Perception of quality of maternal healthcare services among women utilising antenatal services in selected primary health facilities in Anambra State, Southeast Nigeria

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ABSTRACT

Background: This is a cross-sectional descriptive study aimed at assessing antenatal care service attendees' perception of quality of maternal healthcare (MHC) services in Anambra State, southeast Nigeria. **Materials and Methods:** A total of 310 pregnant women utilising antenatal care (ANC) services in three purposively selected primary health centres (PHCs) in rural communities in Anambra State were studied. Reponses were elicited from the participants selected consecutively over a 4-month period, using a pre-tested, semi-structured interviewer-administered questionnaire on socio-demographic characteristics, utilisation and perception of MHC services. Data collected were analysed using SPSS version 17. **Results:** Findings showed that utilisation of facility for both antenatal (97.0%; 95% CI, 94.4–98.4%) and natal services (92.7%; 95% CI 89.2–95.2%) were quite high. Generally, most of the women were satisfied with MHC services (89.7%). Most of them were satisfied with the staff attitude (85.1%), waiting time (84.1%) and cost of services (79.5%). Being ≥30 years ($X^2 = 4.61$, $P = 0.032$), married ($X^2 = 9.70$, $P = 0.008$) and multiparous ($X^2 = 9.14$, $P = 0.028$), as well as utilisation of formal health facility for antenatal ($X^2 = 26.94$, $P = 0.000$) and natal ($X^2 = 33.42$, $P = 0.000$) services were associated with satisfaction with maternal health services. **Conclusions:** The study showed high level of satisfaction with quality of maternal health services among antenatal attendees and highlights the need to strengthen interventions that increase uptake of formal MHC services.

Key words: Perception, maternal health, mothers, satisfaction, utilisation

INTRODUCTION

Nigeria has high maternal and infant mortality. In recent years the country has embarked on measures to reform the healthcare system, including maternal healthcare (MHC) delivery, in a bid to attain Millennium Development Goals (MDGs) 4 and 5. Most health reform efforts have been geared towards increasing availability of healthcare services, without commensurate increase in quality. Studies have shown that increased availability of service does not always translate to increased access to healthcare.[1,2] Hence, for these interventions to deliver optimally there is need to

ensure that quality of service is taken into consideration in the provision of maternal health (MH) services.

Most women who utilise antenatal care (ANC) services in sub-Saharan Africa (SSA) do not receive adequate attention; as care providers are overwhelmed by the number of pregnant women seeking ANC.[3] Consequently, some have argued for the adoption of focused ANC, in which case a woman attends ANC four times during pregnancy at specific intervals for uncomplicated pregnancies. This allows for adequate attention to be given to each pregnant woman and provides opportunity for monitoring of high risk pregnancies. Advocates of this strategy believe that this will enhance the quality of ANC services provided as well as reduce morbidity and mortality associated with high risk pregnancies.[4]

Quality of care is imperative in optimising uptake (effective utilisation) of maternal and child health services.[1,5] In the developing countries including Nigeria, standards of quality of care are often set by health managers and care providers. Although there are several policies and guidelines to ensure

quality of care, the extent to which they are adhered to is not well known. According to Uzochukwu *et al.*, many patients in southeast Nigeria are poor and ignorant, hence often feel that they are not in a good position to influence the type and quality of services they receive even if their expectations are not met.[6]

While many studies have reported high ANC attendance among pregnant women in southeast Nigeria, only few studies have assessed the quality of ANC services among pregnant women.[1] Reducing maternal mortality and morbidity through increased service utilisation in turn requires public health interventions built on clear understanding of women's perception of maternal care services within their cultural context.[7] Quality of healthcare services can be assessed either objectively or subjectively or by assessing the supply or demand component of health services. Subjectively, assessment of patients' perception of healthcare services is one of the ways of measuring quality of healthcare. Beside using outcome of care as a basis for measuring quality of care, clients' perception of care provides another opportunity of assessing quality of care based on their perspective. Patient perception of quality of care is one of the major determinants of uptake of healthcare services including MH services.[6] It measures level of satisfaction of healthcare services received from health facility. Understanding clients' perception of healthcare services provides opportunity for identifying deficiencies in healthcare as well as motivators and barriers to uptake healthcare services. It can also be used for gathering inputs of recipients of healthcare services for the purpose of establishing more patient-friendly services, and using the same to improve quality of care.[8-10] It is also important in setting standards for MH services in the country. This study therefore is an assessment of the perception of pregnant women attending ANC services in selected public primary healthcare facilities in Anambra State.

