

## **The Availability of Maternal and Child Healthcare (MCH) Services in Owerri West Local Government Area, Imo State**

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### **Abstract**

This study's aim was to determine the perception of health providers and consumers on the extent of the availability of maternal and child healthcare (MCH) services in Owerri West Local Government Area of Imo, State Nigeria. The descriptive survey design was adopted in the study, while data were collected from a sample size of 481 respondents comprising 89 healthcare providers and 392 healthcare consumers using the questionnaire instrument. Taro Yamane's formula was used to calculate the sample size given as:  $n = N / (1 + N(e)^2)$ . The data were analysed descriptively while the hypothesis was tested using t-test statistics which was facilitated by the Statistical Product and Service Solutions (SPSS) version 25. The result showed that healthcare service consumers and providers' perception is that MCH services are available to a very high extent in the study area. In addition, the very high extent (VHE) and the high extent (HE) items on the instrument had mean scores that were greater than the criterion mean of 2.50. However, the availability of postnatal services, palpation, physical exercises, and treatment of minor ailments were MCH services perceived to be very low in the study area. No significant difference between the perceptions of the health providers and the consumers was found. Constant education on the availability, location, and utilisation of the MCH services is suggested to reduce maternal and child mortality rates.

**Keywords:** *Maternal, child, mortality rates, healthcare, services*

### **Introduction**

The reduction of maternal and child mortality rates has been a major objective of many world public health interventions and health organisations in recent times. This is because many women of childbearing age die globally on a daily basis as a result of pregnancy related complications.<sup>1</sup> Such complications often result from severe bleeding or obstructed labour among others. The World Health Organisation defines maternal health as 'the health of women during pregnancy,

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childbirth and the postnatal period'.<sup>2</sup> Although a reduction of 34% was recorded between the year 2000 and 2020 when maternal mortality rate declined from 339 deaths to 223 deaths per 100,000 live births, the global maternal mortality rate is still far from the Sustainable Development Goal's (SDG) target of 70 maternal deaths per 100,000 live births by 2030.<sup>3</sup> Maternal mortality in sub-Saharan Africa is extremely high as Africa accounted for 70% of the global maternal mortality in 2020, which translates to about 202,000.<sup>2</sup> Being the most populous country in Africa, Nigeria alone accounted for about 20% of the global maternal deaths.<sup>4-5</sup> Data from a survey conducted by the National Population Commission also indicates that 556 pregnancy-related deaths per 100,000 live births occurred in Nigeria, while 1 in 34 women died as a result of maternal cause.<sup>5</sup> Similarly, there is high child mortality rate globally. Whereas child mortality is the death between the first and the fifth birthday of a child, infant mortality is defined as the death of a child less than a year of age. Infant mortality has been generally accepted as an indicator of economic development obtainable among nations of the world.<sup>6</sup> The survival of a new born to at least age one is therefore a function of the availability of, and access to basic needs to support life at both the individual, household and neighbourhood levels. Both child and infant mortality equally tilt towards the trend of maternal mortality in Nigeria given that the survival of neonates largely depends on maternal health. Nigeria recorded a high under-five mortality rate of 117 per 1,000 live births in 2019.<sup>7</sup> Research has shown that the burden of infant mortality is also greatest in Sub-Saharan Africa and Nigeria has infant mortality rate of 70 per 1,000 live births.<sup>8</sup>

It is equally evident that though some previous studies have examined maternal child healthcare services, they did not determine the extent to which these services were available based on the perceptions of the health providers and consumers. If any of them did, the study was not carried out in Owerri West L.G.A., Imo State Nigeria. The objective of this present study therefore is to determine the perception of health providers and consumers on the extent of the availability of maternal and child healthcare (MCH) services in Owerri West Local Government Area, Imo State Nigeria.

### **Methods**

The descriptive survey design was adopted in this study to describe the existing situations regarding the extent to which maternal and child healthcare services exist in the research area. The population of the study consisted of all child bearing mothers (CBMs) within the study communities of Owerri West Local Government Area of Imo state receiving maternal and child healthcare services. Owerri West is made up of Ezioibodo, Ihiagwa, Obinze, Okolochi, Emeabiam and Nekede Communities. Simple random sampling was used to collect data from all child bearing mothers, aged above 18 years who agreed and gave their consent to participate in the study. Taro Yamane's formula was used to calculate the sample size given as:  $n = \frac{N}{1 + N(e)^2}$ . Where: n signifies the sample size, N signifies the population under study, and e signifies the margin error. The sample size of the study is 481 which comprised 89 healthcare providers and 392 healthcare consumers.

