© FEB 2026 | IRE Journals | Volume 9 Issue 8 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I8-1714248

The Influence of Midwifery-Led Care on Women's Autonomy and Reproductive Health Outcomes in Rivers State

OGBONDAH, AUGUSTINA CHIZOMA[1], DR. GBOBBO JOSEPHINE[2]
[1]*Department of Midwifery, African Centre for Public Health and Toxicology, University of Port Harcourt*
[2]*Department of Nursing, Faculty of Clinical Sciences, University of Port Harcourt*

Abstract *- This study examined the influence of midwifery-led care on women's autonomy and reproductive health outcomes in Rivers State. Two objectives and two research questions guided the study. Two hypotheses were also tested. The study adopted cross-sectional mixed methods design. The population of this study consisted 799,792 women of reproductive age living in Rivers State during the study. A sample of 400 women of reproductive age living in the state provided data for the study. The instruments used to collect data were a validated questionnaire and an interview guide. The reliability coefficients of the questionnaire were established at 0.82, 0.81, 0.76, 0.86, 0.77 and 0.80. The quantitative data collected were analysed using percentage, mean, standard deviation and Chi-square, while qualitative data were analysed thematically and textually. The findings of the study revealed that 71.47% of women in Rivers State had a high level of awareness about midwifery-led interventions ($\bar{x}$ = 2.92), and 55.71% rated the psychometric properties of the interventions highly ($\bar{x}$ = 2.78). Furthermore, the participation of women in the interventions was substantial ($\bar{x}$ = 2.90; 64.94%), resulting in a significant improvement in their reproductive health outcomes ($\bar{x}$ = 2.85; 57.88%; χ^2 = 43.287, p = .000). The study recommended that midwifery training institutions should integrate cultural competence into their curricula to ensure that midwives are well-equipped with relevant skills to handle diverse cultural norms. Local governments should collaborate with community leaders in addressing cultural barriers that often limit women's participation in interventions.*

I. INTRODUCTION

The International Confederation of Midwives (2020) defined the midwife as a person who has successfully completed a midwifery education programme that is duly recognized in the country where it is located and is based on the ICM Essential Competencies for Basic Midwifery Practice and the framework of the ICM global standards for midwifery education; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife'; and who demonstrates competency in the practice of midwifery. The midwife is acknowledged as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the post-partum period, to conduct births on the midwife's own responsibility and provide care for the new born and the infant. This care includes preventative measures, promotion of normal birth, detection of complications in mother and child, the accessing of medical care or other appropriate assistance, and the carrying out of emergency measures in the absence of medical help. The midwife has an important task in health counselling and education, not only for the woman, but also within the family and the community. Overall, the job description for the midwife involves antenatal education, preparation for parenthood and may extend to women's health, sexual or reproductive health and child care (Esienumooh, Okon, Ojong & Akpan, 2015).

Therefore, midwifery-led interventions in Rivers State, Nigeria, focus on improving maternal and neonatal health outcomes through a range of practices and programmes. These interventions often emphasize the role of skilled midwives in providing care throughout pregnancy, childbirth, and the postpartum period. Midwifery-led interventions in Rivers State play a crucial role in enhancing maternal and child health addressing the challenges faced by midwives through improved training, resource allocation, and community engagement can significantly enhance health outcomes in the region. For there to be meaningful midwifery-led interventions, there is need for reproductive health decisions.

The term 'reproductive health decisions' according to World Health Organization (2021) encompass a wide range of choices and considerations individuals face regarding their reproductive lives, including family planning, contraception, pregnancy, childbirth, and sexually transmitted infection (STI) prevention. These decisions are influenced by various factors such as personal beliefs, cultural values, socio-economic status, and access to healthcare services. It can be deduced that reproductive health decision are multifaceted and refer to the choices individuals or couples make regarding their reproductive health and well-being. This can include decisions about contraception, pregnancy, childbirth, family planning, sexual health, and the prevention or treatment of reproductive related health issues. These decisions can be influenced by personal, cultural, social, ethical, and medical factors, and they aim to ensure that individuals can exercise control over their reproductive lives in a way that aligns with their needs and values.

Women's empowerment involves various aspects of agency, autonomy, and participation across social, economic, and political spheres (Jones et al, 2019). Recognition and measurement of women's empowerment are critical for global development and human rights. This was accentuated by the Sustainable Development Goal (SDG 5), which aims to "achieve gender equality and empowerment of women and girls" (Pryor and Seck 2019; Agarwal, 2018). Reproductive empowerment is a transformative process that allows individuals to make informed decisions about their reproductive lives; participate in debates about sexuality, health, and fertility, as well as act on their preferences to achieve desired outcomes without violence, retribution, or fear (Edmeades et al., 2018). This is crucial as intimate relationships often involve unequal power dynamics and normative expectations that could restrict women's sexual powers (Prata et al., 2017).