MATERIALS AND METHODS

The study was carried in three purposively selected health centres in Anambra State under the management of Nnamdi Azikiwe University Teaching Hospital. They are Primary Health Centre (PHC), Neni, Aniocha Local Government Area (LGA), Comprehensive Health Centre, Ukpo, Dunukofia LGA and PHC, Umunya, Oyi LGA. The health centres at Neni and Ukpo are supervised by the Department of Community Medicine while PHC, Umunya serves as a community outreach centre for the Department of Family Medicine. These health facilities are all located in the rural areas of Anambra State. Predominant economic activities in these communities are petty trading and farming. All the health centres provide primary healthcare services including maternal and child health services. These health services are provided by a team of doctors, pharmacists, nurses, community health extension workers

(CHEWs), laboratory scientists and technicians. The study participants included pregnant women who attended ANC clinic in the three health facilities between September 2007 and August 2008. ANC and Infant welfare clinic (IWC) services are provided in the facilities on a weekly basis. Average ANC clinic attendance is 20-25 women per facility per week, while average booking rate for new clients per month is 8-10. All patients attending ANC within the period of the survey and who gave consent were recruited, until a total of 310 women were recruited. Only women with previous natal and postnatal experience were enrolled, so as to capture their natal and postnatal experiences. Nulliparous women were excluded in the survey.

Reponses were elicited from them using a semi-structured, pre-tested, interviewer-administered questionnaire on socio-demographic characteristics, pattern of MH service utilisation and their perception of MH services received during the last confinement. Only women who willingly consented after due explanation of the purpose, procedure, risks and benefits, and assurance of confidentiality were enrolled. The questionnaire was pre-tested using 10 pregnant women attending ANC services at Amaku General Hospital (now Anambra State Specialist Hospital), Awka, by the researchers ascertain to appropriateness of the wording and duration of the interview. Data collected were analysed using SPSS version 17 (SPSS Inc., Chicago Illinois, USA). Association between socio-demographic variables and utilisation MH services and perception of quality of MH was assessed using the chi-square $(X)^2$ test, and the level of statistical significance was set at $P \leq 0.05$.

RESULTS

Out of the total of 310 women recruited for the survey, 8 women did not complete the interview. The survey showed that the median age of the women was 27 years. Majority were married (94.7%), and all of them had at least primary education (88.2%). Most of them were multiparous (64.6%) as shown in Table 1.

During their last confinement, four women (1.3%) did not attend ANC services. A total of 293 (97.0%) utilised the formal health facility for ANC services. Majority of them (78.8%) utilised the hospital during the last ANC, while 5 women (1.6%) utilised the services of traditional birth attendants/maternity. Only 57 (19.1%) booked for ANC during the first trimester and 174 women (58.4%) attended ANC at least four times.

Among those who attended ANC, 30 (10.1%) could not remember or did not know the number of times they attended ANC. Median ANC attendance among them was four times [Table 2]. A total of 277 women (92.7%) delivered in a formal health facility and they included hospital (78.8%) and health centres (13.8%). Sixteen women (5.3%) were delivered by traditional birth

Table 1: Socio-demographic characteristics of respondents

Socio-demographic characteristic	N = 302	%	95% CI
Age (in years)			
≤19	7	2.3	1.1-4.7
20-24	51	16.9	13.1-21.5
25-29	119	39.4	34.1-45.0
30-34	77	25.5	20.9-30.7
≥35	48	15.9	12.2-20.4
Marital status			
Married	287	95.0	91.9-96.9
Single	6	2.0	0.9-4.3
Divorced/separated/widowed	9	3.0	1.6-5.6
Educational status			
Primary	29	9.6	6.8-13.5
Secondary	137	45.4	39.8-51.0
Tertiary	136	45.0	39.5-50.7
Parity			
Primiparous	69	22.8	18.5-27.9
Multiparous	195	64.6	59.0-69.8
Grandmultiparous	38	12.6	9.3-16.8

