



CLIENTS SATISFACTION OF MATERNITY CARE AND THE DETERMINANTS FOR ANTENATAL BOOKING AMONG PREGNANT WOMEN ATTENDING CLINIC IN ECWA HOSPITAL EGBE, KOGI STATE

Olatubosun Alice Kehinde¹, Samuel Godwin Atayi^{2*},

Silas Oyibo Saidu³, and Salamatu Hassan Idris⁴

¹⁻⁴Department of Nursing Sciences, College of Health Sciences, Federal University Lokoja, Kogi State.

*Corresponding Author's Email: godwinatayis@gmail.com

Cite this article:

Olatubosun A. K., Samuel G. A., Silas O. S., Salamatu H. I. (2024), Clients Satisfaction of Maternity Care and the Determinants for Antenatal Booking Among Pregnant Women Attending Clinic in ECWA Hospital Egbe, Kogi State. African Journal of Health, Nursing and Midwifery 7(2), 194-207. DOI: 10.52589/AJHNM-GUA3WCQQ

Manuscript History

Received: 28 Feb 2024

Accepted: 1 May 2024

Published: 18 Jun 2024

Copyright © 2024 The Author(s).

This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

ABSTRACT: Globally, at least 1600 women die from the complications of pregnancy and childbirth daily giving an annual figure of 585.000 women (with Nigeria alone contributing up to 10% of figure), and over 50 million more women suffer from acute complications and long term morbidities. The indices for maternal and child mortality are relatively high in most developing countries, particularly in sub-Saharan Africa. This study aims to look at clients satisfaction of maternity care and The determinants for antenatal booking among pregnant women attending clinic in ECWA Hospital Egbe, Kogi State. A non-experimental descriptive mixed method was used with the combination of quantitative and qualitative method. A total of two hundred and forty-four (244) women attending maternal health services at ECWA hospital Egbe were selected by cluster sampling technique. Data was collected using pretested structured client questionnaires, and focus group discussion guide. About 64(74.6%) of the clients had 2-4 babies and 198(90.0%) had their previous delivery in the hospital. Majority 178(80.9%) book their antenatal in ECWA hospital and 17(7.7%) booked in PHC centres. Only 4 (1.8%) of the participants booked for antenatal service in other facilities. This implies that women are beginning to be aware of the benefits of booking and antenatal care, hence the higher rate of booking although only few return to deliver their babies after booking. Majority 204(92.7%) received enough help from staff with the baby care and 215(97.7%) said they will advice friends to use this facility, hence, the likelihood to return for child birth but they go to another clinic for other services such as child immunisation. Majority of the women were satisfied with the maternity care services received at the hospital. Therefore, the following recommendations were made; the management should employ more competent health professionals especially nurses in their various field of specialties and regular in service training to meet with improving world standard.

KEYWORDS: Antenatal, Booking, determinant, maternity, Satisfaction.



BACKGROUND OF THE STUDY

Maternity services provide opportunity for women to have a supervised antenatal service, safe delivery and to receive family planning counseling. The utilization of maternity services is not as expected in developing countries. The consequence of this is an unacceptably high maternal mortality (Jagun *et al.*, 2013). According to Kagawa-Singer and Kassim-Lakha, (2018) and Filippi, *et al.*, (2015), mainstreaming care-seekers' perspectives of quality into service delivery and aligning maternity care practices with tested ways for assuring quality services are among the necessary steps to improve maternal health outcomes. Few studies have, however, examined the priorities of women—the recipients of maternity care directly—in relation to what is meant by quality maternity care (Rudman and Waldenstrom, 2016; Wieggers, 2019). While there is some agreement among researchers studying quality-of-care "on concepts like structure, process and outcome, and non-clinical versus clinical processes of care," Valentine, *et al.*, (2019) note that these "concepts are commonly explored through surveys measuring patient experiences" and not patient or user quality of care priorities or notions. However, a focus on user and community views, as Pitchforth, *et al.*, (2015) argue, might broaden awareness of the underlying variables in care quality and promote care reform efforts. Improving maternity services depends on knowing what good care is and how it should be assessed. Despite the tremendous interest, there is a lack of clarity surrounding this notion and how general concepts of quality of care can be applied to maternal health (Pittrof *et al.*, 2015).