A structured questionnaire titled "Consumer Utilization and Provider Strategies for Enhancement of Maternal and Child Healthcare Services Questionnaire" (CUPSEMCHSQ) was used to collect data from the respondents. The instrument was divided into two sections. Section 'A' elicited

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information on the demographic characteristics of the respondents; while section 'B' elicited information from respondents based on the items that attended to the research objective. Prior to the administration of the instrument, it was validated by three (3) experts, two in Measurement and Evaluation at Alvan Ikoku University of Education Owerri, in addition to one in the department of Nursing Science, Imo State University, Owerri. The experts critically examined and ascertained the extent to which the contents covered the objective of the study. The data collected with the instrument were extracted and analysed descriptively while the hypothesis was tested using t-Test inferential statistics at a significance of 0.05. The statistical analysis was facilitated by the Statistical Product and Service Solutions (SPSS) version 25.

## Results

Table 1 shows the descriptive data (mean and standard deviation) of the responses of healthcare service consumers and healthcare providers on their perception of the extent of availability of maternal and child healthcare (MCH) services in the study area. The analysis on the table was aimed at attending to the objective of the study by answering the research question: what are the perceptions of health providers and consumers on the extent of the availability of maternal child Healthcare services in Owerri West L.G.A.? The table shows the responses as indicating that the respondents perceive that five maternal healthcare services are, to a very high extent (VHE), available in the study area. These are items 1 (Antenatal services) with a mean score of 3.32, 3 (Child delivery services) with a mean score of 3.33, 4 (Family planning) with a mean score of 3.54, 6 (Tetanus vaccination) with a mean score of 3.51, and 10 (Health education/talk) with a score of 3.49 respectively. The table also shows that three items namely item 7 (Testing of urine and blood) with a mean score of 2.62, 9 (Checking of weight and height) with a mean score of 2.27, and 12 (Immunization) with a mean score of 2.72 are available to a high extent (HE). Both the very high extent (VHE) and the high extent (HE) items on the instrument have mean scores that are greater than the criterion mean of 2.50. The high mean scores of the responses to these items on the instrument shows the respondents' acceptance that the given maternal and child healthcare services (items) are available to a high extent and very high extent in the study area respectively.

Contrastively, Table 1 also shows that the remaining items namely, items 2 (Postnatal services) with a mean score of 1.53, 5 with a mean score of 1.65, 8 with a mean score of 2.30, and 11 with a mean score of 2.46 have mean scores that are below the criterion mean of 2.50 hence indicating that the maternal and childcare services represented by these items are available to a low extent in the study area (LE). However, the grand mean of 2.78 and the standard deviation of 0.566 clearly suggest that there is an average overall acceptance by the respondents that the availability of MCH services is generally up to a high extent in the study area.

**Table 1:** Mean and standard deviation of responses on the perceptions of health providers and consumers on the extent of availability of maternal child healthcare

S/N	ITEM	CONSUMER		PROVIDERS		AV		DECISION
		X	SD	X	SD	X	SD	
1.	Antenatal services	3.31	.463	3.33	.471	3.32	.467	VHE
2.	Postnatal	1.52	.500	1.56	.499	1.53	.500	LE
3.	Child delivery services	3.57	.496	3.53	.502	3.55	.499	VHE
4.	Family planning	3.39	.489	3.48	.503	3.54	.496	VHE
5.	Palpation	1.60	.491	1.69	.467	1.65	.479	LE
6.	Tetanus vaccination	3.53	.544	3.48	.605	3.51	.575	VHE
7.	Testing of urine and blood	3.31	.462	1.92	.742	2.62	.602	HE
8.	Physical exercises	1.52	.500	3.07	.795	2.30	.648	LE
9.	Checking of weight and height	3.57	.496	1.87	.882	2.27	.686	HE
10.	Health education/talk	3.48	.500	3.49	.503	3.49	.502	VHE
11.	Treatment of minor ailments	1.67	.471	3.24	.812	2.46	.642	LE
12.	Immunization	3.50	.590	1.94	.803	2.72	.697	HE
<b>Grand mean</b>		<b>2.83</b>	<b>1.56</b>	<b>2.72</b>	<b>1.69</b>	<b>2.78</b>	<b>.566</b>	<b>HE</b>

Table 2 shows the result of the t-test analysis to determine the difference in the mean responses of health providers and consumers on the availability of maternal and child healthcare (MCH) services in the study area. The result reveals a calculated t-value of 0.119 and sig. value of 0.92 was obtained. Since the calculated sig. value of 0.92 is greater than significance level of 0.05, the hypothesis is accepted. This means that there is no significant difference in the mean responses of health providers and consumers on extent of the availability of maternal and child healthcare services by health providers in Owerri West Local Government Area of Imo state, Nigeria.

