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1. LAUTECH Journal of Nursing (LJN) has the goal of becoming the most widely cited Nursing Journal in West Africa with Impact Factor Value of 0.861 based on International Citation Report (ICR) for the year 2020-2021.
2. The LJN has the tripartite mission of:
  - (a) Promoting a culture of excellence in Nursing Research.
  - (b) Encouraging the exchange of profound and innovative ideas capable of generating creative practice in nursing research practise.
  - (c) Disseminating information on nursing related development that are not usually easily available to academics and practitioners.
3. The Journal will accordingly encourage the publication of the following categories of papers.
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4. LJN is published biannually in any area of nursing interest or relevant to needs of academics and practitioners.

In this edition, eighteen (18) manuscripts scale through the eye of the needle of the Editor-in Chief. The title of the papers in this edition are: effect of cold compress on the reduction of musculoskeletal pain, swelling and hemarthrosis among orthopaedic patients in Lautech Teaching Hospital, Ogbomoso, Oyo State, Nigeria; Awareness of Prostate Cancer Screening Among Male Civil Servants In Egor Local Government Area, Edo State, Nigeria; Knowledge, Perception And Utilization Of Maternal And Child Health Care Among Women In Ogbomosho, Oyo State, Nigeria; Assessment Of Knowledge And Utilization Of Electronic Medical Records Among Nurses In Secondary Health Care Facilities In Jigawa State, Nigeria; Effect Of Midwife Led Educational Intervention On Knowledge Of Anaemia And Risk Factors Among Pregnant Women Attending Ante-Natal In Selected Primary Health Care Facilities In Osun State, Nigeria; Knowledge Of Health Implications Of Rape And Associated Factors Among Male Undergraduates In Ahmadu Bello University Zaria, Nigeria; Effectiveness Of Family Caregivers Centered Nursing On Knowledge Of Pressure Ulcer Prevention In A Tertiary Health Facility In Kano, Nigeria; Knowledge And Practice Of Malaria Prevention Among Expectant Mothers In Selected Primary Health Centers In Mushin Local Government Area, Lagos State, Nigeria; Prevalence Of Sexual And Psychological Abuse In Almajiri System Of Education In Zaria Local Government Area, Kaduna State, Nigeria; Assessment Of Male Involvement In Maternity Care In Selected Health Facilities In Ado Ekiti, Ekiti State, Nigeria; Educational Intervention On Knowledge Of Prevention And Self-Care Practices Of Selected Lifestyle Diseases Among Civil Servants In State Secretariat Oke-Mosan, Abeokuta Ogun-State, Nigeria; Nursing In An Age Of Change In Nigeria; Knee Replacement Surgery: The Role Of The Nurse In Patient Safety In The Operating Room, The Nigerian Perspective; Choice Of Places Of Delivery Among Women Attending Ante Natal Clinic At Ngwo Health Centre; Systematic Review On Adolescent Girls' Knowledge And Practice Of Menstrual Hygiene In Nigeria; Knowledge And Prevention Of Hypertension Among Patients Attending Medical Outpatient Department Of Garki Hospital, Abuja, Federal Capital Territory, Nigeria And Socio-Cultural Factors Influencing Nutritional Status In Under-Five Children In Akure North Local Government, Ondo State, Nigeria.

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Welcome to LAUTECH Journal of Nursing!

LAUTECH Journal of Nursing focus on but not limited to research findings in the different areas of Nursing: Nursing Care, Nursing Education, Medical Surgical Nursing, Maternal and Child Health Nursing, Community Public Health Nursing, and Psychiatric/Mental Nursing. This journal is published to promote quality scholarly writing and hence instigating and generating vibrant discourse in the different areas of nursing. Apart from providing an outlet for publications of research findings, it offers opportunities for professionals and students to disseminate their views or position on topical issues and emerging theories within the scope of the journal. The Journal is peer reviewed by seasoned scholar. Sixty two authors have contributed in one way or the other to the thirteenth edition of the journal.