Table 2: Pattern of maternal healthcare service utilisation

	N = 302	%	95% CI
Place of ANC attendance			
Hospital	238	78.8	73.9-83.0
Health centre	55	18.2	14.3-22.9
TBA/maternity	5	1.6	0.7-3.8
None	4	1.3	0.5-3.4
Timing of ANC booking	N=298		
0-3 months	57	19.1	15.1-23.9
3-6 months	165	55.4	49.7-60.9
>6 months	76	25.5	20.9-30.7
Number ANC attendance	N=298		
1	32	10.7	7.7-14.8
2-3	62	20.8	16.6-25.8
≥4	174	58.4	52.7-63.8
DNK*	30	10.1	7.1-14.0
Pattern of natal care	N=302	%	
Hospital	238	78.8	73.9-83.0
Health centre	42	13.9	10.5-18.3
TBA/local midwife	16	5.3	3.3-8.4
Home	6	2.0	0.9-4.3
Mode of delivery			
Spontaneous vaginal delivery	274	90.7	86.9-93.5
Assisted vaginal delivery	14	4.6	2.8-7.6
Caesarean section	14	4.6	2.8-7.6
Pregnancy outcome			
Abortion	9	3.0	1.6-5.6
Still birth	22	7.3	4.9-10.8
Live birth	271	89.7	85.8-92.7

*Do not know

attendants/maternity, while six of them (2.0%) delivered at home. However, all the four women who did not attend ANC consultation were delivered by traditional birth attendants. Most of them delivered via spontaneous vaginal delivery (90.7%), while 4.6% delivered either by caesarean section or by assisted vaginal delivery. A total of 293 (97.0%) carried their pregnancy to term. About 90% of them had live births; the remainder (7.3%) were still birth. A total of 92% of the deliveries were attended to by skilled birth attendants including trained auxiliary nurses.

Out of the 296 women who delivered either in a health facility or by traditional birth attendant/maternity, most of them (91.6%) expressed satisfaction with MH services received during their last confinement. The aspect they were most satisfied with was attitude of staff (86.8%), followed by time spent in the facilities (85.6%) and the cost of services provided (81.1%) [Table 3].

Age, marital status and parity were significantly associated with overall satisfaction with MH services. Older (≥30 years) ($X^2 = 9.70$, $P = 0.008$), married ($X^2 = 4.61$, $P = 0.032$), multiparous women ($X^2 = 9.14$, $P = 0.028$) were more likely to be satisfied with MH services. Older women were particularly satisfied with the staff attitude ($X^2 = 6.95$, $P = 0.031$), waiting time ($X^2 = 14.05$, $P = 0.001$) and cost services ($X^2 = 9.81$, $P = 0.007$) [Table 4].

Those who were married were satisfied with the staff's attitude ($X^2 = 9.70$, $P = 0.008$). Individuals with primary education were least satisfied with the time spent accessing MHC services ($X^2 = 12.37$, $P = 0.002$), however, those with tertiary education were most satisfied with the cost of MH services ($X^2 = 14.03$, $P = 0.001$). Primiparous were least satisfied with the waiting time ($X^2 = 11.58$, $P = 0.003$), while almost all the grandmultiparous women were satisfied with cost of services ($X^2 = 10.68$, $F = 0.005$) [Table 4].

Significant association was demonstrated between place of ANC attendance and overall satisfaction with MH services ($X^2 = 26.94$, $P = 0.000$), staff attitude ($X^2 = 12.36$, $F = 0.002$) and waiting time ($X^2 = 18.01$, $P = 0.000$). Utilisation of health facility for ANC services was significantly associated with satisfaction with MHC services, while cost of service was associated with the number of ANC visits ($X^2 = 21.43$, $P = 0.000$) [Table 5].