Empowering women to make reproductive health decisions, allows them to control their bodies, fertility, and health outcomes (Kabir et al., 2020). On the other hand, in all contexts, especially in low- and middle-income countries, women face multiple barriers to making informed and voluntary reproductive health decisions, such as lack of access to quality services, information, and resources, as well as social and cultural norms that constrain their choices and preferences (Kabir et al., 2020). In Nigeria, where maternal mortality and its predisposing factors are yet to be reduced (Onambele et al, 2023). Reproductive health decisions are often influenced by patriarchal values, gender inequalities as well as religious and cultural beliefs that limit women's autonomy and empowerment (Onambele et al, 2023). In addition, the healthcare system is plagued by inadequate facilities, insufficient human resources, and weak governance (Hanson-Agumbah, 2022; Chukwu and Nnogo, 2022). These problems adversely affect the accessibility and standard of reproductive health treatments, particularly for marginalized and remote communities (Oleribe et al., 2019). Hence, it is imperative to investigate and advocate for alternative care models that can amplify women's agency in making reproductive health choices and increase their overall health results.

The theory which guided the study is Social Determinants of Health (SDH) theory. This theory provides insight into how various social, economic, and environmental factors shape health outcomes. These factors include the environments in which individuals are born, grow, live, work, and age, and they significantly affect overall well-being. When it comes to women's empowerment in reproductive health, the theory helps us understand how societal structures and access to resources impact their ability to make informed health decisions and maintain control over their reproductive rights (Shokouh et al, 2017). Key social factors like income, education, social support, and employment status have a direct effect on women's access to reproductive healthcare. In Nigeria, for instance, women from low-income backgrounds or with limited education often encounter obstacles to receiving essential health services. Many are unable to afford medical care, and a lack of education leaves them unaware of their reproductive rights or the healthcare options available to them. Poverty can restrict women's access to prenatal care, contraception, or professional assistance during childbirth. In rural areas, financial constraints often push women toward traditional birth attendants instead of skilled healthcare providers, which increases risks for both mothers and babies (Casebolt, 2020).

II. STATEMENT OF THE PROBLEM

Sexual and reproductive health disorders disproportionately affect women between the ages of

15 and 44, comprising around one-third of the total health issues they experience (WHO, 2019). The World Health Organization's 2018 report estimates that approximately 308,000 women residing in impoverished nations perished in 2017 as a result of reproductive health-related risk factors. Unfortunately, Africa parades substandard health outcomes relative to the global average, as evidenced by its exceptionally high maternal mortality rates. Over fifty percent of these maternal mortality-related tragedies occur in sub-Saharan Africa, where the probability of a woman encountering such an ordeal in her lifespan is one in thirty-eight. African women demonstrate the most pronounced degree of unmet demand for contraception, accounting for 21% of the total (Cleland et al., 2014; Solanke et al., 2022). Moreover, a mere 19% of married women between the ages of 15 and 49 employ modern contraceptive methods, which stands in stark contrast to the considerably higher rate of 88% documented in Eastern Asia (World Bank, 2019a). African women are disproportionately affected by sexually transmitted infections, accounting for 18% of the global incidence of STIs in the continent. Women are inflicted with more than half of these infections (UNFPA, 2018; World Bank 2019a).

Empowering women is a complex idea that involves various aspects of women's ability to take action, make decisions independently, and participate in decision-making. One of the vital areas where women's empowerment is essential is reproductive health decisions. These decisions have a significant impact not only on women's health and well-being but also on their social and economic opportunities. However, in many contexts, women face barriers to exercising their reproductive rights and choices, such as a lack of access to quality health services, information, and education, as well as social and cultural norms that limit their autonomy and voice. In Rivers State, Nigeria, where maternal mortality and morbidity rates are among the highest in the world (Ogundipe, et al., 2018); existing tools for evaluating women's empowerment in reproductive health decisions often lack customization for midwifery settings, limiting their effectiveness. There is a lack of comprehensive validation, and interventions aimed at enhancing empowerment are often overlooked. In addition, tools are not easily integrated into routine midwifery practices due to a lack of standardization or acceptance. Moreover, socio-cultural and religious factors also impact women's agency in reproductive health decisions. Hence, there is a need to develop and validate midwifery-led tools to assess and enhance women's empowerment in reproductive health decisions in Rivers State to achieve more effective, culturally sensitive and tailored interventions, ultimately empowering women in their reproductive health decisions as well as improving their entire wellbeing. One of the ways to enhance women's empowerment in reproductive health decisions is to develop and validate midwifery-led tools that can measure and improve various aspects of women's agency, such as decision-making, freedom of coercion, and communication with the partner.

III. AIM AND OBJECTIVES OF THE STUDY

Aim

The aim of the study is to examine the influence of midwifery-led care on women's autonomy and reproductive health outcomes in Rivers State

Objectives

The objectives of the study are to:

1. identify the level of participation of women in midwifery-led interventions in empowering women to make informed reproductive health decisions in Rivers State?
2. assess the extent women's participation in midwifery-led interventions improve reproductive health outcomes among women in Rivers State?

Research Questions

To achieve the objectives of this study, the following research questions guided the study;

1. What is the level of participation of women in midwifery-led interventions in empowering women to make informed reproductive health decisions in Rivers State?
2. To what extent does women's participation in midwifery-led interventions improve reproductive health outcomes among women in Rivers State?

Hypotheses

The following null hypotheses were tested in the study.

Ho_1: There is no significant relationship between women's level of participation in midwifery-led

interventions and reproductive health outcomes in Rivers State.

Ho_2: There is no significant relationship between women's participation in midwifery-led interventions and their age in Rivers State.