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# KNOWLEDGE, PERCEPTION AND UTILIZATION OF MATERNAL AND CHILD HEALTH CARE AMONG WOMEN IN OGBOMOSHO, OYO STATE, NIGERIA

ABIODUN FUNMILAYO LAYENI & VICTORIA BOLANLE BROWN

## ABSTRACT

*Maternal and child health (MCH) care is an important public health issue because it provides the opportunity to end preventable deaths among all women, children and adolescents and to greatly improve their health and wellbeing. This study examined the knowledge, perception and utilization of maternal and child health care, among 256 reproductive age women in Ogbomosho, Oyo State. This was a cross-sectional descriptive design was used for this study. Quantitative data collection was done using a semi structured questionnaire. The questionnaire contained closed ended questions. Data were collected and analysed using statistical package for social science (SPSS) software package, version 21.0 presented in descriptive statistics e.g. frequencies, tables and percentages. Results showed the demographic characteristics of the respondents observed that majority (93.2%) were married, Christians were (65.7%) and (56.5%) had at least two children. Findings also revealed that 21.9% of the respondent's last children were 9 months of age, those delivered at the PHC were 29.4%, artisan were 42.3% and 78.1% were Yoruba by tribe. Considering the respondents' knowledge about maternal and child health care, 66% had good knowledge. The respondents' perception showed that 46% had negative perception about maternal and child health care. Overall, 84.9% had good utilization score. Significant association was found between respondents' level of education and knowledge of maternal and child health ( $P = 0.020$ ), there was also a significant association found between respondents' parity and utilization of maternal and child health care service (0.045). This study showed that majority of the respondents had good knowledge, positive perception and good utilization of maternal and child health care. However, to achieve better results, improvement in access to formal education for women and focused health education to increase knowledge are essential.*

**Keywords:** Knowledge; Perception; Utilization; Healthcare; Mothers

## INTRODUCTION

Nigeria faces a significant public health challenge with its maternal and child health care. The country's 40 million women of childbearing age (between 15 and 49 years old) experience a disproportionate burden of health issues related to childbirth. According to the United Nations Children's Fund (UNICEF), Nigeria accounts for 10% of global maternal deaths, despite representing only 2.4% of the world's population. The maternal mortality rate stands at 576 per 100,000 live births, the fourth highest globally. Each year, approximately 262,000 babies die at birth, the second highest national total worldwide. The infant mortality rate is 69 per 1,000 live births, and for under-fives, it rises to 128 per 1,000 live births. Malaria, pneumonia, and diarrhoea account for 64% of under-five deaths. Addressing maternal and child health care is crucial to ending preventable deaths and improving the health and well-being of women, children, and adolescents, as emphasized by the American Public Health Association.

Maternal and child health (MCH) care is the promotive, preventive, curative and rehabilitative health care for mothers throughout the childbearing period and for children from conception through adolescence (Ikechukwu et al, 2020). It is a comprehensive care which includes educational, social, nutritional services coupled with medical care during and post pregnancy (Olonade, Olawande & Alabi, 2019). It serves as an important indicator for describing mortality and infants' conditions, health progress and the overall social and economic well-being of the country. Regular utilization of MCH care reduces maternal morbidity and mortality. MCH care services include family planning, antenatal care, delivery care, postnatal care, immunization, growth monitoring, school health services which incorporate physical examinations, early detection of high-risk mothers, recognizing danger signs to enable appropriate preventive

action, screening measures and procedures that monitor pregnant women from conception to 6 weeks post-delivery (Umahi et al., 2019).

Women's knowledge of maternal and child health (MCH) care is crucial for its effective utilization (Okpala et al., 2019). A lack of knowledge can manifest in various ways, from not knowing when to start antenatal services and what services to expect at antenatal clinics to being unaware of the benefits of antenatal and postnatal care for both mother and child (Umahi et al., 2019). Clients' perceptions significantly influence their views on the dangers and benefits of care (Umahi et al., 2019). Mothers' perceptions of the quality of maternal healthcare impact their future healthcare utilization decisions and overall trust in the health system (Ansu-Mensah et al., 2020). The utilization of maternal health services, from antenatal to postpartum care, is associated with reductions in maternal mortality and morbidity (Zhao, Han, You et al., 2020; Sharma, Sarathi, Mohanty et al., 2020). Additionally, many infant deaths, due to avoidable causes, can be prevented through basic maternal healthcare interventions, including prenatal care services, skilled delivery, and postnatal care (Kinney, Lawn & Kerber, 2009; Taylor et al., 2016; WHO, 2017).