Despite the tremendous interest, there is a lack of clarity surrounding this notion and how general concepts of quality of care can be applied to maternal health (Pittrof, *et al.*, 2015). Maternal mortality rates among the East Africa Community member states are among the highest on the continent, with Burundi, Tanzania, and Kenya recording, respectively, 740, 410, and 400 deaths per 100,000 live births (WHO, 2016). The lifetime risk of maternal mortality due to pregnancy complications, such as obstructed labour, excessive bleedings or eclampsia, is higher in Sub-Saharan Africa than in other parts of the world in part due to higher fertility rates, poorer nutritional status of women, inaccessibility to antenatal care clinics and higher prevalence of vulnerable life circumstances such as poverty and a higher prevalence of HIV infection (WHO, 2016, Nikiema, 2016).

Maternal mortality rates among the East Africa Community member states are among the highest on the continent, with Burundi, Tanzania, and Kenya recording, respectively, 740, 410, and 400 deaths per 100,000 live births (WHO, 2016). One of the key treatments for enhancing maternal outcomes is antenatal care (WHO, 2016). Early detection of pregnancy-related hazards and difficulties is made possible by ANC services, which also guarantee access to services like health education, vaccinations, diagnostic testing, and therapies (Gross, *et al.*, 2018). Additionally, it facilitates the development of strong bonds between pregnant women and service providers (Magadie, *et al.*, 2019). Additionally, a pregnant woman receiving antenatal care in a health facility would receive guidance and support as well as greater information about her health needs and self-care (WHO 2016), which ultimately led to a higher use of emergency care services (Morse, *et al.*, 2016, Roost, *et al.*, 2020).

Good antenatal care starts with 'booking' which serves as entry to prenatal care for the index pregnant and affords the pregnant women opportunity for risk assessment and management (UNDP/UNFPA/WHO/WORLD 2015). According to Okunbola, *et al.*, (2017), the first



antenatal visit should begin at around 12 weeks for targeted antenatal care and at around 14 weeks for traditional antenatal care, which is the norm in most developing nations. This early antenatal visit aids in early pregnancy diagnosis, provides an accurate estimate of the due date, records past and ongoing obstetric issues as well as medical, social, family, and surgical issues associated with the pregnancy (RCOG, 2015, Lamina, 2014). The general health condition of pregnant women is assessed and ancillary laboratory investigations done. A healthy baby born to a healthy mother is the only goal of early preventive interventions (Omigbodun, 2014, RCOG, 2015, Lamina, 2014).

The initial booking appointment, which occurs when a woman first joins the maternity care system, is characterized by information sharing and thorough history-taking to assist the woman in selecting the best antenatal care option. Measurements of height, weight, blood pressure, and blood tests to determine blood type and haemoglobin level are also included in prenatal appointments. After the lady has been fully informed and has given her consent, blood and urine samples for screening may also be collected at the prenatal booking session (NHS, 2021).

In addition to receiving medical care, it is crucial that mothers deliver their children in a suitable environment with access to life-saving technology and sanitary circumstances to assist lower the risk of complications that could result in the mother's or the child's death or illness (Campbell and Graham, 2016). Investigating factors that affect care-seeking behavior has been more popular during the past ten years. According to the "three delays" concept, there are three key barriers to using health services: the delay in making the decision to seek care, the wait in getting to a facility that can provide acceptable care, and the delay in receiving adequate care at that facility (Thaddeus and Maine 2014). Phase 2 delays could be brought on by the facility's distance, a lack of transportation, hazardous terrain, and high travel costs (Thaddeus and Maine 2014). According to numerous studies (Falkingham, 2013, Navaneetham and Dharmalingam, 2015, Ensor and Witter 2017, Borghi, 2018), high costs are a major barrier to service use, especially for the poor. This study will therefore be carried out to ascertain clients' satisfaction of maternity care service and also the determinants for antenatal booking among pregnant women.