IV. METHODOLOGY

The study adopted a health facility-based descriptive cross-sectional design, employing a mixed method approach. The study was conducted in selected healthcare facilities across Rivers State, located in the Niger Delta region of South-South Nigeria. Rivers State, with its capital city in Port Harcourt, comprises 23 Local Government Areas and spans approximately 11,077 square kilometres. The state's economy is predominantly driven by its flourishing petroleum industry, which attracts a diverse population, including both highly educated and less-educated individuals seeking better employment opportunities. Women of reproductive age form a significant portion of this population. The healthcare facilities selected for the study are:

- Zonal Hospital, Ahoada
- Cottage Hospital, Umuebulu, Etche
- Primary Health Centre, Rumuokwurushi
- General Hospital, Okrika
- Primary Health Centre, Iriebe
- Bori General Hospital

These facilities were chosen to ensure a comprehensive representation of healthcare services across different parts of the state, focusing on women that came for antenatal care or other reproductive healthcare services captured in midwifery-led interventions. The population of this study consists of 799,792 women of reproductive age living in Rivers State during the study (United Nations, 2022). Specifically, this includes women of reproductive age between 18 to 45 years who attend antenatal clinics and seeking for other reproductive health services at the mentioned six health facilities. A sample size of 400 women of reproductive age was used in the study. The Yamane (1967) formula for sample size determination for a finite (known) population was used to determine 400 as respondents. The researcher employed a structured questionnaire and an interview guide as the main instruments used in the data collection process. The structured questionnaire was developed based on the objectives of the study, and, was designed to capture quantitative data, including demographic information of the respondents, women's awareness level, the psychometric properties of the interventions, participation level and reproductive health outcomes. This instrument contained two sections. The items used to measure key variables in the instrument were structure in closed-ended format and scaled in accordance with 4 point Likert scaling style of Very High Extent (VHE) 4 points, High Extent (HE) 3 points, Low Extent (LE) 2 points, and Very Low Extent (VLE) 1 point. To ensure the validity of the research instruments, the structured questionnaire and interview guide were reviewed by the researcher's supervisors, and one expert in reproductive health research. They provided valuable feedbacks that were instrumental in refining the instruments to ensure their alignment with the study objectives and clarity of the words and language, relevance of item to variables measurement, and comprehensiveness of the instruments. The reliability of the structured questionnaire was established through a pilot study. A total of 30 women were part of the pilot study conducted in a healthcare facility in Port Harcourt. Responses obtained from the respondents were subjected to Cronbach's alpha test, which yielded a coefficient of 0.82, 0.81, 0.76, 0.86, 0.77 and 0.80 for the six subsections in section B of the questionnaire, indicating a high level of internal consistency of the constructs. The coefficients were found to be high and demonstrate that the instrument had high reliably measures for the field study. The data collection process involved a systematic approach to ensure the efficient and ethical collection of information from participants across the six selected healthcare facilities in Rivers State. The quantitative data obtained from the questionnaires were coded into SPSS and analysed using descriptive and inferential statistics. Descriptive statistics adopted to answer the research questions include frequencies and percentages, summarised socio-demographic characteristics and response patterns analysis using mean and standard deviation. The inferential statistics used to test the null hypotheses purporting relationships between dependent and independent variables was Chi-square. Qualitative data obtained from the interviews sessions were transcribed and analysed thematically. The interview recordings were firstly transcribed and analysed to generate relevant codes. In the conduct of this study, the researcher adhered to strict ethical standards to ensure that participants' rights and well-being are protected. The researcher applied for and secured ethical approval for this study from the Research and Ethics

© FEB 2026 | IRE Journals | Volume 9 Issue 8 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I8-1714248

Committee of the University of Port Harcourt. These approval confirmed that the study complied with national and international ethical guidelines for research involving human participants.

V. RESULTS

Research Question One: What is the level of participation of women in midwifery-led interventions in empowering women to make informed reproductive health decisions in Rivers State?

Table 1: Percentage and mean of the responses of the responses on the respondents on the level of participation of women in midwifery-led interventions in empowering women to make informed reproductive health decisions in Rivers State.

S/N	Items	Very High Level F (%)	High Level F (%)	Low Level F (%)	Very Low Level F (%)	Mean (x)	S.D.	Remarks
1	I frequently attend midwifery-led intervention sessions on reproductive health.	89 (24.18)	148 (40.22)	129 (35.05)	2 (0.54)	2.88	0.67	High Level
2	I participate regularly in midwifery-led interventions focused on reproductive health.	99 (26.90)	149 (40.49)	115 (31.25)	5 (1.36)	2.93	0.76	High Level
3	Midwifery-led interventions cover topics that are relevant to making informed reproductive health decisions.	84 (23)	136 (37)	106 (29)	40 (11)	2.87	0.94	High Level
4	Midwifery-led interventions have positively influenced my ability to make informed reproductive health decisions.	128 (35)	147 (40)	73 (20)	18 (5)	3.12	0.74	High Level
5	Midwifery-led intervention sessions are easily accessible in my community.	125 (34)	150 (41)	73 (20)	18 (5)	3.11	0.84	High Level
6	I actively participate in discussions during midwifery-led interventions.	80 (21.74)	136 (36.96)	110 (29.89)	42 (11.41)	2.69	0.88	High Level
7	Midwifery-led interventions empower me to make informed reproductive health decisions	99 (26.90)	149 (40.49)	119 (32.34)	1 (0.27)	2.94	0.64	High Level
8	Midwifery-led interventions encourage me to seek support for reproductive health concerns.	77 (21)	132 (36)	114 (31)	44 (12)	2.81	0.87	High Level
9	Cultural norms no longer limit my participation in midwife-led intervention on reproductive health.	85 (23.10)	149 (40.49)	129 (35.05)	5 (1.36)	2.85	0.96	High Level
10	Many women in my community actively participate in midwifery-led interventions.	75 (20.38)	149 (40.49)	139 (37.77)	5 (1.36)	2.80	0.99	High Level
	Aggregate Mean	239 (64.94)		129 (35.06)		2.90	0.83	

