Consumer assessment of perceived quality of antenatal care services in a tertiary health care institution in Osun State, Nigeria

Nigera Osun bölgesinde üçüncü derece bakım hizmeti sunan hastanelerin antenatal servislerinin kalitesinin hastalar tarafından değerlendirilmesi

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Abstract

Objective: To describe consumer assessment of the perceived-quality of antenatal care services in a tertiary health care institution in Osun State.

Material and Methods: In a descriptive cross-sectional study, information was obtained (utilizing a semi-structured questionnaire) from 289 pregnant women randomly selected from the Antenatal Clinic (ANC) of Obafemi Awolowo University Teaching Hospital. Chi-square statistic test was used to explore associations. Level of significance was $p<0.05$.

Results: Mean age of respondents was $30.93 + 9.109$ years, the modal age group was 26-30 years, 6.2% were single while 93.8% were ever-married, 3.5% had no formal education, while 39.1%, 53.3% had secondary and tertiary education respectively. Rate of adolescent pregnancy in this study was 4.2%. About a third each of respondents had parity of one and two respectively. Age, occupation, husband's payment of booking fees, and previous ANC attendance were all significantly related to place of previous delivery ($p<0.05$). More than 90% of respondents assessed health personnel's attitudes positively; however, an assessment of poor quality of care in terms of time spent in clinic (too long/too short) was given by 66.5% of respondents, whilst almost one quarter (22.5%) were not satisfied with the over-all perceived quality of care received. The most frequently mentioned reason for non-satisfaction with quality of care received was wasting of time in the clinic.

Conclusion: Although the majority of respondents assessed the over-all quality of care received as satisfactory, a major point of dissatisfaction in many respondents is the length of time spent in the ANC. To achieve the MDG of reduction in maternal mortality especially in Nigeria, the quality of ANC care needs to be improved, which will, in turn, lead to increased utilization of ANC services and an ultimate reduction in maternal mortality rate.

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Key words: Consumers, Ante-natal Care, Perceived-Quality of Care, Assessment, Nigeria

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Özet

Amaç: Nigera Osun bölgesinde üçüncü derece bakım hizmeti sunan hastanelerin antenatal servislerinin kalitesinin hastalar tarafından değerlendirilmesi

Gereç ve Yöntemler: Obafemi Awolowo Üniversitesi Eğitim Hastanesine başvuran 289 gebe kadından yarı yapılandırılmış anket ile bilgiler alındı. sonuçların değerlendirilmesi için Ki-kare testi kullanıldı. İstatistiksel anlamlılık $p<0.05$ olarak kabul edildi.

Bulgular: Ankete katılanların yaş ortalaması $30.93 + 9.1$ yıl idi (26-30 yaş). Hastaların %6.2 si bekar, %93.8 i evli idi. Katılımcıların %3.5 kadar okur yazar değil iken, %39.1 i ilkokul, %53.3 ü ise lise mezunuydu. Adolesanların oranı ise %4.2 idi. Katılımcıların yaklaşık üçte biri kadarı 1 veya 2 doğum yapmıştı. Katılımcıların %90 kadarı sağlık çalışanlarının yaklaşımlarının ozitif olduğunu beyan etti. Katılımcıların %25 kadarı ise verilen hizmetin kalitesinden memnun kalmadığını ifade etti. bunun en sık nedeni ise klinikte boşa geçirilen süre oluşturmaktaydı.

Sonuç: Ankete katılanların çoğunluğu verilen hizmetten memnunklasa da hoşnutsuzluğun ana nedeni antenatal bakım servislerinde geçirilen sürenin uzunluğu oluşturmaktadır. Bu nedenle antenatal komplikasyonların azaltılabilmesi için özellikle Nijerya da Antenatal Bakım servislerinin iyileştirilmesi şarttır. Böylece sonunda maternal mortalite oranı azaltılabilir. (J Turkish-German Gynecol Assoc 2009; 10: 89-94)

Anahtar kelimeler: Hasta, Antenatal bakım, Bakım kalitesi, Değerlendirme, Nijerya

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Introduction

The antenatal period presents critical opportunities for reducing mortality and morbidity of pregnant women in Nigeria. This is more so when one considers the unacceptably high maternal mortality rate (MMR) of 704 - 1,549 maternal deaths/ 100,000 total births, depending on the area of the country (1). ANC has a number of interventions that have the potential to improve both maternal and newborn health.