Place of delivery and pregnancy outcome were associated with overall satisfaction of MH services. Delivery in a health centre ($X^2 = 33.42$, $P = 0.000$) and adverse pregnancy outcome ($X^2 = 9.06$, $P = 0.007$) were associated with non-satisfaction of MH services. Similarly, place of delivery and ANC attendance were found to be significantly associated with satisfaction with staff attitude and waiting time. Women who delivered in health centres were not satisfied with the staff attitude ($X^2 = 33.33$, $P = 0.000$), while those who delivered outside the health facility were not satisfied with time spent on accessing services ($X^2 = 5.44$, $P = 0.020$). Also, non-facility delivery ($X^2 = 9.70$, $P = 0.008$) and delivery by caesarean section ($X^2 = 7.48$, $F = 0.018$) were associated with non-satisfaction with the cost of MHC services [Table 6].

Table 3: Perception of maternal health services

Degree of satisfaction	N = 302	%	95% CI
Overall satisfaction			
Satisfied	271	89.7	85.8-92.7
Not satisfied	22	7.3	4.9-10.8
Indifferent	9	3.0	1.6-5.6
Staff attitude			
Satisfied	257	85.1	80.6-88.7
Not satisfied	39	12.9	9.6-17.2
Indifferent	6	2.0	0.9-4.3
Waiting time			
Satisfied	254	84.1	79.6-87.8
Not satisfied	36	11.9	8.7-16.1
Indifferent	12	4.0	2.3-26.8
Cost of service			
Satisfied	240	79.5	74.6-83.6
Not satisfied	48	15.9	12.2-20.4
Indifferent	14	4.6	2.8-7.6

DISCUSSION

The study revealed high level of utilisation of MH services among pregnant women accessing ANC services in rural communities in southeast Nigeria. Preferred place for MHC services was hospital, most of which were privately owned hospitals. High utilisation of hospital for maternal services is probably because their services are more convenient, readily accessible and are more likely to be staffed with a doctor than the lower levels of healthcare. An earlier study in southeast Nigeria reported that the presence of a doctor in a healthcare facility as one of the factors influencing pregnant women utilisation of MHC services.[5,6] Compared to women in a rural community in Edo State of Nigeria where 25% of them utilised the services of TBAs for both ANC and delivery, there was less patronage of TBAs among them.[11] Hence, majority of the births were attended to by skilled birth attendants including trained auxiliary nurses with obstetrics skills. Even though most hospitals in the region are manned by doctors, their nursing staffs often comprise auxiliary nurses who have been trained on obstetrics care.

Women utilising MH services are increasingly becoming aware and desirous of the need to improve quality of MHC services provided to them.[9] Their utilisation of maternal care services has been shown to depend on their perceptions on these services.[7] Hence, their perception of MHC services is an important measure for assessing the extent their expectations are being met by both the policy makers and the care providers.

There was high level of satisfaction with the quality of MHC services received. They were most satisfied with the attitude of healthcare staff (85%), and least satisfied with the cost of services (79%). Higher level of satisfaction (95%) has been reported among rural women utilising PHC services (including MH

services) in the region, and most of them also did not consider cost of services and waiting time as barriers to accessing maternal services. However, other studies have highlighted poor staff attitude, long waiting time and relative high cost of services as disincentive to the utilisation of MHC services.[6,11] High patronage of hospital services in the region is suggestive that most women are willing to pay for MH services, despite being relatively more costly than the lower levels of healthcare.[6] Elsewhere in Africa, clients' satisfaction with maternal services is generally high, even though service cost, payment mechanism and long waiting time were identified as barriers to MH service utilisation.[12] While most patients individually often desire longer consultation with care providers, they often expressed dissatisfaction with long waiting time.[13] There was also greater preference for private health facilities to public health facilities and this was not due to difference in technical competence but primarily due tothe process of service provision.[5]