**Table 2:** Independent t-test analysis of the difference in the mean ratings of the respondents on the availability of MCH services provision

S/N	Variables	N	X	SD	df	t	Sig 2 tailed	Remarks
1.	Health providers	89	2.72	.169	479	0.119	0.92	Not Significant
2.	Consumers	392	2.83	.156				

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\* Sig. @ 0.05 level, df = 479

## Discussion

The result of the analysis has made some revelations. One is that the perception of both the health service providers and the consumers are in agreement that the extent to which maternal and child healthcare services are available in Owerri West LGA is high. This is affirmed by the grand mean of 2.78 and the standard deviation of 0.566. The independent t-test analysis also showed that there is no significant difference in the mean responses of health providers and consumers on extent of the availability of maternal and child healthcare services by health providers in Owerri West L.G.A., Imo state. Specifically, such maternal and child healthcare services as antenatal services, child delivery services, family planning, tetanus vaccination, and health education, are significantly high by exceeding the criterion mean of 2.50 according to the health service providers and consumers responses. Other important maternal and child healthcare services that are relatively high are testing of urine and blood, checking of weight and height, as well as immunization. The availability of these services is attributable in part to the attention maternal and child healthcare services have received in recent times in Nigeria.<sup>9-10</sup> This result, to some extent, corroborates the findings of Ezeji<sup>11</sup> in his study of Ahiazu-Mbaise which found that the level of availability of prenatal care services in the study area is very high. Owerri West and Ahiazu-Mbaise Local Government Areas (LGA) are in the same Imo State, Nigeria and are not too far from each other.

Another deduction from the result of the analysis is that the affirmation of the healthcare consumers (respondents) of the high extent of the availability of the maternal and child healthcare services in Owerri West LGA is an indication of their awareness of the provision of these services and the need to utilise them. This implies that healthcare consumers are quite aware of the varied maternal and child healthcare services in Owerri West health centres. This knowledge of the existence of the services predisposes the consumers to the utilisation of the services when the need arises. This is because it is only the potential healthcare consumers who are aware of the existence of the services that will utilise such services. In this study, the healthcare service consumers were part of the respondents who affirmed the availability of the maternal and child healthcare services which is an indication of their awareness of the availability of such services.

It is instructive to note that in spite of the high extent of availability of the maternal and child healthcare services affirmed by the respondents, some important MCH services in this study have been observed to be available to a very low extent. They include postnatal services, palpation, physical exercises, and treatment of minor ailments, which are very important and contribute to the reduction of maternal and child mortality rates when utilised. The low extent of the availability of these services poses a health risk to both the pregnant mothers and their new born babies.

## Conclusion

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The data analysis revealed that the perception of both the health service providers and consumers is that MCH services are available in the study area to a very high extent. This is because the majority of the MCH services such as antenatal services, child delivery services, family planning, etc. are available to a very significant extent. The respondents also agreed that there are some MCH services that are available to a very low extent. These include postnatal services, palpation, physical exercises, and treatment of minor ailments. Although the number of MCH services that are available to a very high extent are more than those that are available to a low extent, it is also important that efforts should be made to increase the availability of the ones that have low extent of availability in the study area due to their importance in improving the decline of maternal and child mortality rates.

## References

1. WHO. Maternal health: Overview. 2023; [https://www.who.int/health-topics/maternal-health#tab=tab\\_1](https://www.who.int/health-topics/maternal-health#tab=tab_1)
2. WHO. Maternal mortality. <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>. 2024.
3. WHO, UNICEF, UNFPA, The World Bank Group, & United Nations Population Division. *Trends in maternal mortality: 2000 to 2020*. WHO Geneva. 2023.
4. World Bank Group. Maternal mortality ratio (modeled estimate, per 100,000 live births) – Nigeria 2019. 2020; <https://data.worldbank.org/indicator/SH.STA.MMRT>
5. NPC Nigeria. Nigeria demographic health survey 2018. The DHS program ICF Rockville, Maryland, USA. Abuja, Nigeria; 2019.
6. Bisiriyu A, Taofik OB, Bola LS. Maternal and child health care services utilization and infant survival in Northern Nigeria. 2016; <https://www.researchgate.net/publication/732827747>.
7. UNICEF (2020). UNICEF Data: Monitoring the situation of children and women. <https://data.unicef.org/country/nga/>. Accessed 1 Nov 2021
8. Esienmoh E, Asuquo E, Duke E, Attai P, Eko L, Lukpata F, Nkere E, Ekanem C, Udofig E, Okon A, Etowa J. Maternal, newborn and child health (MNCH) services utilization: A comparative case study of tertiary and primary health care facilities in Cross River state, Nigeria. *Afr. J. Biomed. Res.* 2021; 24 81- 92.
9. UNFPA. Sub-Saharan Africa's maternal death rate down 41 percent. 2013; <http://africa.unfpa.org/public/cache/offence/news/pid/10767>.
10. Alkema L, Chou D, Hogan D, Zhang S, Moller AB, Gemmill A. et al. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN maternal mortality estimation inter-agency group. *Lancet* (London, England). NIH Public Access, 2016; 387:462–74
11. Ezeji P. Accessibility and utilisation of prenatal care services among women in Ahiazu-Mbaise Local Government Area of Imo State, Nigeria. 2017. <https://www.researchgate.net/publication/342611750>.

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