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Research Article

The Economics of Health and Agency: Analysing the Impact of Women's Economic Empowerment on Reproductive Health Outcomes in Oyo State, Nigeria

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About Article

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ABSTRACT

This study used a cross-sectional quantitative survey design. Two randomly selected Local Government Areas (LGA) are Egbeda and Ibadan North East. The study population was women of reproductive age. Amartya Kumar Sen's Capability Approach provided the framework. A five stage sampling technique was adopted for the selection of these women. Utilising a structured questionnaire administered to 233 women across Oyo State, the research explores the types of reproductive health services accessed, perceived barriers, and the relationship between economic autonomy and health outcomes. Findings reveal that maternal care (88.8%), delivery services (82.0%), postnatal care (81.5%), and family planning (79.8%) are the most commonly accessed services, indicating strong engagement with maternal and preventive health care. Despite positive perceptions of access, particularly regarding confidentiality (mean = 3.55) and affordability (mean = 3.37) some gaps persist, especially in service availability during convenient hours (mean = 3.07) and regular health information dissemination (mean = 2.93). Women reported high levels of economic empowerment, with strong agreement on their ability to work or run businesses (mean = 3.55) and access to financial resources (mean = 3.60). A significant positive relationship was found between women's economic empowerment and access to reproductive health services ($r = .708$, $p < .001$), especially in areas such as family planning and reproductive health education, which enhance productivity and business opportunities. Barriers to empowerment and health access were linked to cultural, social, policy, and financial factors. Respondents strongly supported strategies such as increased government funding (mean = 3.90), policy integration (mean = 3.88), and community engagement, particularly involving men and traditional leaders. The study concludes that strengthening the link between reproductive health and economic empowerment through policy reform, education, and inclusive community strategies is essential for advancing women's well-being and economic growth in Oyo State. The government should prioritise the integration of reproductive health and women's economic empowerment into national and state-level development policies.

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1. INTRODUCTION

Reproductive health includes managing one's fertility, achieving a safe pregnancy, and creating healthy children. Despite being crucial for all women, it is still a major concern, especially in low- and middle-income countries. Because it controls the size and composition of a nation's population, fertility is one of the major factors influencing population change (Rahman *et al.* 2017). Reproductive health issues have a direct effect on fertility. One indication of women's limited ability to make decisions is their difficulties with fertility and reproductive health (FRH) (Humble, 1995; Bhattacharyya 1996 cited Chowdhury *et al.*, 2023). Numerous individual, household, community, national and regional characteristics affect human FRH, which is one of the fundamental factors driving population growth (Chemhaka & Odimegwu, 2020). The decision-making status of women has an impact on FRH outcomes in developing countries and communities as well (Ali *et al.*, 1995; Toufique, 2016; Kc *et al*, 2021). According to the literature, a number of factors including social, economic, demographic and cultural have an impact on fertility (Chandiok, *et al* , 2016; Laelago, Habtu, & Yohannes 2019; Ahmed Shallo, 2020; Lal *et al.*, 2021; Ahinkorah *et al.*, 2021; Pourreza *et al.*, 2021). It is clear that women's empowerment is a strong predictor of fertility in both developed and developing nations (Alonge & Ajala, 2013). Empowering women can increase their agency and resources enabling them to play a significant role in family decision-making such as limiting the number of children to the desired family size (Roy *et al.* 2017). A recent study in Nepal found a strong correlation between women's empowerment and their decision-making regarding their sexual and reproductive health (Nepal *et al.*, 2023).

In order to reverse the fertility trends in any nation women's empowerment has been identified as a key component. There are a number of published studies on fertility and its variations (Paul *et al.*, 2014; Hossain, 2015). Paul *et al.* (2014) also found that women who were working had a lower chance of having more children. The results of these studies are not evenly distributed with the majority concentrating on the socio demographic or economic effects of fertility (Hossain, 2015).Few studies examined women's occupation and level of education as indicators of fertility. Women with secondary or higher education have a significantly lower chance of having more children than women with only a primary education or no education at all according to one study (Agrawal, 2012).