Utilization of antenatal care services is linked to satisfaction with maternal health services (Emelumadu et al., 2014). However, in Nigeria, there is poor utilization of maternal healthcare services (Faniyi et al., 2020). Rural women in Nigeria are particularly underserved and tend to use skilled healthcare services much less than their urban counterparts (Udenigwe et al., 2022). A significant proportion of maternal, fetal, and newborn deaths could be prevented through the maximum utilization of maternal and child health services (Gülmezoglu, 2016). Several reasons, including cultural, social, economic, and political factors, have been attributed to why many pregnant and nursing mothers choose not to use appropriate antenatal and postnatal care. This suggests that both the natural environment (biological) and the social environment play powerful and critical roles in the healthcare utilization behavior of women across African societies. The utilization of MCH care services is influenced by women's socio-demographic characteristics, cultural context, and service accessibility.

Despite global efforts, maternal mortality due to pregnancy complications has been increasing in

many sub-Saharan African countries (Olawale et al., 2019). In Ethiopia, a significant proportion of women fail to utilize modern healthcare services, with only 41%, 16%, and 13% receiving antenatal, delivery, and postnatal care from health professionals, respectively (Dereje et al., 2017). Similarly, in Nigeria, the perception and utilization of skilled maternal services are poor, leading to high maternal morbidity and mortality (Mesfin, 2018). This study aimed to investigate women's knowledge and perception of maternal and child health care, the level of utilization, and the factors affecting utilization. The findings may contribute to the literature by identifying gaps in the utilization of maternal and child health care services, informing health planning, policy formulation, and implementation to reduce maternal and childhood mortality.

## METHODS

**Design:** A cross-sectional descriptive design.

**Setting:** The study setting was Ogbomosho, Oyo State. There are 12 primary health facilities in Ogbomosho North Local Government area.

**Population:** Women in their reproductive ages (15-49 years).

**The inclusion criteria:** The study population consisted of women attending immunization clinics at selected Primary Healthcare (PHC) centers in Ogbomosho, Oyo State who met specific inclusion criteria. These included having children aged 5 years or below, being willing to participate in the study, being females within the reproductive age range of 15-49 years, and residing in Ogbomosho, Oyo State. Women who declined to participate, those above 49 years of age, and those without children were excluded from the study.

**Sample Size Determination:** The sample size was calculated using Cochran's (1963) formula for single proportions, resulting in an initial sample size of 241. To account for potential attrition, an additional 10% of the estimated sample size was added, which is approximately 24 (10% of 241 = 24.1). Therefore, the total sample size was increased to 265 to accommodate for potential participant dropouts.

**Sampling Technique:** Participants were selected using a cluster sampling method. The 12 primary health care centers were grouped into three clusters based on their wards and locations, with each cluster containing four health centers. Two

centers were randomly selected from each cluster, resulting in a total of six centers used for data collection. The selected centers included Ibrahim Taiwo PHC, Isale Afon; Okeelerin PHC, Okeelerin; Blind Center PHC, Osupa; Osupa Health Center, Osupa;

Ladoke Akintola Katangua PHC, Masifa; and Masifa PHC, Masifa. Purposive sampling was then used to select mothers of under-five children who brought their children for immunization at these centers.

**Instrument:** Data collection was done using a semi structured questionnaire. The questionnaire contained 96 closed ended questions. The questionnaire had four sections: Section A: sought information on sociodemographic characteristics of the respondents; section B was used to elicit information on knowledge of maternal and child health care; section C contained question items used to explore the perception of the respondents on maternal and child health care. While section D was used to assess the utilization of maternal and child health care among the respondents.

**Validity:** The instrument was given to expert in the field for tests and measurement for face validity. Unclear and ambiguous items were reframed before using it for data collection.

**Reliability:** The test-retest reliability method was employed to assess the consistency of the research instrument. The Cronbach's alpha reliability index was calculated for each construct, and the results showed a high level of reliability. Specifically, the Cronbach's alpha levels were: 0.763 for knowledge of maternal and child health care, 0.761 for perception of maternal and child health care, and 0.815 for utilization of maternal and child health care. Based on these results, the questionnaire was deemed reliable and suitable for use in the study.

**Data Collection:** The completed questionnaires were checked for completeness and a coding guide was developed to facilitate entry. The data collected were analysed using statistical package for social science (SPSS) software package, version 21.0 using descriptive statistics. Knowledge was assessed by computing the scores of the answers to the knowledge questions. Correct score was given 1, and incorrect score was given 0. A total maximum score was 35 marks. Scores between 19-35 was rated good while scores less than 18 was rated poor.

**Ethical approval:** For the study, ethical approval was obtained from Bowen University Teaching Hospital Research Ethics Committee. Throughout the research, ethical principles were considered and respected. The researchers ensured that all respondents have the right to determine their participation in the study. It was also ensured that research is not a cause of harm to respondents and was confidentiality was maintained. Verbal informed consent was obtained from all the respondents who voluntarily participated in the study.

