

Demographic Factors Associated With Utilization of Free Maternity Services Among Women of Reproductive Age Receiving Care at Saboti Sub-County Hospital, Kenya

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Abstract

Globally there is urgent need to ensure all expectant mothers delivers to a health facility under care of trained specialized health care worker to reduce the risk related complications with the child delivery (kihara *et al.*, 2015). This study aimed to determine demographic factors associated with utilization of free maternity services among women of reproductive age receiving care at Saboti sub-county hospital, Kenya. This study was a cross-sectional study design. Data collection was done from July to October 2022. The sample size was 384 among women receiving maternity services at Saboti Sub-county. Data Collection involves use of pretested questionnaire on demographic factors associated with utilization of free maternity services. Respondents who indicated they were in 30-39 age group were 6.63 [95%CI = 1.95– 22.52, p = 0.002] times more likely to have high utilization of free maternity care services compared to respondents who indicated they were in 15-19 age group. Respondents who indicated they were married were 4.09 [95%CI = 1.89– 8.86, p < 0.001] times more likely to have high utilization of free maternity care services compared to respondents who indicated they were single. Respondents who indicated they were civil servants were 3.67 [95%CI = 1.44– 9.36, p = 0.007] times more likely to have high utilization of free maternity care services compared to respondents who indicated they were unemployed. The study found out socio-demographic factors: age of the mother, marital status and employment status showed a significant statistical association with utilization of free maternity services. Policy makers and health workers should enhance intervention focusing on, young women, single and those of primary level of education to improve on utilization of free maternity services.

Key Words: Delivery, free maternity services.

I: INTRODUCTION

In Kenya every expectant mother is known to be at risk of developing pregnancy-related complications (kihara *et al.*, 2015). Women with the pre-existing conditions that worsen during pregnancy are at a high risk of adverse of pregnancy related outcomes (WHO, 2016). Improving maternal health is one of the sustainable development goals adopted by the UN member states that include Kenya. UN member countries are committed

themselves to reduce maternal mortality ratio by 75% (Sambo & Kirigia, 2014). Kenya has a high Maternal Mortality rate (MMR) of 488 per 100,000 live births (Bourbonnais, 2013). Kenya did not achieve the MDG target and is out of track to achieve the SDG 3.1. Reports by KDHS, (2014) indicates that 61% of women give birth in health facilities and this is well below the target by 2030. Despite national statistics showing there is improvement in utilization of free maternal services, it's noted that there are variations causing concerns. Hospital

statistics show that Trans Nzoia is at 23% attendance of services while the nationwide data shows 96% of women seek antenatal care from skilled health workers, 62% of the women are delivered by skilled health workers and 61% of women deliver in health facilities (KDHS, 2014). The findings indicated that age of the individual, size of the household members and birth order are significant factors which influence the utilization of hospital delivery among women (Chepkorir (2014). Study by Alemi and Teklehaymanot *et*

al.,(2016) found out that education, income, age of the mother, have positive effect on utilization of the maternal health care services. There is little limited data available on individual demographic factors that are associated with free maternity delivery in the health facilities locally. It is against this background that this study seeks to establish the factors that determine utilization of maternity services among women of reproductive age, in Saboti Sub-County.

II: METHODS AND MATERIAL

The study was carried out in Saboti Sub-county of Trans-Nzoia County. A cross-sectional study design was used to assess the demographic characteristics of utilization of maternity services among women of reproductive age seeking maternity services at Saboti Sub-county. Adult women, with sound mind and who signed written informed consent were recruited. Sample size of 384 was interviewed. Dependent variable was utilization of free maternity services among women of reproductive age. This study employed stratified sampling method to select participants from different wards. Study was approved by Research and Ethical Review Committee, The permission from the county government of Trans-Nzoia was sought before carrying out the research and written informed consent was provided by women of reproductive age seeking maternity services. Questionnaires were used after pre-testing was done. Data was collected by the researcher from July to October 2022. Data Analysis was cleaned, coded and entered into access computer software. This was later transferred to SPSS V.23 for analysis. The descriptive statistics were used to summarize the data. Univariable analysis was done to establish demographic factors that are associated with utilization of free maternity care services and those with a P value of <0.05 was considered significant.

