Assessing client's satisfaction of maternal health care: A comparative study between private and public health facilities in northern Ghana

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Abstract

Background: Public and Private maternal health care providers have different incentive structures, which may affect the overall quality and ultimately the acceptability of maternal health care services for their intended clients. This study sought to determine the differences in the satisfaction levels among clients at public and private health facilities in northern Ghana and how these quality differentials impact maternal and child health. **Method:** The research design was a cross-sectional descriptive study using a semi-structured questionnaire. Convenience sampling technique was used to select three public and three private health facilities. A sample of 400 respondents comprising of 300 parturient women and 100 post-partum women accessing health services at the selected health facilities were recruited for the study. A systematic sampling technique was used to select the post-partum women. Data were analyzed using SPSS version 20 and Microsoft excel.

Results: Among the respondent interviewed, 73.5% (294) were between the age group of 15 and 35 years and 69.8% (279) had at least a Middle/Junior High School level of education. The findings of the study showed that more clients were satisfied with the antenatal services, delivery services and client-provider interaction at the private health facilities than the public health facilities. Additionally, most respondents with formal education were generally dissatisfied with the health services provided as compared to those with no formal education.

Conclusion: Privately owned health facilities tend to satisfy clients more as compared to public facilities. Public facilities will then need to study structures that are in private health facilities that lead to more client satisfaction and emulate.

Keywords:Clients' satisfaction, maternal health care, antenatal care, delivery services, provider-Client interaction.

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I. Background

Patient satisfaction is a key criterion by which the quality of health care services is evaluated. Patient satisfaction is a subjective evaluation of the service received against the individual's expectations (Amdemichael, Tafa&Fekadu, 2014). Satisfaction may represent a patient overall assessment of physician delivered care and other related activities within a given setting (Dhahi, Issa, Lamis, & Hameed, 2015).Clients' satisfaction measures how well the expectations of a customer concerning a product or service provided by your company have been met (Tabatabai et al., 2014).

Satisfaction and dissatisfaction indicate patients' judgment about the strengths and weaknesses, of the service (Chow, Mayer, Darzi&Athanasiou,2009). Patient satisfaction has become an integral part of hospital/clinic management strategies across the globe. Asking patients what they think about the care and treatment they have received is an important step towards improving the quality of care, and ensure local health

services are meeting patients' needs. Satisfaction influences whether a person seeks medical advice complies with treatment and maintains a continuing relationship with practitioners (Amdemichael et al., 2014). Measures of clients' satisfaction with health care can provide an important assessment of the quality of health care not adequately captured by other health service statistics such as patient waiting times, consultation times and proximity (Sitzia& Wood, 1997; Williams, 1994). It stands to reason that patient satisfaction is a major quality outcome in itself. Quality of antenatal care is an important determinant of pregnancy outcome and has been designated one of the four pillars of safe motherhood, along with clean and safe delivery, essential obstetric care and family planning which could contribute to a reduction of maternal mortality ((Mansour Lamadah & Hassan Fahmy Elsaba, 2012)r et al., 2012).

One of the crucial determinants of maternal health is antenatal attendance that paves the way for safer delivery and post-delivery care. The World Health Organisation (2006) recommends a minimum of four visits per pregnancy. This means that early detection of problems in pregnancy leads to more timely referrals in case of complications and this is of particular importance to the health care delivery system. Antenatal care-related expectations of pregnant women fall into four main categories: the wish to be provided with enough information, emotional support, general support concerningthe representation of their interests, and the wish to be provided with professional care (Douglas, Cervin&Bower, 2007).). A study in Irbid, Jordan, showed that the majority (94%) were satisfied with the service received (Al-Qutob, Mawajdeh, Nawar, Saidi, &Raad, 1998). Despite general satisfaction with antenatal care, there are significantly lower expectations among women with no formal education, with low income, younger than 26 years andwomen who report intimate partner violence(Galle, Van Parys, Roelens, & Keygnaert, 2015).

Evaluation of client satisfaction with antenatal care services is clinically relevant, as satisfied women are more likely to comply with treatment, take an active role in their care, continue using the services and stay with the health provider (Mansour Lamadah & Hassan Fahmy Elsaba, 2012). In maternal-child nursing practice, patient satisfaction has been widely recognized as one of the critical indicators of the quality and the efficiency of the health care systems (Johansson, Oléni&Fridlund,2002).