Some other studies for instance, for instance Darteh *et al.* (2014) discovered that maternal education gives women more control over reproductive health decisions especially those involving the use of condoms. Studies carried out have been on determinants, factors contributing as well as utilisation of health care services by women of various ethnic groups and at different settings. Thus, the study is looking at reproductive health through women empowerment. The study would answer these research questions: How well do women currently have access to reproductive health services in Oyo State? To what extent are women in semi urban and urban areas economically empowered in Oyo State? ;What effects does women's economic participation and productivity have on access to reproductive health services in Oyo State (such as family planning, maternal care and education)?; What is the relationship between women's economic empowerment and reproductive health in Oyo State?; What are main obstacles to women's economic empowerment and access to reproductive health services in Oyo State?; What strategies can be adopted to strengthen the link between economic empowerment and reproductive health among women in Oyo State?

2. LITERATURE REVIEW

2.1. Reproductive health

Reproductive health has become a major issue that has recently attracted the attention of government, non-governmental organisations and development experts from both developed and developing countries due to its implications for the health of women, their children and family members as well as the socioeconomic advancement of society and population programmes. Women must be able to reproduce and have the autonomy to decide whether when and how often to get pregnant in order to have a fulfilling and healthy sexual life. Overall physical, mental and social well-being in all facets of the reproductive system including sexual health is what the World Health Organisation (WHO 2010) defines as reproductive health. According to Omokhabi (2016) progress has been made in protecting and improving women's health especially reproductive health. Women must be in good physical and mental health in order to engage in such health-related activities. Important facets of women's reproductive health include menstruation, menarche, fertility, pregnancy, childbearing, gynecological issues, cancer, prevention and treatment of sexually transmitted diseases, sexuality and sexual health and function (Omokhabi, 2024).

2.2. Women empowerment

Women's empowerment is necessary to promote women's health claim (Cohen & Richards, 1994). Over the past two decades women's empowerment has become the main focus of international development initiatives. When 189 countries joined the Millennium Development Goals in 2000 they committed to promoting women's empowerment and gender equality (Assembly United Nations General (UNG), 2000). Women's empowerment has become a key focus of global development initiatives (Upadhyay *et al.* 2014). At the Cairo Conference three main facets of women's empowerment were emphasised: lowering gender inequality, advancing health and providing access to financial resources. There are many definitions of the general term empowerment but most of them center on Sen's (1989) ideas and refer to a process of change, ability and choice. Women's empowerment according to Kabeer (2012) is a transformational process that teaches those who have been denied the capacity to make decisions how to do so According to earlier theories this definition is accurate. According to Narayan (2002) the mechanisms that promote empowerment are information, access, accountability, inclusion and participation as well as local organisational capacity. The relationship between women's economic empowerment and their labour force participation is complicated (Kabeer *et al*, 2017). In some cases, women's labour force participation does empower them (Field *et al.* 2021) but in other situations women's involvement in the labour force is an indication of

poverty and labour distress (Kabeer, 2012). According to Anderson and Eswaran (2009) women's work may not be an expression of their independence or autonomy. Participation in the labour force by women is a prerequisite for their economic empowerment but it is by no means a sufficient condition for empowerment (Gammage Joshi & Rodgers 2020).

2.3. Reproductive health and women empowerment

Women typically have better employment outcomes when they have more education (Heath & Jayachandran 2017). Accordingly, it is widely acknowledged that women's empowerment is an essential instrument for facilitating access to sexual and reproductive health care services for better mother-child health (Blanc, 2001). One of the most significant social-economic factors is a person's occupation. Having a job allows women to make decisions about the size of their family, when and how many children to have in order to provide better health care, education and proper care for their children (Omokhabi, 2014). Omokhabi also suggested that education level may be linked to later marriage a preference for smaller families, spacing and planning the second child. According to Corroon *et al.* (2014) women who are more empowered are more likely to use contemporary contraception give birth in a medical facility and have a trained attendant present.