Decision Rule: Items with mean score ≥ 2.50 is deem high level, while those with ≤ 2.49 is deem low level.

The table 1 analysed women's participation in midwifery-led interventions to empower them in making informed reproductive health decisions. The responses in item 1 examined the frequency of women attendance at these sessions, resulting in a mean score of 2.88. This result demonstrates that a significant proportion of respondents frequently attend reproductive health education programmes,

and indicates e consistent midwife-led intervention programmes and engagement with women. Similarly, Item 2, which evaluates regular women participation in the interventions, recorded a slightly higher mean score of 2.93. This shows a steady participation of women their commitment to the intervention programmes.

Respondents rated the relevance of the topics discussed in this sessions in Item 3, which achieved a high mean score of 2.87. This suggests that the sessions effectively address issues that help participants make informed reproductive health decisions. The influence of these interventions on the women's ability to make informed decisions, as captured in Item 3, which received the highest mean score of 3.12, further showcasing the programme's success in empowering women. Accessibility of the sessions was evaluated in Item 4, with a mean score of 3.11. This result indicates that most participants find the sessions easily accessible in their communities, and thus suggest that it is an important factor in encouraging participation. However, active engagement during discussions in the interventions scored a high mean score of 2.69 in Item 5. While this still reflects a high level of participation, it somewhat suggests that some women might felt less comfortable in contributing to discussions during the sessions. Furthermore, a mean score of 2.94 was recorded for women's empowerment through these interventions in Item 6. This indicates that participants perceive themselves as acquiring the necessary knowledge and skills to make informed decisions through their participation in the intervention. Similarly, Item 7, which examines how the interventions encourage women to seek support for reproductive health concerns, recorded a mean score of 2.81, reflecting the willingness of majority of the respondents to positively engage in health-seeking behaviours.

The high mean score of 2.85 recorded in item 8 suggest that cultural barriers to woman participation in midwife-led interventions are gradually being addressed. This indicates that cultural norms are becoming less restrictive to the respondents. In addition, the level of community-wide participation in the interventions, which was assessed in Item 9, yielded a high mean score of 2.80, showing strongly that a substantial number of women are actively involved midwife -led interventions programmes. The high aggregate mean score of 2.90 implies that women participation in midwife-led intervention was high overall. The results is supported by 64.94% respondents, and thus highlight areas of strength, such as accessibility and the empowering nature of the interventions. However, there remains a need for sustainable improvement, particularly in encouraging more active discussion during the sessions and fully overcoming cultural barriers.

Research Question Two: To what extent does women's participation in midwifery-led interventions improve reproductive health outcomes among women in Rivers State?

Table 2: Percentage and mean of the responses of the responses on the respondents on the extent of women's participation in midwifery-led interventions improve reproductive health outcomes among women in Rivers State.

S/N	Items	Very High Extent F (%)	High Extent F (%)	Low Extent F (%)	Very Low Extent F (%)	Mean (x)	S.D.	Remarks
11	Participation in midwifery-led interventions has improved my awareness on reproductive health issues.	149 (40.49)	139 (37.77)	75 (20.38)	5 (1.36)	3.17	0.78	High Extent
12	Midwifery-led interventions have helped me to make more informed reproductive health decisions.	73 (19.84)	149 (40.49)	138 (37.50)	8 (2.17)	2.78	0.82	High Extent
13	Participation in midwifery-led interventions has positively on my reproductive health outcomes.	87 (23.64)	148 (40.22)	120 (32.61)	13 (3.53)	2.84	0.73	High Extent

14	Midwifery-led interventions have connected me with support networks on reproductive health.	50 (13.59)	128 (34.78)	159 (43.21)	31 (8.42)	2.54	0.98	High Extent
15	Participation in midwifery-led interventions has improved the quality of care I received during pregnancy.	99 (26.90)	143 (38.86)	90 (24.46)	36 (9.78)	2.83	0.71	High Extent
16	Midwifery-led interventions have contributed to better childbirth outcomes for me.	83 (22.55)	148 (40.22)	110 (29.89)	27 (7.34)	2.78	0.83	High Extent
17	Midwifery-led interventions have helped me access better postnatal care	92 (25.00)	148 (40.22)	112 (30.43)	16 (4.35)	2.86	0.95	High Extent
18	Participation in midwifery-led interventions has encouraged me to seek professional healthcare services.	99 (26.90)	149 (40.49)	106 (28.80)	14 (3.80)	2.90	0.70	High Extent
19	Midwifery-led interventions have improved reproductive health outcomes among women in my community.	99 (26.90)	149 (40.49)	114 (30.98)	6 (1.63)	2.93	0.80	High Extent
	Aggregate Mean	213(57.88)		155(42.12)		2.85	0.81	

Decision Rule: Items with mean score ≥ 2.50 is deem high level, while those with ≤ 2.49 is deem low level.