Understanding women's satisfaction with their childbirth experience is relevant to health care providers, administrators and policymakers as an indicator of the quality of maternity care (Hodnett, 2002). A woman's satisfaction with her childbirth experience may have immediate and long-term effects on her health and relationship with her neonate. A satisfactory childbirth experience can contribute to a woman's sense of accomplishment and self-esteem and expectations for future positive childbirth experiences (Goodman et al., 2004). The purpose of the study wasto assess the clients' satisfaction with maternal health care

II. Methodology

Study Setting

The study was carried out in one of the districts of the Upper East Region of Ghana. The population of the district as at 2010 stood at 13003 (Ghana Statistical service, 2014). About five in ten (53.6%) of the population are age 12 years and older are married, 37.3% have never married,0.2% are in consensual unions, 7.3% percent are widowed, 3.9% are divorced and 0.6% are separated (Ghana Statistical service, 2014). The district has no hospital but has eight (8) public health centers, seven (7) clinics and five (5) private clinics.

Study Design, Participants and Sampling

A descriptive cross-sectional study was performed using 300 parturient women who attended antenatal clinics and 100 mothers who had given birth at the selected public and private health facilities in the district at the time of data collection. Convenience sampling technique was used to select three public and three private health facilities for the study. Proportional quota sampling method was then used to assign several respondents to each health facility based on the average number of women who attend antenatal and deliveries they conduct in a month. For the parturient women, they were selected using a systematic sampling method where every third person who had received antenatal services from the selected facilities was selected until the required number of respondents was attained. A systematic sampling method was used because the women were registered in the antenatal attendance book which provided an ordered list. However, during the systematic sampling, when a selected person refused to take part in the study the next available person was selected. A census sampling technique was used to recruit the post-partum women because their number was generally smaller.

Sample Size Estimation

Raosoft sample size calculator at 95% confidence interval was used to determine the sample size for the study. In all, a total number of 400 questionnaires were administered (200 each from the public and private health facilities) and all retrieved.

Data Collection Procedure

The study was approved by the School Review Committee of the School of Allied Health Sciences of the University for Development Studies. Formal permission was also obtained from the authorities of the facilities that were selected for the study. Data for the study were collected with a semi-structured questionnaire developed by the researchers themselves. The questionnaire consisted of questions that elicited information about the socio-demographic factors of subjects, their satisfaction with antenatal care, satisfaction with delivery services and satisfaction with provider-client interaction. The level of satisfaction was assessed by asking clients the extent to which they were satisfied with the services they received. Parturient women assessing antenatal services in the selected facilities were informed of the study and those who met the inclusion criteria and voluntarily accepted to participate were recruited. The administration of the questionnaire was done when the women finished receiving the ANC services. Women who had given birth in the selected facilities and were in stable conditions were also contacted and the study explained to them. Informed consent was obtained from all the respondents before the questionnaire was administered.

Data Analysis

The analysis of data was performed with the SPSS 20.0 statistical software. The results were presented with descriptive statistics such as frequencies and percentages. Cross-tabulation was used to understand the relationship between the level of education of mothers and their satisfaction with maternal services.

III. Results

Socio-Demographic characteristics

Table 1 below indicates that a total of 400 women within the reproductive age of 15 to 50 years old were included in the study. Two hundred (200) respondents consisting of 150 parturient women and 50 post-partum women were selected public health facilities. The remaining 200 respondents also consisted of 150 parturient women and 50 post-partum women from private health facilities. Regarding educational level, of the total of 400 sampled 215 respondents (53.8%) had some level of education. Of those who had tertiary level education, 19 (9.5%) of them were among those sampled at the public health facilities whereas 21 (10.5%) were among those sampled at the private facilities. Most of these respondents with a tertiary level of education were teachers. For those with secondary school education, 41 (20.5%) of them were studied at the public facilities and 28 (10.5%) from the private facilities. On employment, 39 (19.5%) were unemployed from public facilities as compared to 57(28.5%) from private facilities. Also, 65 (32.5%) were unemployed from public facilities, 100 (50.0%) had less than four (4) children and 47(23.5%) had no child while among those from the private health facilities.