Quality of care is one of the major public health concerns in this 21st century. Many countries have developed various models of quality assurance in order to ensure client satisfaction and overall improvement of their health care delivery services. The new approach to ANC also emphasizes the quality of care rather than the quantity (2). The importance of involving and using consumer perceptions of services is widely recognized in maternity services in developed countries; and is one of the best measures of quality of care comes from the patient's perspective (3). However, this concept has not been fully recognized or accepted in developing countries such as Nigeria. Data reflecting women's views that are based on issues that matter to them, rather than just those that are measurable, offer much in terms of increasing our understanding of their experiences. While challenging, such data also help to focus and inform service development to become more woman and baby focused and friendly.

There has been some debate about using the client's perspective in evaluation of the quality of services. While many stakeholders have viewed the client's perspective as a meaningful indicator of health services quality, others have dismissed the views of clients as too subjective (4). For the latter point of view, how a client feels is important, even though the provider's assessment of reality may be different (4), because at a minimum, the subjective assessment of quality by clients can still provide useful input to help the provider understand and establish acceptable standards of services (5). Consumer assessments of interpersonal processes of care during prenatal care provide important information about how well clinicians satisfy the perceived needs of the clients they serve. Furthermore, perceived quality of care received in health facilities is directly proportionately related to the use of health facilities.

Client-perceived quality of care is a subjective, dynamic perception of the extent to which expected health care is received (6). The advantages of perceived quality measurement have been pointed out by several authors (7, 8). However, most studies on client perspective of quality of services have been conducted in developed countries (9-11) and only a few reports are available for developing countries (5, 12, 13). There is a dearth of information on clients' perception of quality of care in ANC in many developing countries. The objectives of this study therefore, were to describe consumers' assessment of health personnel's attitude to clients and processes of care in the ANC, and examine the relationship between selected socio-demographic characteristics and respondents' assessment of personnel attitude and the processes of care in ANC.

Materials and Methods

Description of Study Area: The study was conducted at the Obafemi Awolowo University Teaching Hospital Complex (OAUTHC), Ile-Ife, Nigeria. The basic antenatal services offered in the ANC of OAUTHC are physical examination (including weight, assessment of gestational age by measurement of fundic height, and blood pressure), laboratory investigations (including screening for anemia (Packed Cell Volume), Retroviral screening, VDRL, Urinalysis, Blood grouping, and Genotype), Ultrasonography, Malaria prophylaxis (IPT), Hematinics and treatment of any presenting illness. The inhabitants of Ile-Ife are mainly farmers, traders and artisans, though there is an increasing population of highly educated middle class made up of civil servants and professionals.

Study Design: This was a descriptive cross-sectional study conducted between November, 2007 and February, 2008.

Sampling Technique: The study continued for a period of three months. Fifty percent of ANC attendees on each clinic day during the study period were selected by simple random sampling technique. Information was obtained from 289 pregnant women randomly selected from the Antenatal Clinic of Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife, Osun State, Nigeria.

Instrument: A semi-structured questionnaire was developed in English and the vernacular for the purpose of data collection. This instrument was corrected for any ambiguity after pre-testing the initial tool at another tertiary health care institution with similar characteristics (ANC of LAUTECH Teaching Hospital, Osogbo, Osun State, Nigeria). The questionnaire contained three sections covering the socio-demographic characteristics of respondents, respondents' assessment of health personnel's attitude and assessment of processes of care in the ANC. Informed Verbal consent was obtained from each respondent.