Additionally, using contraceptives helps prevent maternal mortality, fetal neonatal and under-5 deaths as well as high-risk pregnancies such as those among older women and teenage girls. Gendered power disparities particularly in intimate relationships hinder many women with health care challenges from exercising their rights and obtaining the best possible benefits for their sexual and reproductive health (Robinson *et al.*, 2017). One such quality that could affect a woman's experience with pregnancy childbirth and postpartum care is empowerment. In many areas women's empowerment results in notable improvements. Reduced mortality and morbidity have been linked in studies to greater empowerment (Alemayehu *et al.*, 2015; Waiswa *et al.*, 2016). Empowerment has been linked to lower rates of unwanted pregnancies (Upadhyay *et al.*, 2014) and Sexually Transmitted Infections (STIs) like chlamydia and gonorrhea in high-risk groups (Shain *et al.*, 1999). The advantages of empowerment are not just for women, they can also benefit those around them most notably their own children. Consequently, it can be argued that women's empowerment may be crucial in lowering fertility and enhancing reproductive health. Afolabi, Afolabi and Badayi (2022) found a direct link between maternal health and education in Nigeria. They concluded that maternal education creates a whole piece of interaction and connects many social components which leads to better health outcomes. Women with higher levels of literacy were more likely to give birth in medical facilities with trained birth attendants present. Additionally, they are more likely to seek postnatal care for both themselves and their babies. Maternal education has advantages for more than just the direct recipients it also benefits children because it lowers the likelihood that they will not seek out maternal and newborn health services. To balance work and childcare skilled women in developed nations who have access to formal sector jobs and high salaries are known to put off getting married and having children (Bertrand *et al.* 2016; Blau & Kahn, 2017). However, the demands of juggling work and childrearing frequently push women into the unorganised sector where they struggle with unstable work schedules and lack crucial protections for wages and working conditions (United Nations (UN)2016). This is especially true in developing nations.

2.4. Theoretical framework: capability approach

This method emphasises people's abilities and what they can accomplish. It implies that increasing people's actual freedoms rather than focusing only on income is what constitutes true development. Sen (1985) developed the capability approach a theoretical framework that comprises two normative claims: first that people's freedom to attain well-being is of primary moral importance and second that peoples capabilities and functioning should be taken into consideration when defining well-being. This approach focuses on what individuals are able to do and to be their capabilities. It suggests that true development is not just about income, but about expanding the real freedoms people enjoy. The capability approach is a theoretical framework that entails two normative claims: first, the claim that the freedom to achieve well-being is of primary moral importance and, second, that well-being should be understood in terms of people's capabilities and functioning. Sen (1985; 1993) makes the following distinctions:

2.5. Functioning

A person's accomplishment is what they are able to do or become. It sort of reflects a portion of that persons condition (Sen 1985). The ability to work, maintain good health and raise a family are examples of functioning. What a person can truly do such as work, maintain good health and raise a family is called functioning. A function is an achievement of a person: what she or he manages to do or be. It reflects, as it were, a part of the state of that person (Sen, 1985).

2.6. Capacity

A person's capacity to accomplish a specific functioning (doing or being) is reflected in their capability (Saith, 2001). The actual freedoms or opportunities to accomplish those functions for instance. For instance actual liberties or chances to accomplish those functions. A healthy reproductive system allows women to plan when and how many children to have as well as live healthier lives. This includes having access to family planning, prenatal care and safe childbirth. Other freedoms (like economic participation) are frequently restricted without this fundamental health capability. This increases their freedom to pursue education, postpone early marriage and pregnancy, enter and remain in the workforce and invest in entrepreneurial or economic opportunities. Women who are in charge of their reproductive choices have more agency in shaping their future. They are better able to choose between work, schools or business, manage their time between paid work and caregiving and participate in social civic and political activities. Thus access to reproductive health directly supports choice which is a key idea in the Capability Approach.

