.3	
Religion			
African instituted churches	15	5.2	$\chi^2 = 12.679$, df 6, $p < .048$
Catholic	48	16.6	
Evangelistic churches	79	27.2	
Islam	20	6.9	
SDA	13	4.5	
Protestant	113	39.0	
No religion/Atheist	2	0.7	
Head of Family			
Self	72	24.8	$\chi^2 = 21.322$, df 2, $p < .001$
Husband	178	61.4	
Other	40	13.8	
Decision Maker			
Husband	47	16.2	$\chi^2 = 31.594$, df 5, $p < .001$
Husband Mother-In-Law	1	0.3	
Self	136	46.9	
Self-Husband	65	22.4	
Other	40	13.8	

On age distribution, most respondents in the study were between the age of 20-24 years accounting for a majority 138(47.6%), the next big group were mothers between the age of 25-29 accounting for 88(30.3%) while those above 40 years in the study were the least represented.

Marital status of the respondents, majority of respondents (61%) were married and living with their husbands, while a minority of respondents (0.7%) were divorced or separated.

Level of education majority of respondents (54.5%) had secondary education, while a minority of respondents (0.3%) had no formal education. A majority of the respondents in the study had education, this showed that mothers being attended to at the facility were fairly educated and this largely influenced their choice on place of delivery.

Majority of respondents (57.2%) had no child birth prior to the clinic attendance, where as a minority of respondents (0.3%) had 5 and 8 previous births respectively.

Regarding religious affiliation majority of the respondents attending antenatal care at Tassia kwa Ndege identified with the protestant faith accounting for 113(39%), Catholics were the second largest group in the study accounting for 48(16.6%). Only 2(0.7%) of the respondents did not identify with any religion in the study.

In terms of decision makers choice of place of delivery, majority of the respondents (46.9%) indicated self, while a minority of respondents (0.3%) indicated that decisions were made by others. As regards the family head, a majority of the respondents (61.4 %) acknowledged that the husband was the family head, while a minority of respondents (13.8%) indicated that the family was headed by others.

Socio-demographic factors had an influence on the choice of place of delivery among mothers. Our study revealed that Age, Parity, Education, Religion and decision maker are factors that significantly influence the choice of place of delivery. Chi- square tests in the study identified several significant associations within this category (Table 1).

IV. Discussion

Chi square tests analyzed in the study highlighted several associations between socio-demographic factors and their influence on the choice of place of delivery among mothers. The study revealed that Age, Marital status, Parity, Education and Religion significantly influenced decision making among respondents on the choice of place of delivery. Our study aligns with the broader literature, that suggests underlying factors exist in influencing decision made by expectant women on the choice of place of delivery, such as age, marital status, Parity, level of education and religion.

The study found age had a significant influence on the choice of place of delivery among respondents this agreed with similar study in India that found that increase in age had a positive influence on health seeking behavior and facility-based delivery (Singh et al.,2021). Marital status of the respondents showed a significant association on the choice of place of delivery. This finding agreed with a study in Kenya that found marital status had an influence on the choice of place for delivery (Kibera et al.,2020). Parity in the study revealed a significant association with the choice of place of delivery. This finding was similar to a study in Uganda that found higher parity decreases the level of utilization of maternal healthcare (Mugambe et al.,2021).

Education proved a key factor in the influence on respondents in the study. Level of education among respondents influenced the choice of place of delivery among women, Women with higher levels of education opted to get services from private hospitals or higher rated public facility within the study area. Study findings were similar to a study in India that found mothers with higher education were much equipped to make better decisions (Barman et al.,2020). Religion in the study had an influence on the choice of place of delivery. Participants of the Muslim faith had higher chances of giving birth in other facilities. The findings were similar to a study in South East Asia that found religious influence in the choice of place of delivery (Rahman et al.,2021)

V. Conclusion

Level of Education, Marital status and Parity had a huge influence on the choice of place of delivery among mothers in the study. Married women with children were more likely to deliver at other facilities. Aligning with existing literature that indicates Mothers who were married had their decisions influenced by their husbands on the choice of place of delivery.

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