III: RESULTS

Demographic characteristic of women of reproductive age seeking maternity services

About 384 respondents were recruited to participate in the study. Most of the respondents 160 (41.7%) were aged between 30-39 years, hundred and twenty five 32.6% respondents were aged between 20-29 years, sixty one 15.9% respondents aged between 40-49 years. Majority of the respondents 272 (70.8%) indicated that they were married whereas eighty eight 22.9% were single. Most of the respondents 138 (35.9%) indicated that they were farmers while hundred and seven 27.9% were business people. With respect to level of education, almost half of the respondents 167 (43.5%) indicated to have completed primary school education whereas 144 (37.5%) of the respondents indicated to have completed secondary school education. Majority of the respondents 373 (97.1%) indicated that they were Christians. Most of the respondents (113; 29.4%) indicated that they had four children whereas hundred and five 27.3% indicated that they had three children. Majority of the respondents 112 (29.2%) indicated that they had four births whereas hundred and five 27.3% indicated that they had three births.

.Table 1 Demographic characteristic of women of reproductive age seeking maternity services

Variables	N=384	%
Age Group		
15-19	38	9.9
20-29	125	32.6
30-39	160	41.7
40-49	61	15.9
Marital status		
Single	88	22.9
Married	272	70.8
Widowed	22	5.7
Divorced/Separated	2	0.5
Occupation		
Farmer	138	35.9
Civil servant	69	18
Business person	107	27.9
Unemployed	70	18.2
Level of education		
Non formal education	1	0.3
Primary	167	43.5
Secondary	144	37.5
Tertiary- Diploma	72	18.8
Religion		
Christian	373	97.1
Muslim	11	2.9
Children		
One	54	14.1
Two	74	19.3
Three	105	27.3
Four	113	29.4
More than 5	38	9.9
Number of births		
1 birth	53	13.8
2 births	75	19.5
3 births	105	27.3
4 births	112	29.2
5 births or more	39	10.2

Respondents who indicated they were in 30-39 age group were 6.63 [95%CI = 1.95– 22.52, p = 0.002] times more likely to have high utilization of maternity care services compared to respondents who indicated they were in 15-19 age group. Respondents who indicated they were married were 4.09 [95%CI = 1.89– 8.86, p<0.001] times more likely to have high utilization of maternity care services compared to respondents who indicated they were single. Respondents who indicated they were widowed were 3.75 [95%CI = 1.14– 12.29, p = 0.029] times more likely to have high utilization of maternity care services compared to respondents who indicated they were single. Respondents who indicated they were civil servants were 3.67 [95%CI = 1.44– 9.36, p = 0.007] times more likely to have high utilization of maternity care services compared to respondents who indicated they were unemployed. Respondents who indicated they had three children were 4.69 [95%CI = 1.71– 12.84, p = 0.003] times more likely to have high utilization of maternity care services compared to respondents who indicated they had one child. Respondents who indicated they had four children were 5.66 [95%CI = 2.09– 15.34, p< 0.001] times more likely to have high utilization of maternity care services compared to respondents who indicated they had one child.

Association between demographic characteristics and utilization of maternity care services among women of reproductive age

Table 2 Association between demographic characteristics and utilization of maternity care services among women of reproductive age