When reproductive health services are available women can transform their potential into things like long-term

employment, increased income, owning their own business and financial confidence. Examining the reasons why some women lack capabilities despite having resources is encouraged by the capability approach. This could include: gender bias in the home or in policy decisions, poor infrastructure or distance from clinics, cultural norms restricting women's autonomy and it emphasises that reproductive health is a freedom issue as much as health . Governments or states can enable greater economic empowerment for women by improving their reproductive health which will enhance personal well-being and promote inclusive economic growth. Given that having access to reproductive health services is a crucial skill that empowers women to live fulfilling lives this theory is pertinent to the research. When women are in good health and have control over their reproductive lives they can pursue economic empowerment through entrepreneurship work and education.

3. METHODOLOGY

3.1. Research design

This study used a cross-sectional quantitative survey design. By collecting data at a single point in time the cross-sectional design made it possible to examine the connection between respondent's economic empowerment and reproductive health outcomes.

3.2. Study area

The study was carried out in Ibadan, Ibadan City is the third largest metropolitan area in Nigeria after Lagos and Kano. Ibadan is the capital city of Oyo State. Its current population (2023) is estimated to be at 3.87 million, with a population growth rate of 3.17%. (Ibadan Urban Flood Management Project, 2023) . Its 11 Local Government Areas (LGAs) are divided into semi-urban (6) and urban (5) categories. Egbeda and Ibadan North East are the two randomly chosen LGAs for this study Egbeda is a semi-urban LGA and Ibadan North East is an urban LGA. These LGAs comprise of multi-ethnic groups but are dominated by the Yoruba speaking people. Ibadan North-East was created by Federal Military Government of Nigeria on 27th August, 1991 from the defunct Ibadan Municipal Government. The headquarters of the Council which is one of the most urban Local Government in Oyo State is accommodated at Iwo Road Barracks, Ibadan. The LGA covers an area of about 80.537 hectares of land. According to the National Population Commission of Nigeria (web), National Bureau of Statistics (web) census, 2022 the population projection is 473,700, 19.94 km^2 Area 23,758/km^2 Population Density with twelve wards while Egbeda , postal code is 200109 Demographics, with an area of 191 km^2 and a population of 281,573 at the 2006 census and subdivided into 11 wards.

3.3. Study population and sampling procedures

Women of reproductive age made up the study population. These women were chosen using a five-stage sampling technique. Out of Ibadan's eleven LGAs we chose two at random for the first stage: one from the urban LGA and the other from the semi-urban LGA. Three wards were chosen from each of the wards in the chosen LGA for a total of six wards. Out of the six wards two communities were selected at random through balloting for a total of twelve communities. The sampling frame for the study was made up of the households in each community with at least one eligible respondent. For the study a sample size of 250 was calculated and employed.

Inclusion criteria

i. Women of reproductive age 19 -49 years

ii. Residing in the study area for at least 6 months

iii. Women willing to participate in the study and capable of giving their informed consent, having the ability to finish the questionnaire on their own or with help.

iv. Women not afflicted with any physical or mental illness that would impair their capacity to react appropriately at this time.

3.4. Instrumentation

The instrument used for data collection in this study is a questionnaire developed based on a review of relevant literature Section A of the questionnaire was designed to collect essential demographic data about the participants. This section included questions that provided background information necessary for understanding the respondents' profiles and for analyzing variations in responses based on demographic characteristics. The instrument consists of six sections that assess key variables in the study Access to reproductive health services Scale, Women Economic Empowerment Scale, Effects of Women's Economic Participation and Productivity and Access to Reproductive Health Services Scale, Women's Economic Empowerment and Reproductive Health Scale , Obstacles to Women's Economic Empowerment and Access to Reproductive Health Scale and Strategies to link Reproductive Health and Economic Empowerment Scale items were designed using a four point Likert scale, of Strongly Agree -SA, Agree-A, Strongly Disagree-SA and Disagree-D format to measure the participants' responses effectively. The questionnaire was administered to participants who met the inclusion criteria for the study