Data Analysis: Data were entered on a computer using the Software Package for Social Sciences (SPSS). Frequencies were generated and data presented in the form of tables. Using EPI-INFO Statcalc Feature, further analysis was employed using Chi-square test of statistics to measure associations between socio-demographic characteristics and perceived quality of care received in ANC.

Ethical considerations

Approval for the study was obtained from the Ethical Committee of the Department of Community Medicine, LAUTECH, and permission to conduct the study was obtained from the administration of the hospital involved in the study. Informed consent was also obtained from each respondent.

Results

A total of 289 respondents were studied. The mean age of respondents was 30.93±9.109 years, the modal age group was 26-30 years, 6.2% were singles while 93.8% were ever-married. Only 3.5% has no formal education while 39.1%, 53.3% had secondary and tertiary education respectively. Rate of adolescent pregnancy in this study was 4.2%. There were a total of 237 (82.0%) respondents with a history of previous deliveries while 52 (18.0%) respondents were primigravidas (Table 1).

When respondents were considered according to place of delivery of previous pregnancy, result showed that 181(76.4%) deliveries took place in a health facility while 56 (23.6) deliveries took place outside a health facility. For deliveries that took place in the health facility, 165 (91.2%) took place in hospitals, while 16 (8.8%) took place in Maternity centers. For deliveries that

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Table 1. Socio-demographic Characteristics of Respondents

Variables	Frequency N	%
Age group		
<19years old	12	4.2
20-25	62	21.4
26-30	107	37.0
31-35	84	29.1
36-40	23	8.0
>40	1	0.3
Educational status		
No formal education	10	3.5
Primary	12	4.2
Secondary	113	39.0
Tertiary	154	53.3
Marital status		
Single	18	6.2
*Ever Married	271	93.8
Religion		
Christianity	238	82.4
Islam	51	17.6
Occupational status		
Housewife	37	12.8
Trading	111	38.4
Artisans	31	10.7
Civil Servants	110	38.1
Parity		
Primipara (P 0)	52	18.0
Parity 1	110	38.0
Parity 2	93	32.2
Parity 3	23	8.0
Parity 4	6	2.1
Parity >5	5	1.7
*Ever Married = married, divorced, separated, widowed		

took place outside the health facility, 7 (12.5%) were in Mission (Church) Houses, 9 (16.1%) in the Home and 40 (71.4%) in other places such as farm, market, on the way to the hospital, etc. For respondents with a history of previous deliveries (n=237), the persons responsible for paying for the booking fees in the ANC were husbands 198 (83.5%), self 15 (6.3%), both 11 (4.6%), and parents 13 (5.5%).

The major reasons given by respondents for using this hospital were access to efficient and good care (65.9%), availability of qualified personnel (27.0%), referral to the hospital because of complications (5.2%), recommendation from friends (3.8%) and proximity of the hospital to place of respondent's residence (3.1%).

Table 2 shows that the majority of respondents (>95%) assessed the health personnel attitude positively. Almost 60% of respondents assessed time spent with the Doctor as adequate but more than fifty percent (56.1%) of them considered the total time spent in the clinic to be too long, while only 33.6% of respondents considered the total time spent in the ANC as adequate. Furthermore, almost one quarter (22.5%) of the respondents were not satisfied with the overall perceived-quality of service they received in the ANC.

Results showed that the mean total duration of time spent in the clinic by respondents was 2.53±0.48 hours, the modal time was 2.32 hours, with the minimum time of 1.30 hours and maximum of 4.30 hours. The mean duration of time spent by respondents in consultation with the doctor was 10.54± 6.36 minutes, modal time was 6.00 minutes, while the minimum duration of consultation with the doctor was 4.00 minutes and the maximum was 29.00 minutes. Mean duration of time spent on health talk was 25.50 minutes.

Table 3 shows respondents' reasons for non-satisfaction with over-all perceived-quality of care received in the ANC. The major reason given by respondents (75.4%) for non-satisfaction with the over-all perceived quality of care received in the clinic was wasting of time, followed by lack of privacy because of students (15.4%) and boring health talks (13.8%). Fifty-one respondents (17.6%) were not satisfied with the quality of the health talk and their proffered reasons include the talk being too long, boring or with inadequate content in 85.4%, 53.6% and 25.5% of respondents respectively.