Previous studies have not demonstrated consistent relationship between patient satisfaction and socio-demographic characteristics of users of healthcare services.[14] This is because determinants of clients' satisfaction are multi-factorial and no factor has been shown to contribute to satisfaction or dissatisfaction more than the other. Patients' satisfaction with health services is purely individualistic and dynamic.[10] On the contrary, more consistent association has been demonstrated between service satisfaction and age of patients. This study revealed that non-satisfaction with MHC services was significantly associated with age, marital status and parity. Women who were younger, not currently married and primiparous were less likely to be satisfied with MHC services. Specifically, younger women were not satisfied with attitude of the healthcare workers, waiting time and cost of services, while primiparous women though were satisfied with the attitude of care providers, were less satisfied with the time and money spent on accessing MHC services. Studies have shown that younger women are often less satisfied with healthcare services than older women.[7,13,15] Birhanu *et al.*,[14] reported that older women were more likely to be satisfied with communication and attitude of healthcare staff, but are often less satisfied with outcome of care. Younger women were probably less satisfied because of their level of expectation were higher and their lack of previous experience.[7,13] Previous obstetric experience has been shown to influence women' level of satisfaction with MH, hence younger and primiparous women who have limited birth experience are less likely to be satisfied with MH received during pregnancy and delivery.[7]

Women with lower educational status were less satisfied with the time spent accessing services, while women with

Table 4: Socio-demographic characteristics and perception of maternal health services

Characteristic	Overall satisfaction		X^2	P-value
Age (in years)	Satisfactory N = 271 (%)	Not satisfactory/indifferent N = 31 (%)		
≤24	48 (82.8)	10 (17.2)		
25-29	103 (86.6)	16 (13.4)		
≥30	120 (96.0)	5 (4.0)	9.70	0.008
Marital status				
Married	260 (90.6)	27 (9.4)		
Others — single, widowed, divorced	11 (73.7)	4 (26.3)	4.61	0.032
Educational status				
Primary	23 (79.3)	6 (10.7)		
Secondary	125 (91.2)	12 (8.8)	3.83	0.147
Tertiary	123 (90.4)	13 (9.4)		
Parity				
Primiparous	56 (81.2)	13 (18.8)		
Multiparous	180 (92.3)	15 (7.7)	9.14	0.028
Grand multiparous	35 (92.7)	3 (7.9)		
Age (in years)	Staff attitude N=257(%)	N=45(%)		
≤24	45 (77.6)	13 (22.4)		
25-29	98 (82.4)	21 (17.6)		
≥30	114 (91.4)	11 (8.8)	6.95	0.031
Marital status				
Married	246 (85.7)	41 (14.3)		
Others — single	11 (73.3)	4 (26.7)	1.72	0.253
Educational status				
Primary	21 (72.4)	8 (27.6)		
Secondary	121 (88.3)	16 (11.7)	4.43	0.085
Tertiary	115 (84.6)	21 (15.4)		
Parity				
Primiparous	55 (79.7)	14 (20.3)		
Multiparous	170 (87.2)	25 (12.8)	2.27	0.336
Grand multiparous	32 (84.2)	6 (15.8)		
Age (in years)	Waiting time N=254 (%)	N=48 (%)		
≤24	42 (72.4)	16 (28.6)		
25-29	96 (80.7)	23 (19.3)	14.05	0.001
≥30	116 (92.8)	9 (7.2)		
Marital status				
Married	244 (85.0)	43 (15.0)	3.59	0.058
Others — single	10 (66.7)	5 (33.3)		
Educational status				
Primary	18 (62.1)	11 (37.9)		
Secondary	121 (88.3)	16 (11.7)	12.37	0.002
Tertiary	115 (84.6)	21 (16.4)		
Parity				
Primiparous	50 (72.5)	19 (27.5)		
Multiparous	174 (89.2)	21 (10.8)	11.58	0.003
Grand multiparous	30 (78.9)	8 (21.1)		
Age (in years)	Cost of services N=240(%)	N=62(%)		
≤24	38 (65.5)	20 (34.5)		
25-29	95 (79.8)	24 (21.2)	9.81	0.007
≥30	107 (85.6)	18 (14.4)		
Marital status				
Married	228 (79.4)	59 (20.6)		
Others — single	12 (80.0)	3 (20.0)	0.003	1.000
Educational status				
Primary	22 (75.9)	7 (24.1)		
Secondary	97 (70.8)	40 (29.2)		
Tertiary	121 (89.0)	15 (11.0)	14.03	0.001
Parity				
Primiparous	52 (75.4)	17 (24.6)		
Multiparous	151 (77.4)	44 (22.6)	10.68	F=0.005
Grand multiparous	37 (97.4)	1 (2.6)		