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	Public HealthC	are	Private Health	Care
	n=200		n=200	
Variable	Frequency	Percentage	Frequency	Percentage
Age				
15-24	58	29.0	66	33.0
25-34	78	39.0	92	46.0
35-44	46	23.0	23	11.5
45-50	18	9.0	19	9.5
Educational level				
None	102	51.0	83	41.5
Primary	14	7.0	27	13.5
Middle/JHS	24	12.0	41	20.5
Secondary	41	20.5	28	14.0
Tertiary	19	9.5	21	10.5
Husbands Educational Level				
None	43	21.5	60	30.0
Primary	13	6.5	5	2.5
Middle/JHS	23	11.5	25	12.5
Secondary	57	28.5	20	10.0
Tertiary	64	32.0	90	45.0
Occupation of clients				
Salaried worker	39	19.5	38	19.0
Self employed	96	48.0	105	52.5
Unemployed	65	32.5	57	28.5
Parity				
None	47	23.5	67	33.5
1-3	100	50.0	59	29.5
More than 3	53	26.5	74	37.0

Level of satisfaction with Antenatal care

Table 2 shows an assessment of the level of satisfaction with ANC among 300 parturient women. One hundred and fifty each were recruited from public facilities and private facilities. From the 150 respondents sampled from the public health facilities, 85 (56.7%) indicated a general dissatisfaction with ANC services received while 45(30%) were satisfied and another 20 (13%) were very satisfied. On the other hand, 59 (39.3%) respondents and another 53 (35.4%) indicated satisfied and very satisfied respectively while 38 were dissatisfied with ANC services at private facilities.

	Public Heal	Public Health Care		th Care
	n=150	%	n=150	%
Dissatisfied	85	56.7	38	25.3
Satisfied	45	30.0	59	39.3
Very satisfied	20	13.3	53	35.4

The educational level of mothers and satisfaction with ANC services

Table 3 indicates that at private facilities, among the women none of the education 37.3% were satisfied and 64.2% were very satisfied with ANC services. Again, at the public facilities among the women who had none of the education, 45.5% were satisfied and 95% very satisfied with ANC services. Also, at the private facilities, though 40.7% of women with secondary education were satisfied, only 9.4% of participants with secondary education were very satisfied. Among women with tertiary education, only 17% of them were very satisfied with private facilities and none of them were very satisfied with public facilities.

Table 3: Cross-tabulation of Educational level of mothers	* Mothers satisfaction with ANC services
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		Mothers satisfaction with ANC services					
		Private Health Facilities		Public Health Facilities			
		5		Dissatisfied n=65	Satisfied n=55	Very satisfied n=30	
The educational level of mothers	None Primary Middle/JHS Secondary Tertiary	13.3 0 8.7 3.3 0	37.3 8.5 0 40.7 13.6	64.2 0 9.4 9.4 17	23.1 23.1 15.4 23.1 15.4	45.5 9.1 27.3 9.1 9.1	95 0 5 0 0

Clients' satisfaction with the delivery services

Table 4 below shows that a total of hundred (100) women who had received delivery services responded to questionnaires on satisfaction with delivery services. Fifty (50) respondents each were purposively selected from the public and private facilities. Thirty-four percent of the women were satisfied and 14% ofwomen were very satisfied with the delivery services at the public health providers. On the other hand, out of the 50 women studied at the private health facilities, 34% of them were satisfied and 30% were very satisfied with the delivery services while 36% were dissatisfied.

Table 4: Client's level of satisfaction of delivery services

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	Public Healt	Public Health Care		th Care
	n=50	n=50 %		%
Dissatisfied	26	52.0	18	36.0
Satisfied	17	34.0	17	34.0
Very satisfied	7	14.0	15	30.0

The educational level of mothers and satisfaction with delivery service

The results of the cross-tabulation in Table 5 indicates that there are more women (15) from the Public health services who were very satisfied with their delivery services than their counterparts (7) on the other side who are very also very satisfied. That notwithstanding, none of the women with Middle/JHS, Secondary and Tertiary levels of education at the public health facilities were very satisfied with the delivery service. Also, at the private facilities, only 7 women with secondary and tertiary were very satisfied.