Pregnancy-related mortality is a serious health, social and economic problem affecting 600,000 women and their families each year. Experience from

nations with low maternal death rates suggests that having access to high quality treatment is important (De Brouwere, *et al.*, 2016). Global initiatives to boost the number of births in hospitals may not succeed in lowering maternal or infant mortality if the standard of care is inadequate. The quality of hospitals that care for pregnant women and new newborns, as well as the factors that influence prenatal booking and institutional delivery ratio in low-income countries, are, however, poorly documented (Kruk, *et al.*, 2016).

According to data from the WHO (2016), almost 800 women die each day from pregnancy- and childbirth-related avoidable causes, with developing nations accounting for 99% of these deaths. Nigeria ranks as the second highest contributor to the global rate of maternal and under-five mortality, losing 2,300 children under the age of five and 145 women who are childbearing age every single day (UNICEF, 2015). Access to emergency obstetric care can help to reduce the morbidity and mortality. Hence, the study



RESEARCH QUESTIONS

- 1) What are the rate of antenatal booking in ECWA hospital, Egbe?
- 2) What is the rate of clients ' return for maternity related care?
- 3) What are the clients degree of satisfaction with services received in ECWA Hospital?

HYPOTHESIS

H₀: There was a significant difference between the mean attendance population of women using antenatal services and that of women returning to the facility for child delivery.

RESEARCH DESIGN

This study is a non-experimental descriptive design. It employed a mixed-methods for data collection (questionnaires and focus group discussion guide).

STUDY SETTING

The study was carried out in Egbe, Kogi State Nigeria. Egbe is one of the large communities in Yoruba speaking provincial metropolis in Kogi State. It is the largest town in Yagba West Local Government Area which shares the Kogi boundary with both Kwara and Ekiti States. Egbe became a popular town in Nigeria being the location of first mission school and mission Hospital in the area, the Titcombe College Egbe and ECWA Hospital Egbe respectively.

POPULATION, SAMPLE AND SAMPLING TECHNIQUES

The population for the quantitative strand of the study were all child bearing age women (628 clients) receiving maternity care services in ECWA Hospital Egbe. The target population was obtained from the records provided by Hospital authorities in charge. Sampling size of the study was determined based on Taro-Yamane method for sample size calculation as formulated by a statistician called Taro-Yamane (1967) to determine the sample size from the target population. Below is the mathematical illustration formula:

$$n = \frac{N}{1 + N(e)^2}$$

where n= sample size

N= Target Population

E= margin error

(0.1, 0.05 or 0.01)

For this study, population under study was 628 clients

Therefore: $n = \frac{628}{1 + 628(0.05)^2}$

$n = \frac{628}{2.57} = 244$ clients



244 clients would be sample size for the study.

Cluster sampling technique was used for this study. The clients which were all child bearing age women come in three (3) categories. They include;

1. Antenatal women (clinic on Monday)
2. Post natal women (clinic on Wednesday)
3. Child welfare (clinic on Friday)

Tab1: CLUSTER SAMPLING TECHNIQUE TABLE

	NUMBER OF CLIENTS	SAMPLE SIZE
Antenatal	251 (40%)	98 (40%)
Post natal	107 (17%)	41 (17%)
Child welfare	270 (43%)	105 (43%)
Total	628(100%)	244 (100%)

Non-probability (convenient) sampling technique was utilized for the qualitative strand in which ten (10) women in a visit in child welfare clinic who are willing were enlisted in focused group discussions.

INCLUSION CRITERIA

Client: - Women who attend ECWA Hospital either with pregnancy in antenatal clinic, or with their babies in postnatal clinic, immunization, child welfare clinic, family planning centre. Women who are within 18 to 45 years of age.

EXCLUSION CRITERIA

Client: -women who are not willing or too sick following childbirth excluded from the study.