The analysis of the data in Table 2 above examines how women's participation in midwifery-led interventions relates to reproductive health outcomes. The table shows that Item 11 yielded the highest mean of 3.17, implying that women participation in midwife-led intervention greatly improved their awareness in respect to reproductive health issues. Similarly, Item 18, with a record of a mean score of 2.90, indicates that the midwife led interventions strongly encouraged women to seek for professional healthcare services. Similarly, Item 19 recorded a mean of 2.93, which is similarly higher than 2.50 criterion mean, and thus suggests that the presence of positive community-wide reproductive health outcomes was positively linked to their participation in midwife-led intervention. Furthermore, items 13, 15, and 17 produced high mean values of 2.84, 2.83, and 2.86 respectively, reflecting notable acceptable of the respondents on the improvements recorded as a result of midwife-led interventions in areas of maternal health, the quality of care during pregnancy, and access to better postnatal care services by the women.

On the other hand, Item 14, with the record of the lowest mean of 2.54 outcome suggests that while support networks for reproductive health were present for women in Rivers State, the impact these networks had been less impactful when compared to other areas measured. Items like 12 and 16 yielded a mean score of 2.78, indicating that the respondents were in accord that midwife-led intervention led to improvements in women's ability to make informed reproductive health decisions for better childbirth outcomes. The aggregate mean of 2.85 summarises the overall findings, indicating a high level of positive outcomes. This is confirmed by 57.88% of the respondents who took part in the study, affirming that midwifery-led interventions have broadly improved reproductive health outcomes for women in Rivers State, especially in areas like health awareness, decision-making, and access to care during and after pregnancy.

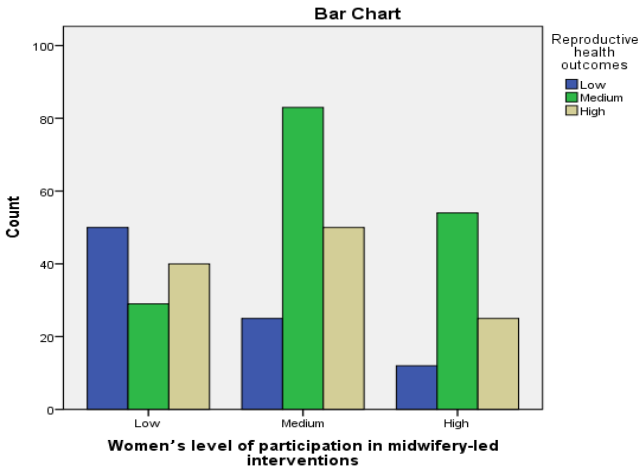
Ho_1: There is no significant relationship between women's level of participation in midwifery-led interventions and reproductive health outcomes in Rivers State.

© FEB 2026 | IRE Journals | Volume 9 Issue 8 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I8-1714248

Table 3: Crosstabulation of Women's Level of Participation in Midwifery-Led Interventions and Reproductive Health Outcomes.

			Reproductive Health Outcomes			Total
			Low	Medium	High	
Level of Women Participation	Low	Count	50	29	40	119
		Expected Count	28.1	53.7	37.2	119.0
	Medium	Count	25	83	50	158
		Expected Count	37.4	71.3	49.4	158.0
	High	Count	12	54	25	91
		Expected Count	21.5	41.0	28.4	91.0
Total		Count	87	166	115	368
		Expected Count	87.0	166.0	115.0	368.0

Table 3 examines the relationship between women's levels of participation in midwifery-led interventions and reproductive health outcomes in Rivers State. For women with low participation, results showed that there is a significant overrepresentation in low outcomes (50 observed vs 28.1 expected), while an underrepresentation was observed in medium outcomes (29 observed vs 53.7 expected). This pattern suggests that a limited participation in midwifery-led interventions is strongly associated with a poorer or lower reproductive health outcomes, and thus less likely to enhance the achievement of moderate or high reproductive health outcomes. The crosstabulation table further showed that women with medium participation were overrepresented in medium outcomes (83 observed vs 71.3 expected), and in alignment with the expected count for high outcomes (50 observed vs 49.4 expected). This results indicates that moderate participation in midwife-led intervention programmes provides balanced reproductive health benefits, and primarily linked to moderate improvements in reproductive health outcomes. Also, women with high participation were underrepresented in low outcomes (12 observed vs 21.5 expected) and overrepresented in medium outcomes (54 observed vs 41.0 expected). This results implies that there was a significant positive impact of active engagement in these interventions on health outcomes.



Chi-Square Tests			
Statistics	Value	Degrees of Freedom (df)	P-value (Asymp. Sig.)
Pearson Chi-Square	43.287[a]	4	.000
Likelihood Ratio	43.260	4	.000
Linear-by-Linear Association	5.579	1	.018
N of Valid Cases	368		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.51.