In Tables 4 & 5, bivariate analysis shows that there was a statistically significant association between attendance at ANC, person who paid the booking fees, occupational status, parity and the place of delivery. A similar statistically significant relationship was found between religion/parity and satisfaction with over-all perceived quality of ANC care; educational status/occupational status and assessment of time spent in ANC (p<0.05).

Respondents' suggestions for improving the perceived quality of care in the ANC included engendering more user-friendly attitudes in the health personnel (23.5%), increasing the number of staff (31.0%) and reduction in time spent in the clinic (45.5%).

Discussion

The study revealed that almost a quarter of the respondents were not satisfied with the overall perceived quality of care/ service they received. This should be a major concern to health care providers both at the grass-root and the national levels. If we are to achieve the millennium development goal (MDG) of reducing MMR (740-1,549/100,000 total births in Nigeria) by two-thirds by the year 2015 (1), improvement of ANC care in terms of quality care and client satisfaction is vital.

As revealed in the study, the degree of negative attitudes of health personnel as perceived by the clients increased from the cadre of the doctor to that of the medical record personnel. The medical record personnel provide the first contact with the clients who come to the clinic, so they are like "gate-keepers". Therefore, if their attitude is perceived to be negative by the clients, this might lead to either total boycott or infrequent ANC visits. If at the entry point the clients are not satisfied, this can impact on other prospective clients because, as seen from the

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Table 2. Distribution of Respondents according to their Assessment of Health Personnel Attitude and Perceived Quality of Care Received in ANC

Variables	Frequency	(%)
Respondents' assessment of health personnel attitude		
Assessment of Doctor's Attitude		
Very Friendly	187	64.7
Friendly	96	33.2
Unfriendly/Rude	6	2.1
Assessment of Nurse's attitude		
Very Friendly	165	57.1
Friendly	114	39.4
Unfriendly/Rude	10	3.5
Assessment of medical records staff's attitude		
Very Friendly	118	40.8
Friendly	158	54.7
Unfriendly/Rude	13	4.5
Assessment of quality of care		
Time spent with Doctor		
Too long	33	11.4
Too short	85	29.4
Adequate	171	59.2
Total Time spent in the clinic		
Too long	162	56.0
Too short	30	10.4
Adequate	97	33.6
Overall assessment based on satisfaction with care		
Good Quality of Care	224	77.5
Poor Quality of Care	65	22.5

result, many clients' choice of whether to use a health facility or not were influenced by recommendations from their friends and colleagues. Another reason that could lead to non-visit or infrequent utilization of the ANC is the attitude of the health care providers (doctors and nurses) themselves.

Three out of five respondents considered the length of time spent in consultation with the doctor to be adequate while more than half of them assessed the total time spent in the antenatal clinic as being too long. This is an important element of service delivery that must be noted as it can affect utilization of the health services. The importance of proper time management in the clinic was further revealed by the fact that almost a quarter of the respondents were not satisfied with the overall perceived quality of care they received. The major reason for this in three quarters of these respondents was wasting of client's time in the clinic. Long waiting time in the clinic cuts into time spent on income-earning activities and this may be a major determinant of whether a health service is utilized or not. In this study, it is significant to note that almost half of the respondents are artisans and small traders. Time is very important to this class of

clients; hence all health providers should always be mindful of proper time management in the clinics. Uzochukchu et al. (14) corroborated this finding in their study in southeastern Nigeria, where they found that long waiting queues, provider behaviour and lack of doctors militated against the utilization of maternal and child health services.

Another important reason proffered for non-satisfaction with the overall perceived quality of care in the ANC was lack of privacy because of the presence of so many medical students at consultation. While it is recognized that in a Teaching Hospital setting, there is a need to teach the medical students who will be future doctors, procedures must be put in place to ensure patient privacy, as this is part of code of medical ethics which is binding on all practitioners.