RESEARCH INSTRUMENT

Two research instruments were used for the collection of data for this study. The two instruments are questionnaires and focus group discussion guide to elicit data from the client in antenatal and postnatal clinic.

VALIDITY AND RELIABILITY OF THE INSTRUMENT

The face and content validity of the instruments was ascertained by comparing the items with the research objectives and questions to ensure their relevance. Besides, each copy of these instruments were made available to three research experts of experience in Ladoko Akintola University of Technology Ogbomosho. Their suggestions, inputs and constructive corrections were utilized to improve the instruments. Reliability of the instrument was



established before going to the field of study. It was determined using Cronbach's alpha to ascertain the reliability of the instrument.

PROCEDURE FOR DATA COLLECTION

Letter of introduction from the Head of Department of Maternal and Child Health, Faculty of Nursing, LAUTECH Ogbomoso. This was taken to Ethical Committee of ECWA Hospital Egbe to obtain permission to carry out the research work in the maternity health care services centre. More so, the consent forms were given to the respondent meant to participate in the study to seek for their willingness to freely participate in the study. Their sincere and maximum cooperation was solicited in order to achieve reliable data for the study. The respondents were assured that their contributions would be treated confidentially and for the purpose of this study only. The collection of the data spanned over a period between 4 weeks. All relevant data collected was handled with utmost confidentiality and was exclusively for the purpose of the study.

DATA ANALYSIS TECHNIQUES

The quantitative data collected through the research instrument (questionnaire) was subjected to statistical analysis. The research questions were answered using descriptive statistics of frequency, percentage, mean and standard deviation.

The qualitative strand of this study (focus group discussion) was done among the clients, that is, the child bearing age women (clients) receiving maternity care services. The coding of data and formation of detailed coding was done and descriptive reporting was also carried out. Thematic content approached (Braun & Clarke, 2006) was utilized for analysis. Direct respondents' comments were used to validate analysed quantitative data.

ETHICAL CONSIDERATION

Letter of permission were written to the chairman of Yagba West L.G.A and the ethical committee of ECWA Hospital Egbe, to secure permission prior to the commencement of the data collection. Attached to these letters was the ethics clearance that was obtained from the faculty of Nursing LAUTECH Ogbomoso. The proposal was also submitted along with the ethics clearance. Informed consent was obtained from each participant. The following ethical principles regarding each participant were respected; Autonomy, Confidentiality and Anonymity, Beneficence, Non-maleficence.



RESULTS

244 questionnaires were administered, 220 completed questionnaires were retrieved. Response rate was 90.2%. FGDs were conducted with the group comprising 10 participants. Thematic content approached (Braun & Clark, 2006) was utilized for analysis. Direct respondents' comments were used to validate analysed data

Table 2: Obstetric characteristics of participants

		Frequency	Percentage
Is this yes first pregnancy	Yes	19	8.6
	No	201	91.4
How many babies are you bless with	0-1	47	21.4
	2-4	164	74.6
	5 and above	9	4.0
Use this facility for previous delivery	Yes	198	90.0
	No	22	10.0
Where did you book for antenatal care during the last pregnancy	Not applicable	3	1.4
	TBA centre	-	-
	Faith based mission home	-	-
	ECWA hospital	178	80.9
	PHC centres	17	7.7
	State/ federal hospital	16	7.3
	Other	4	1.8
Do you book for antenatal care in any other facility apart from here	Yes	4	1.8
	No	216	98.2
How many times did you did you attend antenatal clinic in you previous pregnancy	1-2 times	5	2.3
	3-4 times	97	44.1
	Above 4 times	116	52.7
	Nil	2	0.9

Table 2, few 19(8.6%) had their first pregnancy. About 164(74.6%) of the participants had 2-4 babies. Majority 198(90.0%) had their previous delivery in this hospital. Majority 178(80.9%) book their antenatal in ECWA hospital and 17(7.7%) booked in PHC centres. Only 4(1.8%) of the participants booked for antenatal in other facilities. More than half 116(52.7%) of the participants do attend antenatal more than four times.