## RESULTS

A total of 265 questionnaires were administered, and all were retrieved, resulting in a 100% response rate. The sociodemographic data of the respondents is presented in Table 1. The respondents' ages ranged from 18 to 45 years, with a mean age of 29.5 years (SD = 5.97%). The majority of the respondents were married (93.2%), had two children (56.5%), and were Christians (65.7%). Furthermore, 37 (14%) had no formal education, while 95 (35.8%) and 81 (30.6%) had secondary and tertiary education, respectively. The occupation of the respondents

**Table 1: Socio-Demographic Characteristics of Respondents**

<b>Variables</b>	<b>Frequency (n=265)</b>	<b>Percentage (%)</b>
<b>Marital status</b>		
Married	247	93.2
Divorced	2	0.8
Widow	16	6.0
<b>Religion</b>		
Christianity	174	65.7
Islam	79	29.8
Others	12	4.5
<b>Number of children</b>		
2	150	56.5
3	77	29.1
4	28	10.6
More than 4	10	3.8
<b>Age of youngest child in month</b>		
0	32	12.1
1	31	11.7
2	18	7.2
3	32	12.1
6	50	18.9
9	58	21.9
12	20	7.5
18	23	8.7
<b>Place of delivery of youngest child</b>		
Home	22	8.3
TBA Center	42	15.8
PHC Center	78	29.4
General Hospital	22	8.3
Mission Hospital	29	10.9
Private Hospital	43	16.2
FMC/ Teaching Hospital	29	10.9
<b>Occupation</b>		
Housewife	54	20.4
Artisan	112	42.3
Civil servant	86	32.5
Student	13	4.9
<b>Tribe</b>		
Yoruba	207	78.1
Igbo	15	5.7
Hausa	15	5.7
Others	28	10.6

showed that 102 (42.3%) were artisans, and 109 (41.1%) had a monthly income of 30,000 or below. Additionally, the findings revealed that the majority of the respondents' last child was 9 months old (21.9%), delivered at the PHC (29.4%), and were of Yoruba tribe (78.1%).

Respondents' knowledge of maternal and child health care is presented in table 2. The respondents had poorest level of knowledge on health care is presented in table 2. The respondents had poorest level of knowledge on the constitution of homemade oral rehydration solution (ORS) in

**Table 2: Respondents' Knowledge of Maternal and Child Health Care**

<b>Variables</b>	<b>Correct Response n (%)</b>	<b>Incorrect Response n (%)</b>
Do pregnant women need vitamins supplement and iron folic acid tablet during pregnancy?	263 (99.2)	2 (0.8)
Do you need to visit the health facility after delivery only when there are complications?	235 (88.7)	30 (11.8)
At what time should women return to the clinic after delivery for check- ups?	184 (69.4)	81(30.6)
Have you ever heard of oral rehydration solution (ORS)?	234 (88.3)	31(11.7)
Have you ever given your child ORS?	197 (74.3)	68 (25.7)
What illness is ORS used for?	207 (78.1)	58 (21.9)
How much salt should homemade ORS contain?	86 (32.5)	179 (67.5)
How much sugar should homemade ORS contain?	109 (41.1)	156 (58.9)
How much water should homemade ORS contain?	203 (76.6)	62 (23.4)
At which age are the following immunization are given to infants?	212 (80.0)	53 (20.0)
BCG	209 (78.9)	56 (21.1)
OPV 0	154 (58.1)	111 (41.9)
OPV 1	146 (55.1)	119 (44.9)
OPV 2	146 (55.1)	119(44.9)
OPV 3	141 (53.2)	124 (46.8)
Pentavalent vaccine 1	141 (53.2)	124 (46.8)
Pentavalent vaccine 2	140 (12.8)	125 (47.2)
Pentavalent vaccine 3	137 (51.7)	128 (48.3)
Pneumococcal conjugate vaccine (PCV) 1	137 (51.7)	128 (48.3)
Pneumococcal conjugate vaccine (PCV) 2	136 (51.3)	129 (48.7)
Pneumococcal conjugate vaccine (PCV) 3	81 (30.6)	184 (69.4)
Rotavirus vaccine 1	81 (30.6)	184 (69.4)
Rotavirus vaccine 2	80 (30.2)	185 (69.8)
Rotavirus vaccine 3	157 (59.2)	108 (40.8)
Measles	163 (61.5)	102 (38.5)
Yellow fever		
At what age should an infant complete routine immunization?	81 (30.6)	184 (69.4)
How many months should an infant be breastfed exclusively?	246 (92.8)	19 (7.2)
Should water be given to a baby on exclusive breastfeeding?	245 (92.5)	20 (7.5)
What should be used to treat a newborn umbilical cord?	209 (78.9)	56 (21.1)
	60%	40%

terms of quantity of salt, (67.5%) and sugar (58.9%). However, one hundred and seventy-five (66%) of the respondents had a good overall knowledge score.