Table 5: ANC utilisation and perception of maternal healthcare services

ANC utilisation Place of ANC	Overall satisfaction		X^2	P-value
	Satisfactory N = 271 (%)	Not satisfactory/indifferent N = 31 (%)		
Hospital	221 (92.9)	17 (7.1)		
Health centre	44 (80.0)	11 (20.0)	26.94	0.000
TBA/maternity	6 (66.7)	3 (33.3)		
Timing of booking				
First trimester	51 (89.5)	6 (10.5)		
Second trimester	148 (89.7)	17 (10.3)	0.95	0.640
Third trimester	71 (93.4)	5 (6.4)		
Number of ANC visit				
≤Once	30 (93.8)	2 (6.2)		
2–3 times	55 (88.7)	7 (11.3)	4.57	F=0.198
≥4 times	159 (91.4)	15 (8.6)		
DNK	27 (79.4)	12 (20.6)		
Place of ANC	Staff attitude N=257 (%)	N=45 (%)		
Hospital	211 (88.7)	27 (11.3)		
Health centre	40 (72.7)	15 (27.3)		
Others — TBA/maternity	6 (66.7)	3 (33.3)	12.36	F = 0.002
Timing of booking				
First trimester	48 (84.2)	9 (15.8)		
Second trimester	140 (84.8)	25 (15.2)	0.57	0.752
Third trimester	67 (88.2)	9 (11.8)		
Number of ANC visit				
Once	30 (93.8)	2 (6.2)		
2–3 times	49 (79.0)	13 (21.0)		
≥4 times	151 (86.8)	23 (13.2)	4.94	0.176
DNK/none	27 (79.4)	7 (20.6)		
Place of ANC	Waiting time N=254 (%)	N=48 (%)		
Hospital	209 (87.8)	29 (12.2)		
Health centre	42 (76.4)	13 (23.6)	18.01	0.000
TBA/maternity	6 (66.7)	3 (33.3)		
Timing of booking				
First trimester	44 (77.2)	13 (22.8)		
Second trimester	139 (84.2)	26 (15.8)		
Third trimester	70 (92.1)	6 (7.9)	5.78	0.058
Number of ANC visit				
Once	31 (96.9)	1 (3.1)		
2–3 times	52 (83.9)	10 (16.1)		
≥4 times	143 (82.2)	31 (17.8)	4.96	F=0.168
DNK	28 (82.4)	6 (17.6)		
Place of ANC	Cost of service N=240 (%)	N=62(%)		
Hospital	194 (81.5)	44 (18.5)		
Health centre	40 (72.7)	15 (27.3)	3.05	0.218
TBA/maternity	6 (66.7)	3 (33.3)		
Timing of booking	N=239 (%)	N=59 (%)		
First trimester	46 (80.7)	11 (19.3)		
Second trimester	132 (86.1)	33 (20.0)	0.13	1.000
Third trimester	61 (80.3)	15 (19.7)		
Number of ANC visit				
≤ Once	32 (100.0)	0 (0.0)	20.16	0.000*
2–3 times	51 (82.3)	11 (17.7)	df=2	
≥4 times	138 (79.3)	36 (20.7)		
DNK	19 (55.9)	15 (44.1)		

higher educational status were most satisfied with the cost of maternal services. In contrast, women with higher educational status play a greater role in decision-making process concerning their health than their counterparts who are less educated. This is because they are more socio-economically empowered and often have greater access to

Table 6: Maternity service utilisation and perception of maternal healthcare services