3.5. Validity and reliability of the instrument

To ensure the validity of the instrument, the questionnaire was subjected to content validation by experts in the fields of reproductive health, gender studies, and economic empowerment. These experts reviewed the items in each of the six scales to evaluate their clarity, relevance, and alignment with the study's objectives. Their feedback was used to revise and refine the instrument, ensuring that each section accurately measured the intended construct. To determine the reliability of the instrument, a pilot study was conducted with a sample of participants who shared similar characteristics with the target population but were not included in the main study. The internal consistency of each scale was assessed using Cronbach's Alpha. The reliability coefficients obtained for each scale ranged from 0.78 to 0.91, indicating a high level of internal consistency and reliability. These results confirm that the instrument is suitable for measuring the constructs related to women's economic empowerment and access to reproductive health services. A total of 250 copies of the questionnaire were distributed while 241 retrieved and only 233 was valid and used for data analysis.

3.6. Method of data analysis

Data collected from the respondents were coded and analysed using both descriptive and inferential statistical techniques. Descriptive statistics, including frequencies, means, and standard deviations, were employed to summarise and present the general patterns and distribution of the data. To examine the relationship between women's economic empowerment and reproductive health, Pearson Product-Moment Correlation analysis was conducted. This statistical method was used to determine the strength and direction of the relationship between the two key variables. The level of statistical significance was set at $p < 0.05$, indicating that any result with a p-value less than 0.05 was considered statistically significant.

4. RESULTS AND DISCUSSION

Table 1. Demographic characteristics of respondents in the study

Variables	Labels	Frequency	Percentage
Age	19-23 years	77	33.0
	24-28 years	40	17.2
	29-33 years	40	17.2
	34-38 years	46	19.7
	39-43 years	12	5.2
	Above 44 years	18	7.7
Marital status	Single	41	17.6
	Married	161	69.1
	Widowed	17	7.3
	Divorced	14	6.0
Educational level	No formal education	47	20.2
	Primary	65	27.9
	Secondary	37	15.9
	Tertiary	50	21.5
	Vocational/Apprenticeship	34	14.6
Current employment status	Self-employed	40	17.2
	Employed (public sector)	89	38.2
	Employed (private sector)	17	7.3
	Unemployed	29	12.4
	Student	28	12.0
	Homemaker	30	12.9
Main source of income	Salary/wages	77	33.0
	Small business/trading	56	24.0
	Farming	22	9.4
	Artisan/Vocational work	26	11.2
	Support from spouse/ family	25	10.7
	No income	27	11.6
How often do you earn income	Daily	91	39.1
	Weekly	27	11.6
	Monthly	38	16.3
	Irregularly	44	18.9
	Never	33	14.2

Average monthly personal income	Below ₦10,000	25	10.7
	₦10,000 - ₦30,000	47	20.2
	₦30,001 - ₦50,000	39	16.7
	₦50,001 - ₦100,000	37	15.9
	Above ₦100,000	85	36.5
Access to financial services by respondents	**Labels**	**Frequency**	**Percentage**
Do you own a business or participate in income-generating activities	No	37	15.9
	Yes	196	84.1
If yes, what type of business do you own	Trading	31	31
	Farming/Agriculture	70	70
	Entrepreneur	59	59
	Manufacturing/production	36	36
Access to financial services: Personal bank account	No	20	8.6
	Yes	213	91.4
Access to financial services: Mobile money or digital wallet	No	30	12.9
	Yes	203	87.1
Access to financial services: Microcredit or cooperative loan	No	39	16.7
	Yes	194	83.3
Access to financial services: Business loan or grant	No	97	41.6
	Yes	136	58.4
Access to financial services: None of the above	No	166	71.2
	Yes	67	28.8