Table 3 shows the respondents' perception about maternal and child health care. As shown in the

table, 73 (27.5%) and 101 (38.1%) respondents strongly agreed and agreed respectively that they were satisfied with maternal and child health care services provided overall. Seventy-five (28.3%) strongly agreed that health workers exhibit

**Table 3: Respondents' Perception about Maternal and Child Health Care**

Variables	Strongly Agree n (%)	Agree n (%)	Neutral n (%)	Disagree n (%)	Strongly Disagree n (%)
Women should return to the clinic 6 weeks after delivery for check-ups?	97 (36.6)	128 (48.3)	26 (9.8)	9 (3.4)	5 (1.9)
Overall, I am satisfied with maternal and child health care services provided	73 (27.5)	101 (38.1%)	22 (8.3)	60 (22.6)	9 (3.4)
Health workers exhibit positive attitude	75 (28.3)	84 (31.7)	12 (4.5)	47 (17.7)	47 (17.7)
Health workers exhibit negative attitude	17 (6.4)	82 (30.9)	23 (8.7)	106 (40.0)	37 (14.0)
I am satisfied with waiting time	20 (7.5)	54 (20.4)	33 (12.5)	111(41.)	47 (17.7)
Cost of health care services is affordable	66 (24.9)	75 (28.3)	33 (12.5)	51 (19.2)	40 (15.1)
Cost of health care services is high	51 (19.2)	55 (20.8)	22 (8.3)	112(42.)	25 (9.4)
I am satisfied with the quality of care provided	43 (16.2)	61 (23.0)	31 (11.7)	83 (31.3)	47 (17.7)
Had enough time with the health care providers during checkups?	73 (27.5)	89 (33.6)	35 (13.2)	49 (18.5)	19 (7.2)
Health facility is close to my house	52 (19.6)	96 (36.2)	9 (3.4)	87 (32.8)	21 (7.9)
Health facility is far from my house	26 (9.8)	74 (27.9)	8 (3.0)	106(40.)	51 (19.2)
Some equipment's are not available for testing?	33 (12.5)	128(48.3)	14 (5.3)	66 (24.9)	24 (9.1)
Referral to a better health facility is easy	21 (7.9)	103(38.9)	17 (6.4)	81 (30.6)	43 (16.2)
I need to obtain permission from my spouse to attend ANC, Post -natal clinic or infant welfare clinic	74 (27.9)	99 (37.4)	22 (8.3)	49 (18.5)	21 (7.9)
I have challenge with transportation money	24 (9.1)	60 (22.6)	23 (8.7)	114 (43.0)	44 (16.6)
No skilled health worker in the hospital/clinic	19 (7.2)	29 (10.9)	18 (6.8)	136 (51.3)	63 (23.8)
Essential medicines are available in health facilities	41 (15.5)	167 (63.0)	15 (5.7)	40 (15.1)	2 (0.8)
Essential medicines are not available at the facility	8 (3.0)	31 (11.7)	18(6.8)	173(65.3)	35 (13.2)
I don't have information about maternal and child health care services	10 (3.8)	26 (9.8)	9 (3.4)	105 (39.6)	115 (43.4)
I have no interest in maternal and child health care services	8 (3.0)	22 (8.3)	7 (2.6)	99 (37.4)	129 (48.7)
There is a need to improve maternal and child health care services	158 (59.6)	77 (29.1)	9 (3.4)	7 (2.6)	14 (5.3)
TBAs are as skillful as health care providers in health facilities	8 (3.0)	25 (9.4)	13 (4.9)	75 (28.3)	144 (54.3)
I can deliver my baby myself, I don't need the assistance of a health worker	2 (0.8)	4 (1.5)	11 (4.2)	102 (38.5)	146 (55.1)
	<b>17%</b>	<b>29%</b>	<b>7%</b>	<b>29%</b>	<b>19%</b>