MEASURE CLIENTS' RETURN RATES FOR MATERNITY-RELATED SERVICES WITHIN THE LAST TWELVE MONTH

Table 3: Difference between BCG immunizations, antenatal cases versus delivery cases in facility

Pair sample statistics

		Mean	Std deviation	Std. Error of mean	t-statistics P-value
Pair 1	Antenatal women	71.8	67.12	10.01	4.590 (0.001)
Pair 2	Delivery Babies immunized with BCG	36.4	33.84	9.28	4.001 (0.08)
	Delivery	36.4	33.84	9.28	

There was a significant difference between the mean attendance population of women using antenatal services and that of women returning to the facility for child delivery; p-value <0.05. This implies that the women who returned to the facility for child delivery service were fewer in number than women who actually booked for antenatal care in the same centres. Similarly, there was a significant difference between the mean attendance population of women using immunization services and that of women using child delivery services; p-value >0.05. This implies that women who utilize the facility for child birth go to other centres for child immunization.

Table 4 a: Degree of satisfaction with the services received in ECWA hospital, Egbe Labour

	Yes Frequency	Percentage	No Frequency	Percentage
Was your nurse all through with you during labour	203	92.3	17	7.7
Did your nurse/midwife always attend to your call during labour	199	90.5	21	9.6
Were you allowed to talk to your friend/family members during labour	157	71.4	63	28.6
Did you sustain any trauma/complication during labour	49	22.3	171	77.7
Were you given any injection immediately after childbirth	169	76.8	51	23.2
Did you receive enough help from staff with the baby care	204	92.7	16	7.3
Is the hospital environment neat	213	96.8	7	3.2



Will you advice your friend/relatives to have their deliveries in this hospital	215	97.7	5	2.3
---	-----	------	---	-----

From the Table 4a, majority 203(92.3%) of the participants said nurses were all through during labour. Majority 199(90.5%) said nurses do attend to their calls. More than half 169(76.8%) of participants received injection after childbirth. Majority 204(92.7%) received enough help from staff with the baby care. Majority 215(97.7%) will advice friends to use this facility

Table 4b: Degree of satisfaction with the services received in ECWA hospital, Egbe Postnatal

		Frequency	Percentage
Did you give birth to your last baby in this facility	Yes	133	60.5
	No	87	39.5
If you get pregnant in future, which facility will you return for antenatal and delivery care	This hospital	209	95.0
	Another place	11	5.0
Reasons for choice of place of delivery	Facility close to my home	154	70.0
	Like the services in the facility	143	65.0
	The facility is less expensive	72	32.7
	The health workers are more competent	96	43.6
	Health workers don't demand too much materials	29	13.2
	The pregnancy was just a mistake	-	-
	Health workers treat with respect and friendly	89	40.5
	Health workers take care of my concern very seriously	139	63.2
	Other reasons	4	1.8
	How will you describe the attitude of health workers	Very friendly	132
Friendly		88	40.0
Hostile		-	-
Very hostile		-	-

In Table 4b, more than half 133(60.5%) of participants give birth to last baby in this facility. Majority, approximately 209(95%) are willing to use this facility for future pregnancy. More than half, approximately 132(60%) said the attitude of the health workers was very friendly.



QUALITATIVE ANALYSIS: SATISFACTION WITH MATERNITY SERVICES

The participants of FGD said that the hospital provided all kinds of antenatal services and the kind of services provided better than that of other hospitals. A participant said

“The hospital provided good services and surprise about the kind of services provided. This kind of services provided better than that of other hospitals”

Participants of FGD said that the midwives were always available during delivery and throughout.