© FEB 2026 | IRE Journals | Volume 9 Issue 8 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I8-1714248

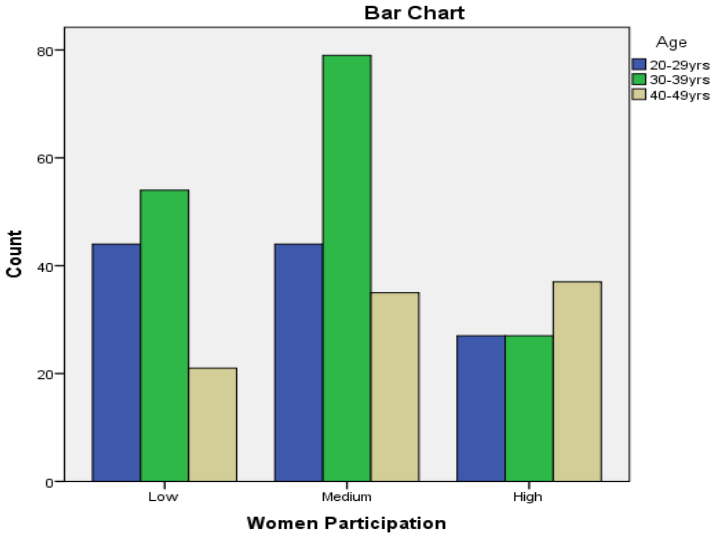
The Chi-Square analysis confirms a statistically significant relationship between women's participation levels and reproductive health outcomes. The Pearson Chi-Square value (43.287, p = .000) and the Likelihood Ratio (43.260, p = .000) indicate a highly significant association. The Linear-by-Linear Association (5.579, p = .018) further validates the significance of the trend across participation levels and their impact on outcomes. Importantly, all expected counts exceeded the minimum threshold of 21.51, and therefore confirms the reliability of the analysis, and rejection of the null hypothesis.

Ho_2: There is no significant relationship between women's participation in midwifery-led interventions and their age in Rivers State.

Table 4: Crosstabulation of Women's Participation in Midwifery-Led Interventions and their Age

			Age			Total
			20-29yrs	30-39yrs	40-49yrs	
Women Participation	Low	Count	44	54	21	119
		Expected Count	37.2	51.7	30.1	119.0
	Medium	Count	44	79	35	158
		Expected Count	49.4	68.7	39.9	158.0
	High	Count	27	27	37	91
		Expected Count	28.4	39.6	23.0	91.0
Total		Count	115	160	93	368
		Expected Count	115.0	160.0	93.0	368.0

Table 4 explores the relationship between women's levels of participation in midwifery-led interventions and reproductive health outcomes in Rivers State. For women with low participation, there is a notable overrepresentation in low outcomes (50 observed vs 28.1 expected) and an underrepresentation in medium outcomes (29 observed vs 53.7 expected). This pattern suggests that limited participation in midwifery-led interventions is strongly associated with poorer reproductive health outcomes and less likelihood of achieving moderate or high outcomes. Women with medium participation show an overrepresentation in medium outcomes (83 observed vs 71.3 expected), which is somewhat in alignment with the expected count for high outcomes (50 observed vs 49.4 expected). These results indicate that moderate participation provides balanced reproductive health benefits, and primarily associated with moderate improvements. Also, women with high participation were underrepresented in low outcomes (12 observed vs 21.5 expected) and overrepresented in medium outcomes (54 observed vs 41.0 expected). This result implies that there is a significant positive impact of active engagement in these interventions on health outcomes.



Chi-Square Tests			
Statistics	Value	Degrees of Freedom (df)	P-value (Asymp. Sig.)
Pearson Chi-Square	19.413[a]	4	.001
Likelihood Ratio	18.811	4	.001
Linear-by-Linear Association	8.383	1	.004
N of Valid Cases	368		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.00.			

The Chi-Square analysis above confirms a statistically significant relationship between women's participation levels and reproductive health outcomes. For instance, the Pearson Chi-Square value (43.287, p = .000) and the Likelihood Ratio (43.260, p = .000) indicate a highly significant association of the two variables. Also, the Linear-by-Linear Association (5.579, p = .018) further validates this significant trend across participation levels and their impact on outcomes. More importantly, all expected counts exceed the minimum threshold of 21.51, effectively confirming the reliability of the analysis, and the need for rejection of the null hypothesis stated above.

VI. DISCUSSION OF FINDINGS

Level of participation of women in midwifery-led interventions in empowering women to make informed reproductive health decisions

The finding of this study showed that the level of women's participation in midwifery-led interventions was high ($\bar{x}$=2.90; 64.94%). This finding highlights the effectiveness of the interventions in empowering women to make informed reproductive health decisions. This finding aligns with recent research findings indicating that midwifery-led care contributes significantly to improving maternal health outcomes. For instance, Fikre (2023) reported midwife -led interventions and care helped to reduce preterm births among women, and also helped in minimizing the need for medical interventions during childbirth. The results obtained from hypothesis test indicate a strong association between participation levels in midwifery-led programmes and reproductive health outcomes. Women with low participation rate were predominantly linked to poor health outcomes, as evidenced by their significant overrepresentation in low reproductive health outcomes (50 observed vs. 28.1 expected) and underrepresentation in moderate outcomes (29 observed vs. 53.7 expected). This result indicates that minimal engagement in these programmes greatly diminishes the likelihood of achieving improved health outcomes among women. These findings align with Campbell et al. (2022), who identified systemic barriers such as limited awareness, cultural constraints, and logistical challenges as critical factors impeding women's involvement in maternal health initiatives. The results obtained from qualitative data provide deeper insights into the statistical analysis, given that they highlight the challenges women face in participating in midwifery-led interventions. Women with low participation identified logistical and financial barriers as significant impediments to their access to midwife-led interventions. The cost of traveling to health centres and inconsistent communication about available programmes constituted significant obstacles to women engagement with the midwives. These barriers not only limited women access to reproductive health programmes led by midwives, but also contributed to poorer health outcomes on their part. This is consistent with Fikre et al. (2023), who identified economic constraints as a critical factor in healthcare access disparities, particularly in low-resource settings.