The length and content of health talks given in ANC is another area of non-satisfaction to clients. These were considered to be either too long, too boring or having inadequate content. More than three-quarters of this study population had at least secondary level education, so it is not surprising to find that they would at least expect a certain level of factual information to be passed

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Table 3. Respondent Reasons For Non-Satisfaction With Over-All Perceived Quality Of Care Received In The Clinic

*Reasons for non-satisfaction with perceived quality of care received at ANC (n=65)	Frequency	%
Too much wasting of time	49	75.4
No privacy because of students	10	15.4
Too boring health talk	9	13.8
Rude attitude of staff	6	9.2
Satisfaction with Health Talk (n=289)		
Yes	238	82.4
No	51	17.6
*Reasons for non-satisfaction with health talk (n=51)		
Too long	35	85.4
Inadequate content	22	53.6
Too boring	13	25.5
*Multiple choices		

Table 4. Association between Selected Socio-demographic Characteristics and Place of Previous Delivery

Variables	Place of Previous delivery		χ^2	p-value	Remark
Age	Health Facility	Non-Health Facility			
< 30 years	93 (51.4)	36 (64.3)	2.87	0.09	NS
> 30 years	88 (48.6)	20 (35.7)			
Educational status					
<Secondary Educ.	10 (5.5)	11 (19.6)	10.56	0.001	S
>Secondary Educ.	171 (94.5)	45 (80.4)			
Occupational status					
Housewife/unemployed	11 (6.1)	18 (32.1)	38.11	0.00000001	S
Artisan/Traders	74 (40.9)	29 (51.8)			
Civil Servants	96 (53.0)	9 (16.1)			
Previous ANC attendance					
Yes	103 (56.9)	10 (17.9)	26.14	0.0000003	S
No	78 (43.1)	46 (82.1)			
Parity					
1 & 2	167 (92.3)	36 (64.3)	27.25	0.0000002	S
>2	14 (7.7)	20 (35.7)			
Payee of ANC booking fees					
Husband	167 (92.3)	39 (69.6)	19.25	0.00001	S
Significant others (e.g. self, parents)	14 (7.7)	17 (30.4)			

across during health talks.

The study showed a statistically significant relationship between the person who paid the booking fees and attendance at ANC. This infers that, for sustained and meaningful reduction in MMR to be achieved in this environment, male involvement is vital and will play a pivotal role.

Conclusion: The study has revealed that the majority of respondents assessed the overall quality of care received as satisfactory. A major point of dissatisfaction in many respondents is the length of time spent in the ANC. To achieve the MDG of reduction in maternal mortality, especially in Nigeria, quality of ANC care needs to be improved which will in turn lead to increased utilization of ANC services and ultimately a reduction in maternal mortality rate.

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Table 5: Association between Socio-demographic Characteristics and Consumer Assessment of Perceived Quality of Care Received in the ANC N=289

Variables	Assessment of Perceived Quality of Care		x2	p-value	Remark
Age	Assessment of quality time				
	Adequate	Inadequate			
<30 years	61 (62.9)	120 (62.5)	0.00	0.95	NS
>30 years	36 (37.1)	72 (37.5)			
Occupational status					
Housewife/unemployed	28 (16.4)	9 (7.6)	20.99	0.00003	S
Traders/Artisans	65 (38.0)	77 (65.3)			
Civil Servants	78 (45.6)	32 (27.1)			
Educational status					
<Secondary educ.	61 (35.7)	74 (62.7)	20.51	0.00001	S
Tertiary educ.	110 (64.3)	44 (37.3)			
Religion	Satisfaction with over-all perceived quality of care received				
	Satisfied	Not Satisfied			
Christianity	190 (84.8)	48 (73.8)	5.45	0.02	S
Islam	34 (15.2)	17 (26.2)			
Parity					
<1	149 (66.5)	13 (20.0)	44.26	0.00000001	S
>1	75 (33.5)	52 (80.)			

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