A participant said:

“Yes, the midwives are always available during delivery”

Participants said the staffs do respond to call promptly. A participant said

“Yes, they always respond to call every time we called on them”

All FGD participants said they will recommend the hospital to others because of the nature of their services which implies that they will likely return for maternity care. A participant said:

“Yes, I will always recommend because the behaviour of the staff are very good”

DISCUSSION OF FINDINGS

Rate of antenatal booking in ECWA hospital Egbe

Majority 198(90.0%) had their previous delivery in the hospital, ECWA hospital Egbe. Moreover, 178(80.9%) book their antenatal in ECWA hospital and 17(7.7%) booked in PHC centres. Hence, a larger percentage had themselves booked in the hospital. Only 4(1.8%) of the participants booked for antenatal in other facilities. More than half 116(52.7%) of the participants do attend antenatal more than four times. It can be deduced that the higher booking rate is a factor of good and quality maternity care rendered in the hospital. There was a significant difference between the mean attendance population of women using antenatal services and that of women returning to the facility for child delivery; p-value <0.05. This implies that the women who returned to the facility for child delivery service were fewer in number than women who actually booked for antenatal care in the same centres. Similarly, there was a significant difference between the mean attendance population of women using immunization services and that of women using child delivery services; p-value >0.05. This implies that women who utilize the facility for birthing centre converged go to other centres for child immunization

Clients' Return Rates for Maternity-Related Services

There was a significant difference between the mean attendance population of women using antenatal services and that of women returning to the facility for child delivery; p-value <0.05. This implies that the women who returned to the facility for child delivery service were fewer in number than women who actually booked for antenatal care in the same centres. Similarly, there was a significant difference between the mean attendance population



of women using immunization services and that of women using child delivery services; p -value >0.05 . This implies that women who utilize the facility for birthing centre converged go to other centres for child immunization.

The findings of this study again showed that the population of women who eventually delivered their babies in the studied hospital were significantly fewer than those who commenced antenatal care in the centres. Similarly, the population of mothers who brought their babies for immunization was less than mothers who actually delivered their babies at the hospital. This implies that women who utilize this hospital for prenatal moved to another hospital for childbirth and child immunization. These findings agreed with Aluko *et al.*, (2020) which reported a statistically significant percentage of the women who received prenatal care in the PHC did not return there for childbirth.

Degree of Satisfaction With the Services Received in ECWA Hospital, Egbe.

The study revealed that majority of the participants said nurses were all through during labour attended to their calls, received injection after childbirth, received enough help from staff with the baby care and will advice friends to use this facility . Also the findings revealed that many participants give birth to last baby in the facility, willing to use this facility for future pregnancy and the attitude of the health workers was very friendly. In the same vein, the FGD participants express their satisfaction level with services received and ready to recommend the hospital to others. The study revealed various expressions of satisfaction with different aspects of the maternity services by the women. Those aspects included the following: type of services, condition of building infrastructure, equipment and medications, attitudes and competence of the health workers. Regarding health workers' attitudes, a situation where health workers never nag, bully and treated pregnant women and women in labour without respect. Such attitudes led to situations where pregnant women enjoy going to the hospital for clinic visits, because the health workers were behaving well to them and supportive. Every woman has the right to be treated with dignity and respect. No one can humiliate or verbally abuse a woman for any reason. Service providers must ensure that women are as comfortable as possible during procedures (Aluko, 2015). The finding in this study agreed with Sayyadi (2021) who reported that majority of the women (70.3% and 63.0%) were completely satisfied with the delivery services in the urban and rural communities of Kano respectively compared to 9.1% and 14.6% who were dissatisfied with the delivery services. About two-thirds of the clients, 67.6% and 65.3%, in both the urban and rural communities respectively were completely satisfied with the quality of care received. On the other hand, about 9% were dissatisfied with the care received compared to 6.9%. Babalola *et al.*, (2019) also reported that women do enjoy maternity services in private hospitals and will recommend to others

RECOMMENDATIONS

The issue of inadequate health personnel like nurses and midwife can be addressed by employing more competent hands and provision of good welfare for the available ones so that they can be maintained. In service training should also be encouraged so that the available staff can be retained. The proprietor can also work on and improve the pension and gratuity scheme of the institution. Since there is significant difference in the number of women that came for antenatal clinic and the number of women that deliver their babies in the hospital,



the hospital should still work on some factors that can attract patient into the hospital for delivery. Such factors like attractive bill, and improvement on nurse-patient relationship.