Extent women's participation in midwifery-led interventions improve reproductive health outcomes

The findings of this study showed that women's participation in midwifery-led interventions improved reproductive health outcomes of women to a high extent. with an aggregate mean of 2.85, this study indicates that the significant impact of midwifery-led interventions on reproductive health outcomes. This high aggregate mean reflects the overall effectiveness of these programmes in improving maternal health awareness, promoting informed decision-making, and enhancing access to antenatal and postnatal care. The findings showed that women who participated in midwifery-led interventions consistently experienced improved health outcomes, particularly in areas such as

reproductive health education and professional healthcare engagement. This finding is consistent with findings obtained by Astika, et al. (2024), which demonstrated the positive effects of midwifery-led programmes in improving maternal health outcomes in low- and middle-income countries. However, the slightly lower scores in areas such as community support networks and cultural integration reveal the need for adjustment and further enhancements to these programmes to achieve maximal benefits to the women.

The results arising from test of hypothesis revealed a clear and significant relationship between participation levels in midwifery-led interventions and reproductive health outcomes. Findings showed that women with low participation were disproportionately linked to poorer outcomes, as reflected by their higher representation in low reproductive health categories and their lower presence in medium outcome categories. This pattern highlights that minimal engagement in these programmes may fall short of delivering the meaningful health improvements anticipated, thereby leaving women needs for reproductive health unaddressed. These observations resonate with Hanson-Agumbah (2022), who highlighted that limited involvement in maternal health initiatives often fails to meet the required comprehensive and even the multifaceted needs of women in the state, especially in rural areas where resource-constrained may exacerbate challenges. For women with moderate participation, the findings revealed a notable alignment with medium health outcomes. This reflects a balanced yet limited benefits of the interventions, thus suggests that while moderate engagement addresses immediate reproductive health concerns of women, it often falls short of delivering the continuity and comprehensiveness required for long-term improvements. The qualitative findings provide complementary overview of the statistical analysis, as they highlight systemic and contextual factors that shape women's participation in midwifery-led interventions. Qualitative findings indicate that women with low participation frequently pointed at logistical and financial barriers as significant obstacles they face while attempting to access midwife-led interventions. For example, participants noted that the cost of traveling to health centres and inconsistent communication on the part of programme planners about available services hindered their ability to plan for and access care. These challenges not only restricted their participation but also contributed to poorer health outcomes, given their limitation to timely access of essential maternal healthcare services. These insights align with Onah et al. (2021), who identified economic constraints and logistical difficulties as critical barriers that undermine maternal health engagement, particularly in underserved communities.

VII. CONCLUSION

This study investigated the influence of midwifery-led care on women's autonomy and reproductive health outcomes in Rivers State, with focus on women's awareness level, participation, and psychometric properties of midwife-led interventions and associated outcomes. The findings revealed that the awareness level of midwifery-led interventions is generally high, though not unevenly distributed. Some rural areas faced communication challenges and inadequate access to reproductive health services. The psychometric properties of midwifery-led interventions were rated highly, with respect, clear communication, and relevance to women's needs being key strengths of the interventions. This study concludes that midwifery-led interventions significantly improved reproductive health outcomes of women, as it fostered a better decision-making ability among them, enhanced their antenatal and postnatal care, and promotes safer health behaviours among them. However, the presence of disparities in rural outreach, cultural misconceptions, and economic constraints highlight the need for targeted interventions to ensure inclusivity and equity in planning and implementation of midwife-led interventions to ensure the attainment of its potential in empowering women and improving their reproductive health outcomes.

VIII. RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

1. Midwifery training institutions should integrate cultural competence into their curricula to ensure that midwives are well-equipped with relevant skills to handle diverse cultural norms. Local governments should collaborate with community leaders in addressing cultural barriers that often limit women's participation in interventions.

2. The Rivers State Ministry of Health should expand the scope of midwifery-led interventions to include broader reproductive health services such as menstrual health, infertility counselling, and general gynaecological care. Adequate resources should also be budgeted and allocated to these interventions to ensure that they of high quality and effective in addressing reproductive health of women in the state.

REFERENCES

[1] Agarwal, B. (2018). Gender equality, food security and sustainable development goals. *Current opinion in environmental sustainability*, *34*, 26-32.