Variables	Utilized		Not utilized		OR	95% CI		P-value
	N	%	N	%		Lower	Upper	
Age Group								
15-19	3	7.9%	35	92.1%	Ref			
20-29	20	16.0%	105	84.0%	2.22	0.62	7.93	0.219
30-39	58	36.3%	102	63.8%	6.63	1.95	22.52	0.002
40-49	12	19.7%	49	80.3%	2.86	0.75	10.88	0.124
Marital status								
Single	8	9.1%	80	90.9%	Ref			
Married	79	29.0%	193	71.0%	4.09	1.89	8.86	<0.001
Widowed	6	27.3%	16	72.7%	3.75	1.14	12.29	0.029
Divorced/Separated	0	0.0%	2	100.0%	UD	UD	UD	UD
Occupation								
Farmer	46	33.3%	92	66.7%	4.50	1.91	10.61	0.001
Civil servant	20	29.0%	49	71.0%	3.67	1.44	9.39	0.007
Business person	20	18.7%	87	81.3%	2.07	0.82	5.19	0.121
Unemployed	7	10.0%	63	90.0%	Ref			
Level of education								
Non formal Education	0	0.0%	1	100.0%	UD	UD	UD	UD
Primary	39	23.4%	128	76.6%	0.79	0.42	1.48	0.792
Secondary	34	23.6%	110	76.4%	0.80	0.42	1.53	0.804
Tertiary- Diploma	20	27.8%	52	72.2%	Ref			
Religion								
Christian	90	24.1%	283	75.9%	0.85	0.22	3.26	0.811
Muslim	3	27.3%	8	72.7%	Ref			
Number of Children								
One	5	9.3%	49	90.7%	Ref			
Two	6	8.1%	68	91.9%	0.86	0.25	3.00	0.819
Three	34	32.4%	71	67.6%	4.69	1.71	12.84	0.003
Four	41	36.6%	71	63.4%	5.66	2.09	15.34	0.001
More than 5	7	17.9%	32	82.1%	2.14	0.63	7.34	0.225
Number of births								
1 birth	5	9.4%	48	90.6%	Ref			
2 births	6	8.0%	69	92.0%	0.83	0.24	2.89	0.776
3 births	35	33.3%	70	66.7%	4.80	1.75	13.13	0.002
4 births	40	35.7%	72	64.3%	5.33	1.96	14.48	0.001
5 births or more	7	17.9%	32	82.1%	2.10	0.61	7.20	0.238

OR = Odds Ratio, UD= Undefined, Ref= Reference, CI = Confidence Interval

IV: DISCUSSION

This study showed that the age of the mother influenced the use of free maternity services; the very young 15 – 24 years tend to shy away from the facility care. This is due to stigma attributed to the fact that the community perceives their pregnancy as unwanted while mothers above the age of 30 utilized free maternity services more. This is due to the experiences that they have gone through their previous pregnancy and the health messages they might have received during their earlier ANC visits and postnatal visits. This study is similar to a study that was done by (Seiduet *al.*,2022). Survey done by KDHS 2014 reported that facility care is slightly more among mothers aged between 20–34 years compared with those outside this age group. Marital status was found to be significant factor for utilization of FMC. The results showed that 272 (70.8%) of the respondents who were married attended FMC compared to 88 (22.9%) mothers who were single or divorced. The reason may be that widowed and separated mothers miss husband support, while the married have husband support, especially if the husband are educated and have good income. This increases the chances of the husband escorting the wife to the health facility. Similar finding by Ngesa *et al.*(2021) found out education is a positive predictor of utilization of FMC. KDHS 2014 reported that education statuses of the women are associated with receiving the recommended number of ANC visits. This is also consistent with the study carried out by Kidamuet *al.*,(2017) who reported that women who have higher education levels were more likely to utilize healthcare services compared with women with a low education. This is attributed to the assumption that educated women tend to have a greater awareness of the existence of health care services and its advantages.

IV: CONCLUSION

The study found out socio-demographic factors; age of the mother, marital status and

employment status showed a significant statistical association with utilization of free maternity services. Policy makers and health workers may enhance intervention focusing on, young women, single and those of primary level of education to improve on utilization of free maternity services

ACKNOWLEDGEMENT

I would like to express my appreciation to my supervisors, Dr. Dennis Magu and Dr. Patrick Mbindyo for the constructive criticism and support throughout this study. I wish to thank Mr Mwit Peter Kirimi for participation in Manuscript development. I thank Jomo Kenyatta University staff for their support during research study. I sincerely thank the almighty God for having seen me through this work

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