REFERENCES

- Aluko J.O. (2015). Quality of service analysis towards development of a model for primary–level maternity care in Ibadan, Nigeria.
- Aluko JO, Modeste RRM, Adejumo O, Anthea R. Return for prenatal care and childbirth services among Nigerian women using primary health care facilities. *Nurs Open*. 2019 Sep 19;7(1):91-99. doi: 10.1002/nop2.314. PMID: 31871694; PMCID: PMC6918006.
- Babalola, S., Fatusi, A. Determinants of use of maternal health services in Nigeria - looking beyond individual and household factors. *BMC Pregnancy Childbirth* 9, 43 (2009). <https://doi.org/10.1186/1471-2393-9-43>
- Borghi J. (2018). What is the cost of Maternal Health Care and how can it be financed? *Studies in Health Service Organisation and Policy*,17:247-296.
- Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology. *Qual. Res. Psychol.* 3, 77–101. doi: 10.1191/1478088706qp063oa
- Campbell OM, Graham WJ (2016). Strategies for reducing maternal mortality: getting on with what works. *Lancet*;368:1284–1299.
- Campbell OM, Graham WJ. (2016). On behalf of The Lancet Maternal Survival Series steering group: Strategies for reducing maternal mortality: getting on with what works. *The Lancet* 368(9543):1284-1299.
- De Brouwere V, Tonglet R, Van Lerberghe W (2016). Strategies for reducing maternal mortality in developing countries: what can we learn from the history of the industrialized West? *Trop Med Int Health*; 3: 771–82.
- Ensor T, Witter S (2017): Provider payment systems. In *Health Economics for Developing Countries: A Practical Guide* Edited by: Witter S, Ensor T, Jowett M. London: MacMillan.
- Falkingham J (2013). Inequality and changes in women's use of maternal health care services in Tajikistan. *Stud Fam Plann*, 34(1):1783-1789.
- Filippi V, Ronsmans C, Campbell OMR, Graham WJ, Mills A, Borghi J, Koblinsky M, and Osrin D. (2015). Maternal health in poor countries: the broader context and a call for action. *The Lancet* 368: 1535–41. <http://pubmed/18807434>.
- Gross K, Schellenberg JA, Kessy F, Pfeiffer C, Obrist B. (2018) Antenatal care in practice: an exploratory study in antenatal care clinics in the Kilombero Valley, south-eastern Tanzania. *BMC Pregnancy Childbirth*.;11:36.
- Jagun O.E., Abiodun O., and Olu-Abiodun O., (2015). An Assessment of Maternity Care Services in a Semi-Urban Local Government Area in Nigeria. *Journal of Medicine and Medical Science Research*. <https://www.researchgate.net/publication/266685508/>
- Kagawa-Singer M, and Kassim-Lakha S. (2018). A strategy to reduce cross-cultural miscommunication and increase the likelihood of improving health outcomes. *Academic Medicine* 78: 577–87.
- Kruk M.E., Leslie H.H., Verguet S., Mbaruku G.M., Adanu R.M., and Langer A. (2016). Quality of Basic maternal care functions in health facilities of five African countries: an analysis of national health system surveys. *The Lancet Global Health*. DOI: [https://doi.org/10.1016/S2214-109X\(16\)30180-2](https://doi.org/10.1016/S2214-109X(16)30180-2).