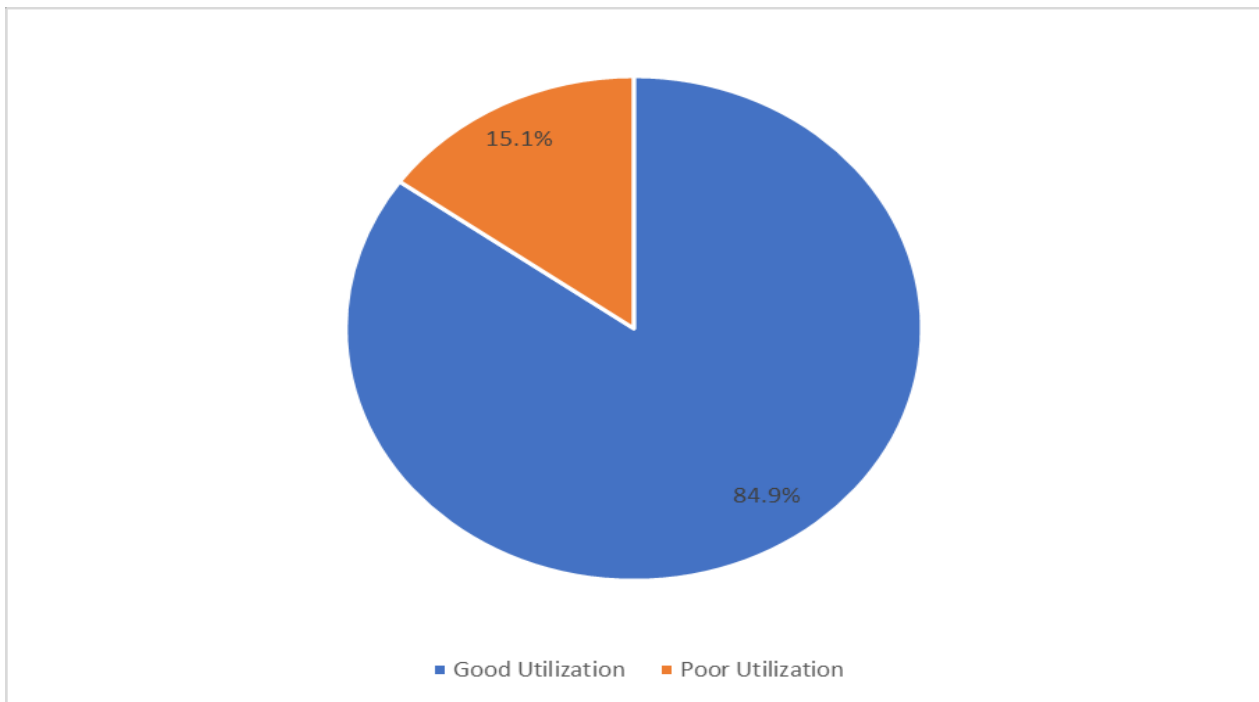
positive attitude while 17 (6.4%) strongly agreed that health workers exhibit negative attitude. More than one third of the respondents, 111 (41.9%) disagreed to satisfaction with waiting time while 20 (7.5%) strongly agreed with satisfaction with waiting time. Eighty- three (31.3%) disagreed to satisfaction with the quality care, 89(33.6%) agreed to having enough time with the health care

provider during checkups and 103(38.9%) agreed that referral to a better facility is easy. One hundred and fifty-eight (59.6%) strongly agreed to the need to improve maternal and child health care services. This study reveals that 46% of the respondents had negative perception about maternal and child health care. In table 4, the respondents' degree of utilization of the various