[2] Astika, F. F., Ningrum, G., Izzati, D., & Ferdinandus, L. (2024). Impact of the midwife-led care model on mode of birth: A systematic review and meta-analysis. British Journal of Midwifery. https://www.britishjournalofmidwifery.com/content/literature-review/impact-of-the-midwife-led-care-model-on-mode-of-birth-a-systematic-review-and-meta-analysis

[3] Campbell, R., Cegolon, L., Macleod, D., & Benova, L. (2022). Impact of midwifery-led interventions in improving maternal and newborn health in low-resource settings. *Midwifery Journal, 43*(2), 1–7.

[4] Casebolt, M. T. (2020). Barriers to reproductive health services for women with disability in low- and middle-income countries: a review of the literature. *Sexual & Reproductive Healthcare*, *24*, 100485.

[5] Chukwu, O. A., & Nnogo, C. C. (2022). High-level policy and governance stakeholder perspectives on health sector reform within a developing country context. *Health Policy and Technology*, *11*(4), 100690.

[6] Cleland, J., Harbison, S., & Shah, I. H. (2014). Unmet need for contraception: issues and challenges. *Studies in family planning*, *45*(2), 105-122.

[7] Edmeades, J., Hayes, R., & Gaynair, G. (2018). Improving maternal health through empowerment: Evidence from participatory health programmes. *Maternal and Child Health Journal, 22*(1), 5–14. https://doi.org/10.1007/s10995-017-2386-3.

[8] Esienumooh, J., Okon, O., Ojong, O. & Akpan, A. (2015). Effect of community health workers' visits on uptake of modern contraception among rural women of reproductive age in Nigeria. *African Journal of Reproductive Health*, *24*(3), 108-117.

[9] Fikre, A., Yimer, G., & Tesfaye, L. (2023). Evaluating the quality of maternal health programs: Implications for policy and practice. *Journal of Maternal and Child Health, 17*(2), 123–136.

[10] Hanson-Agumbah, T. (2022). Bridging the gap in maternal healthcare: Lessons from medium-quality interventions. *African Journal of Reproductive Health, 26*(1), 45–58.

[11] Jones, R., Haardörfer, R., Ramakrishnan, U., Yount, K. M., Miedema, S., & Girard, A. W. (2019). Women's empowerment and child nutrition: The role of intrinsic agency. *SSM-Population Health*, *9*, 100475.

[12] Kabir, A., Rashid, M. M., Hossain, K., Khan, A., Sikder, S. S., & Gidding, H. F. (2020). Women's empowerment is associated with maternal nutrition and low birth weight: evidence from Bangladesh Demographic Health Survey. *BMC Women's Health*, *20*, 1-12.

[13] Ogundipe, O. M., Olurinola, O. I., & Ogundipe, A. A. (2018). Health aid and child mortality in Africa: Evidence from disaggregated analysis. *African Population Studies*, *32*(1).

[14] Oleribe, O. O., Momoh, J., Uzochukwu, B. S., Mbofana, F., Adebiyi, A., Barbera, T., & Taylor-Robinson, S. D. (2019). Identifying key challenges facing healthcare systems in Africa and potential solutions. *International Journal of General Medicine*, 395-403.

[15] Onah, H. E., Ikeako, L. C., & Iloabachie, G. C. (2021). Cultural barriers and access to maternal healthcare in sub-Saharan Africa. *International Journal of Gynecology & Obstetrics, 155*(3), 357–362. https://doi.org/10.1002/ijgo.13572.

[16] Onambele, L., Guillen-Aguinaga, S., Guillen-Aguinaga, L., Ortega-Leon, W., Montejo, R., Alas-Brun, R., Aguinaga-Ontoso, E., Aguinaga-Ontoso, I., & Guillen-Grima, F. (2023). Trends, projections, and regional disparities of maternal mortality in Africa (1990-2030): An ARIMA Forecasting Approach. *Epidemiologia (Basel, Switzerland)*, *4*(3), 322–351.

[17] Prata, N., Fraser, A., Huchko, M. J., Gipson, J. D., Withers, M., Lewis, S., ... & Upadhyay, U. D. (2017). Women's empowerment and family planning: a review of the literature. *Journal of Biosocial Science*, *49*(6), 713-743.

[18] Pryor, E. C., & Seck, P. A. (2019). Improving gender data is essential for progress on equity and empowerment. *SSM - Population Health*, *9*, 100494. https://doi.org/10.1016/j.ssmph.2019.100494.

[19] Shokouh, S. M. H., Mohammad, A. R. A. B., Emamgholipour, S., Rashidian, A., Montazeri, A., & Zaboli, R. (2017). Conceptual models of social determinants of health: A narrative review. *Iranian Journal of Public Health*, *46*(4), 435.

[20] Solanke, B. L., Adetutu, O. M., Rahman, S. A., Soladoye, D. A., & Owoeye, M. O. (2022). Prevalence and determinants of unmet need for contraception among women in low and high-priority segments for family planning demand generation in Nigeria. *Archives of Public Health*, *80*(1), 1-14.

[21] United Nations (2022). Promoting women's economic empowerment: Recognizing and investing in the care economy. *Issue Paper*.

[22] World Health Organization. (2019). *Optimizing the contributions of the nursing and midwifery workforce to achieve universal health coverage and the sustainable development goals through education, research and practice.*

[23] World Health Organization. (2021). *Social and economic determinants of health.* https://www.afro.who.int/health-topics/social-and-economic-determinants-health.