- Lamina MA. (2014). Gestational age at First antenatal attendance in Sagamu Western Nigeria Niger J Clin Pract;7:162-4.
- Magadi MA, Madise NJ, and Rodrigues RN. (2019). Frequency and timing of antenatal care in Kenya: explaining the variations between women of different communities. SocSciMed.;51:551–61.
- Morse ML, Fonseca SC, Gottgroy CL, Waldmann CS, GuellerE. (2019). Severe maternal morbidity and near misses in a regional reference hospital. Rev Bras Epidemiol. ;14:310–22.
- NHS (2021). Maternity Services Monthly Statistics June 2021, experimental statistics. <https://digital.nhs.uk/data-and-information/publications/statistical/maternity-services-monthly-statistics/june-2021/analysis>
- Nikiema B, Beninguisse G, and Haggerty JL.(2016). Providing information on pregnancy complications during antenatal visits: unmet educational needs in sub-Saharan Africa. Health Policy Plan.;24(5):367–76.
- Navaneetham K, and Dharmalingam A. (2015). Utilization of Maternal Health Care Services in Southern India. *SocSciMed* , 55(10):1849-1869.
- Okunbola MA, Ayinde OA, Owonikoko KM, and Omigbodun AO (2017). Factors influencing gestational age of antenatal booking at the University College Hospital, Ibadan, Nigeria. J ObstetGynaecol;26:1957.
- Omigbodun A.O. (2014). Preconception and antenatal care, Comprehensive Obstetrics in the tropics. In: KwawukumeEY,Emuveyan EE, editors. Dansoman:Asante and HittscherPrinting Press Ltd; . p.7-14
- Pitchforth E, Lilford RJ, Kebede Y, Asres G, Stanford C, and Frost J. (2015). Assessing and understanding quality of care in a labour ward: a pilot study combining clinical and social science perspectives in Gondar, Ethiopia. Social Science and Medicine 71: 1739–48.
- Pittrof R., Campbell O.M., and Filipi V.G. (2015). What is quality in maternity care? An International perspective.*ActaObstetGynecolScand*; 81: 277–283.
- Roost M, Altamirano VC, Liljestrang J, and Essen B. (2020). Does antenatal care facilitate utilization of emergency obstetric care? A case-referent study of near-miss morbidity in Bolivia.*Acta Obstetric GynecolScand.*;89:335–42.
- Royal College Obstetricians and Gynaecologists (RCOG)Clinical Guideline (2015). Antenatal care routine care for the healthy pregnant women; London: RCOG Press.
- Rudman A, and Waldenstro U. (2016). Critical views on postpartum care expressed by new mothers. BMC Health Services Research 7: 1.safe delivery? A study in urban Uttar Pradesh, India.*Health Policy Plan.* 1999;14:38-48.
- Sayyadi BM, Gajida AU, Garba R, Ibrahim UM. Assessment of maternal health services: a comparative study of urban and rural primary health facilities in Kano State, Northwest Nigeria. Pan Afr Med J. 2021 Mar 30;38:320. doi: 10.11604/pamj.2021.38.320.25214. PMID: 34285743; PMCID: PMC8265247.
- Yamane, Taro. (1967). Statistics: An Introductory Analysis, 2nd Edition, New York: Harper and Row.
- Thaddeus S, Maine D (2014). Too far to walk: maternal mortality in context. *SocSci Med* 38(8):1089-1110.
- UNDP/UNFPA/WHO/WORLD BANK (2015). Special programme of Research Development and Research training in Human Reproduction. WHO Antenatal Care Randomized trial: Manual for implementation of the new model. Geneva: Department of



- Reproductive Health and Research, family and Community Health, World Health Organization.
- UNICEF, UNICEF data (2015): Monitoring the Situation of Children and Women <http://data.unicef.org/maternal-health/delivery-care>.
- Valentine N, Darby C, Bonsel GJ. (2019). Which aspects of non-clinical quality of care are most important? Results from WHO's general population surveys of "health systems responsiveness" in 41 countries. *Social Science & Medicine* 66: 1939–50.
- Wiegers TA. (2019). The quality of maternity care services as experienced by women in the Netherlands. *BMC Pregnancy and Childbirth* 9:1.
- World Health Organization. (2016). The Partnership for Maternal, Newborn and Child Health. Opportunities for Africa's newborns: practical data, policy and programmatic support for newborn care in Africa. Geneva: World Health Organization.
- World Health Organization (2016): monitoring health for the SDGs sustainable development goals. Geneva, Switzerland: WHO; 2016.
- World Health Organization. (2016). Maternal mortality. Geneva: World Health Organization.