Table 5: Cross-tabulation of Educational level of mothers * Mothers satisfaction with delivery services

		5		Private Health Facilities			
				(n=15)	Dissatisfied (n= 26)	Satisfied (n=17)	Very satisfied (n= 7) Percent
		Percent	Percent		Percent	Percent	
	None	50	29.4	80	42.3	41.2	0
Educational level of mothers	Primary	16.7	17.6	20	26.9	0	0
	Middle/JHS	33.3	0	0	15.4	41.2	0
	Secondary	0	41.1	0	15.4	0	57.1
	Tertiary	0	11.8	0	0	17.6	42.9

Level of satisfaction with client-provider interaction

Table 6 shows the assessment of the level of satisfaction with provider-client interaction among all the 400 respondents. At the private health facilities, 118(59%) were satisfied and 55(27.5%) were very satisfied. Also, at the public health facilities, 62(31%) were satisfied and 8(4%) were very satisfied. On dissatisfaction, 27 (13.7%) of the women were dissatisfied with delivery services at private health facilities as compared to 130(65%) who were dissatisfied at public health facilities.

Table 6: Level of satisfac	ction of Provider-Client	interaction
	Public Health Care	Private Health Care

	Public Health Care		Private Health	n Care
	n=200	%	2=200	%
Dissatisfied	130	65.0	27	13.5
Satisfied	62	31.0	118	59.0
Very satisfied	8	4.0	55	27.5

IV. Discussion

The study compared women's satisfaction with antenatal care (ANC) services, delivery services and provider-client interaction between public and private health facilities. The study was carried out among women 400 respondents, 200 each from public and private health facilities in the selected district. The age range of respondents was between 15-35 years and most of them did not receive education up to the tertiary level.

The study revealed that 45 (30%) of respondents were satisfied and 20(13.3%) were very satisfied with antenatal care (ANC) services at public facilities. At the private facilities, 59 (39.3%) were satisfied and 53(35.4%) were very satisfied with ANC services. Based on this, the study found that most of the women surveyed at the private facilities were satisfied with the ANC services as compared to those at the public facilities. Also, the study revealed that women's level of satisfaction with ANC services was affected by their educational status. For instance, more women with no formal education were satisfied with ANC services at both private and public facilities as compared to those with formal education. This means that the satisfaction level among women who had some level of formal education all put together (Primary, Middle/JHS, Secondary or Tertiary) was rather lower. The findings from the study agree with Galle et al. (2015) which established that women with no education have significantly lower expectations during ANC. The setting of the present study which was predominantly rural could have influenced the low expectations of those who were not educated. Lack of education on patient rights could also be a factor in making patients easily satisfied.

The study established that 32 (64%) of respondents were satisfied with delivery in public as compared to 24 (48%) from private facilities. Among those who were satisfied with delivery services at the private facilities, most of them had some formal education, and 15 respondents out of the 32 respondents satisfied with delivery services at the public facilities had formal education. This implies that about half of those satisfied with delivery services were having a formal education and this could be a factor influencing satisfaction. When patients are not aware of what they are supposed to get from a service provider their level of expectations could below. Amdemichael et al. (2014) concluded that regarding participants' educational status, less educated clients have higher satisfaction than the educated ones.

Provider-client interaction is one of the indispensable components that predict clients' satisfaction with health care services. Communication between the provider and the client during antenatal visits plays an important role in her satisfaction with maternal health care. In this study, 118(59%) of the respondents were satisfied and 55(27.5%) of them were very satisfied with provider-client interaction at the private health facilities. Ghobashi and Khandekar (2008) established that the positive behavior of the health staff and the warm reception clients received in the antenatal care unit were the most satisfying parts of the services. In this study, at the public health facilities, 62(31%) respondents were satisfied and only 8(4%) were very satisfied with the level of interaction they had with staff. Studies conducted in Malawi showed that poor attitudes of health workers have been identified (Graham et al., 2001; Changole, 2010). Staff unfriendliness, negative attitude and

impatience is a major cause for dissatisfaction with services and avoidance of the use of health services (Aradhana& Bilal, 2015). The high level of satisfaction at the private facilities could be good be staff being friendly and giving a warm reception to clients.

V. Conclusion

Clients' satisfaction with maternal health care services was high with services accessed by clients at the private health facilities as compared to that of the public health facilities in the study area. This establishes that private facilities deliver client-centered services and this could be as a result of staff motivation and supervision. Also, clients who have formal education were generally less satisfied with health services provided as compared to those with no formal education.

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Availability of Material

The data from which this manuscript was developed is available upon request from the corresponding author. **Competing Interest**

The authors declare that there is no competing interest

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Authors' contributions

EBK conceptualized the study and discussed it with TBA and GNT. EBK collected the data. EBK TBA and NGT analysed the data. NGT drafted the manuscript and it was reviewed by TBA and EBK. All authors read and approved the final manuscript.

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