**Table 4: Respondents' Utilization of Maternal and Child Health Care Services**

<b>Variables</b>	<b>Yes n (%)</b>	<b>No n (%)</b>
Attended antenatal during last pregnancy?	242 (91.3)	23 (8.7)
Attended antenatal visit more than 4 times during the last pregnancy?	205 (77.4)	60 (22.6)
Got at least one TT vaccine during antenatal care during the last pregnancy	238 (89.8)	27 (10.2)
Used iron and folic acid tablet when pregnant?	261 (98.5)	4 (1.5)
Delivered at home during previous deliveries?	30 (11.3)	235 (88.7)
Last child birth was conducted by health personnel?	197(74.3)	68(25.7)
Last child birth was conducted by a TBA?	58 (21.9)	207 (78.1)
Neonatal care (nutrition/breastfeeding and illness) advices?	206 (77.7)	59 (22.3)
Attended Postpartum family planning counselling?	175 (66.0)	90 (34.0)
Child/children got complete vaccines?	244 (92.1)	21 (7.9)
Child/ children weighed and growth monitored?	252 (95.1)	13 (4.9)
Returned for postnatal checkups?	203 (76.6)	62 (23.4)
Utilized family planning services to plan pregnancy	162 (61.1)	103 (38.9)
At what time did you return to the clinic after delivery for postnatal check-ups?	<b>N(n=265)</b>	<b>%</b>
	Four weeks	113 42.6
	Six weeks	135 50.9
	Eight weeks	4 1.5
	Ten weeks	7 2.6
	Twelve weeks	6 2.3
Where do your children receive health care when sick?	<b>N (n= 265)</b>	<b>%</b>
	Health facility	164 61.9
	Nearby chemist shop	42 15.8
	Traditional birth attendant center	10 3.8
	I give home remedy	49 18.5
What role does your husband play toward mother and child health care in the family?	<b>N (n= 265)</b>	<b>%</b>
	Decide when and where to go for health care services 0	46 17.4
	Provide money for treatment and drugs	137 51.7
	Remind of clinic/hospital visits	45 17.0
	Take mother or/ and child to health facility when required	37 14.0
	Do not play any role in mother and child health care	0 0
	<b>69%</b>	<b>23%</b>





**Figure 1: Overall Utilization of Maternal and Child Health Care Services among Respondents**

maternal and child health care services is presented. Two hundred and five (77.4%) attended antenatal visit more than 4 times during the last pregnancy. Two hundred and thirty-eight (89.8%) got at least one tetanus toxoid vaccine during antenatal care, 30 (11.3%) delivered at home

during previous pregnancies, 162 (61.1) of the respondents utilized family planning services to plan pregnancy. Figure 1 displays the respondents' utilization scores which shows that 225 (84.9%) respondents had good utilization of maternal and child health care services

**Table 5: Factors Influencing Respondents' Knowledge, Perception and Utilization of Maternal and Child Health Care Services**

Variables	Yes n (%)	No n (%)
Cultural acceptance	221 (83.4)	44 (16.6)
Previous use of maternal and child health care services	250 (94.3)	15 (5.7)
Mass media availability	232 (87.5)	33 (12.5)
Accessibility of maternal and child health care services	242 (91.3)	23 (8.7)
Previous history of complications during pregnancy, labor and post delivery	225 (84.9)	40 (15.1)
Attitude of health care provider	236 (89.1)	29 (10.9)
Perceived low quality of care	197 (74.3)	68 (25.7)
Husbands' acceptance of the services rendered	225 (84.9)	40 (15.1)
Affordability of maternal and child health care services	260 (98.1)	5 (1.9)
Schedule of maternal and child health clinics	241 (90.9)	24 (9.1)

(89.8%) got at least one tetanus toxoid vaccine during antenatal care, 30 (11.3%) delivered at home during previous pregnancies, 162 (61.1) of the respondents utilized family planning services to plan pregnancy. Figure 1 displays the respondents' utilization scores which shows that 225 (84.9%) respondents had good utilization of maternal and child health care services.

In table 5, the respondents' views on factors influencing their knowledge, perception and

utilization of maternal and child health care are presented. Two hundred and sixty (98.1%) respondents stated affordability, while 241 (90.9) expressed schedule of maternal and child health clinics as factors influencing their knowledge, perception and utilization of maternal and child health care. As shown in tables 6, a significant association was found between respondents' level of education and knowledge of maternal and child health ( $P=0.020$ ). Also, as presented in table 7, the

**Table 6: Association Between Respondent's Level of Education and Knowledge of Maternal and Child Health**

Education level	Knowledge			Df	$\chi^2$	p-value
	Poor	Good	Total			
No formal education	14	23	37	3	9.870	.020
Primary	25	27	52			
Secondary	33	62	95			
Tertiary	18	63	81			

study reveals a significant association between respondents' parity and utilization of maternal and child health care services ( $P=0.045$ ).