Utilisation of natal services	Overall satisfaction		X²	P-value
Place of delivery	Satisfactory N=271 (%)	Not satisfactory/indifferent N = 31 (%)		
Hospital	224 (94.1)	14 (5.9)		
Health centre	33 (78.6)	9 (21.4)		
TBA/maternity/home	14 (87.5)	8 (6.3)	33.42	0.000
Mode of delivery				
Spontaneous vaginal delivery	246 (89.6)	28 (10.4)		
Assisted vaginal delivery	12 (85.7)	2 (14.3)	0.39	0.896
Caesarean section	13 (92.9)	1 (7.1)		
Pregnancy outcome				
Live birth	248 (91.5)	23 (5.3)	9.06	0.007
Still birth/abortion	23 (74.2)	8 (25.8)		
Place of delivery	Staff attitude N=257 (%)	N=45(%)		
Hospital	214 (89.9)	24 (10.1)		
Health centre	31 (73.8)	11 (26.2)	33.33	0.000
TBA/maternity/home	12 (75.0)	10 (18.8)		
Mode of delivery				
Spontaneous vaginal delivery	232 (84.7)	42 (15.3)		
Assisted vaginal delivery	12 (85.7)	2 (14.3)	0.71	0.702
Caesarean section	13 (92.9)	1 (7.1)		
Pregnancy outcome				
Live birth	235 (86.7)	36 (13.3)		
Still birth/abortion	22 (68.2)	9 (31.8)	5.44	0.020
Place of delivery	Waiting time N=254 (%)	N=48(%)		
Hospital	214 (89.9)	24 (10.1)		
Health centre	33 (78.6)	9 (21.4)	50.97	0.000
TBA/maternity	7 (31.8)	15 (68.2)		
Mode of delivery				
Spontaneous vaginal delivery	229 (83.6)	45 (16.4)		
Assisted vaginal delivery	12 (85.7)	2 (4.3)	0.88	0.733
Caesarean section	13 (92.9)	1 (7.1)		
Pregnancy outcome				
Live birth	233 (86.0)	38 (14.0)		
Still birth/abortion	21 (67.7)	10 (32.3)	6.92	0.009
Place of delivery	Cost of services N=240 (%)	N=62 (%)		
Hospital	195 (81.9)	23 (18.1)		
Health centre	33 (78.6)	9 (21.4)		
TBA/maternity/home	12 (54.5)	10 (45.5)	9.10	0.039
Mode of delivery				
Spontaneous vaginal delivery	236 (81.7)	38 (14.2)		
Assisted vaginal delivery	13 (92.9)	1 (7.1)		
Caesarean section	8 (57.1)	6 (42.9)	7.48	F = 0.018
Pregnancy outcome				
Live birth	231 (85.2)	40 (14.2)		
Still birth/abortion	26 (77.3)	5 (18.2)	0.41	1.00

health information. Consequently, this category of women is more likely to value time and money spent on accessing quality healthcare. They are also more likely to access better quality of care and take measures to enhance their health status despite the cost. However, in India the case was converse, where an inverse relationship was observed between clients' satisfaction and literacy status. It was believed that higher literacy status increases the level of expectation from MH services, and this results in lower level of satisfaction.[15]

Place of utilisation of MHC services was found to have significantly influenced maternal perception of quality of care. Utilisation of hospital for ANC and delivery services was associated with positive perception of quality of MHC services; however, increasing frequency of ANC visits was associated with non-satisfaction with service cost. Most of those who utilised higher levels of healthcare facilities also expressed satisfaction with staff attitude and time spent to access care. Although hospital care is relatively more expensive than the lower levels of care, it is believed that it provides better

quality of care. It has been reported that women are more likely to deliver in health facility they consider to be safe and secure, a consideration often borne out of quality of care received and delivery outcome of previous pregnancies.[7]

In contrast, mothers who reported adverse birth outcome had a negative perception of MHC services. Also, women who delivered either at home, maternity or by TBA and those who delivered via caesarean section considered the cost of MHC services unsatisfactory. In Nicaragua, women's perception of cost of services influenced women choice of delivery care. Positive or good pregnancy outcome was associated with satisfaction with quality of maternal care services. In contrast, frequent assessment of labour by different providers was found to be in conflict with the cultural expectation of women in Uganda, and this explains among other reasons the level of patronage.[7,12]

In conclusion, the study showed high level of satisfaction with quality of MH services and highlights the need to strengthen interventions that encourage women's utilisation of formal healthcare services. However, the major limitation of the study was that it was conducted among women who are already seeking care in health facilities and may not reflect the opinion of those who never sought for care in health facilities.

ACKNOWLEDGEMENT

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