## DISCUSSION

This study investigated the knowledge, perception, and utilization of maternal and child health care among women of reproductive age in Ogbomoso, Oyo State. The demographic analysis showed that the majority of respondents were

**Table 7: Association Between Respondents' Parity and Utilization of Maternal and Child Care Services**

No of children	Utilization			Df	$\chi^2$	p-value
	Poor	Good	Total			
2	20	130	150	3	8.044	0.045
3	9	68	77			
4	7	21	28			
More than 4	4	6	10			

This study findings shows that respondents' knowledge of maternal and child healthcare was above average. This finding is similar to Yar'zever (2018), who noted that respondents' knowledge of maternal health facilities and services in both urban and rural Northern Nigeria was extremely good, scoring 99.0% in urban and 82.4% in rural areas.

However, this study contrasts with Umahi et al. (2019), whose respondents lacked understanding of when a woman should start antenatal services and the benefits of antenatal and postnatal services for both mother and child. This study aligns with the findings of Akhtar et al. (2018), who found that most respondents knew the benefits of antenatal check-ups for pregnant women and recognized the importance of attending ANC even without complications.

This study reveals that almost half of the respondents had a negative perception of maternal and child healthcare. This finding is consistent with Mesfin (2018), who observed that the perception and utilization of skilled maternal services were poor among respondents, resulting in high prevalence of maternal morbidity and mortality in Nigeria. Similarly, Kennedy and Martin (2018) noted that respondents had a negative perception due to the lower quality of care received from healthcare personnel during childbirth compared to prenatal care services. This study also supports Umahi et al. (2019), who found that women experienced delays in receiving care from health workers when needed. Furthermore, this study aligns with Oladapo et al. (2018), who revealed that the quality of services and subsequent use affect the poor relationship between the provider and the client.

This study observes that respondents' utilization of maternal and child healthcare services was above average. This finding is consistent with Okpala et al. (2019), who reported that almost all women in their study area attended antenatal clinics during their last pregnancy, with the majority attending four or more times. Similarly, this study aligns with Agani et al. (2020), who found that most respondents attended antenatal clinics four or more times

during pregnancy. However, this study contrasts with Okaro et al. (2020), who reported low use of antenatal and postnatal care services in Nigeria, with only a third of childbearing-age women choosing to deliver in healthcare facilities. Additionally, this study disagrees with the Nigeria Demographic and Health Survey (2018), which found that 7% of mothers in southwest Nigeria lacked trust in healthcare providers due to poor quality services, leading them to avoid giving birth in health facilities. Finally, this study is inconsistent with the World Health Organization (2019), which estimated that 80% of maternal deaths are due to preventable causes, which could be avoided if women had timely access to and proper utilization of skilled maternal services.

This study identified several factors that influence respondents' knowledge, perception, and utilization of maternal and child healthcare services. These factors include previous use of maternal and child healthcare services, accessibility of maternal and child healthcare services, affordability of maternal and child healthcare services, and schedule of maternal and child health clinics. This finding aligns with Okpala et al. (2019), who also recognized affordability as a key influencing factor.

This study also corroborates the findings of Adamu (2018), who found that lack of Western education was a significant factor in low attendance for maternal health services in rural Kano. However, this study does not support Kebebe et al. (2016), who identified previous complications during pregnancy, delivery, or post-delivery as a highly influential factor. This study also disagrees with WHO (2017), which noted cultural acceptance as a key factor influencing knowledge, perception, and utilization of maternal and child healthcare services.

Furthermore, this study contrasts with Yar'zever (2018), who identified individual perceptions of modern health services and religious beliefs as influential factors. However, this study supports Kebebe et al. (2016), who found that previous complications during pregnancy, delivery, or post-delivery were highly influential. Finally, this study disagrees with

Yar'zever and Said (2018), who noted that scarcity of vehicles and poor road conditions can make it difficult for women to access nearby facilities, forcing them to walk during labour.

**Limitation:** This study was conducted in primary health care facilities, therefore, collecting data from women attending health facilities might have contributed to the high level of utilization, as the women are more likely to have utilized maternal and child health care services previously.

## CONCLUSION

This study reveals that the respondents' knowledge of maternal and child healthcare was exceptionally high, exceeding average expectations. Notably, about one-third of the respondents expressed satisfaction with the maternal and child healthcare services. The key factors influencing the knowledge, perception, and utilization of maternal and child healthcare among the respondents were identified as affordability, previous use, and schedule of services. However, despite the satisfactory knowledge and utilization levels, the respondents' perception and satisfaction with maternal and child healthcare services remain suboptimal. To enhance the utilization of maternal and child healthcare services among the target population, it is essential to address these factors and develop strategies to improve the respondents' perception and satisfaction.

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