Table 1 showed the demographic characteristics of respondents in the study. The age distribution showed that the majority (33.0%) fall within the 19-23 years category, while smaller percentages are found in the older age brackets, with only 7.7% above 44 years. In terms of marital status, the majority of respondents are married (69.1%), while singles make up 17.6%, with smaller proportions being widowed or divorced. Regarding educational attainment, a significant proportion have primary education (27.9%), followed by those with tertiary education (21.5%) and no formal education (20.2%). On employment status, the largest share is employed in the public sector (38.2%), while smaller proportions are self-employed (17.2%), unemployed (12.4%), students (12.0%), or homemakers (12.9%). Income sources indicated that salary/wages (33.0%) and small businesses (24.0%) are the most common, while others rely on farming, artisan work, family support, or have no income. Regarding income frequency, daily earners (39.1%) are most common, with fewer earning monthly (16.3%) or irregularly (18.9%). In terms of personal income, the highest proportion (36.5%) earned above ₦100,000 monthly, indicating a relatively varied economic background among the respondents.

On the aspect of access to financial services. The study showed that a significant majority (84.1%) are engaged in business or income-generating activities, with farming/agriculture (30.0%) and entrepreneur (25.3%) being the most common, followed by trading/shop keeping (13.3%) and manufacturing (15.5%). Access to formal financial services is notably high, as 91.4% of respondents owned a personal bank account, and 87.1% make use of mobile money or digital wallets. Additionally, 83.3% have access to microcredit or cooperative loans, indicating strong integration with financial support mechanisms. However, only 58.4% have benefited from business loans or grants, indicating some gaps in access to larger funding sources. Despite these opportunities, some of the respondents (28.8%) still reported having no access to any of the specified financial services, revealing the need for more inclusive and diversified financial options.

Research question one: How well do women currently have access to reproductive health services in Oyo State?

Table 2. Access and availability of reproductive health services

Variables	Labels	Frequency	Percentage
How far is the nearest reproductive health facility from your home?	Less than 1 km	51	21.9
	1-5 km	16	6.9
	6-10 km	44	18.9
	More than 10 km	122	52.4
What type of health facility do you mostly use for reproductive health services?	Government hospital/clinic	107	45.9
	Private hospital/clinic	65	27.9
	Faith-based/mission clinic	34	14.6
	Traditional birth attendant	27	11.6
How would you rate the availability of reproductive health services in your area?	Very poor	115	49.4
	Poor	77	33.0
	Fair	24	10.3
	Good	17	7.3

Table 2 showed access and availability of reproductive health services among women in Oyo State. A significant obstacle in terms of physical accessibility is highlighted by the fact that 52. 4 percent of the respondents reside more than 10 kilometers from the closest reproductive health facility. A smaller percentage of women use faith-based clinics (14.6 percent) or traditional birth attendants (11.6 percent) while 45.9 percent of women use government hospitals or clinics and 27.9 percent use private hospitals or clinics. Despite the fact that these services are utilised the majority of respondents (49. 4%) rate the availability of reproductive health services as very poor and 33. 0% rate it as poor. This indicates that although access to these services may be available many local women continue to have serious concerns about the quality, consistency or sufficiency of the services they receive.

Table 3. Types of reproductive health services accessed by women in oyo state

Variables	No	Yes
Family planning/contraceptive services	47(20.2%)	186(79.8%)
Treatment for sexually transmitted infections (STIs)	75(32.2%)	158(67.8%)
Delivery services (skilled birth attendance)	42(18.0%)	191(82.0%)
Postnatal care (after delivery)	43(18.5%)	190(81.5%)
Antenatal care (during pregnancy)	26(11.2%)	207(88.8%)
Cervical/breast cancer screening	59(25.3%)	174(74.7%)
HIV counseling and testing	60(25.8%)	173(74.2%)
Menstrual health support (education, pads, etc.,)	58(24.9%)	175(75.1%)

The types of reproductive health services that women accessed were displayed in Table 3. Antenatal care (during pregnancy) is the most commonly used service as indicated by 88.8% of respondents. Delivery services (82.0 percent), postnatal care (81.5 percent) and family planning/contraceptive services (79. 8 percent) come in close succession indicating a high level of use of services linked to infection prevention and maternal health. Furthermore a considerable percentage of people obtain HIV counseling and testing (74.2 percent) cervical/breast cancer screening (74.7 percent) and menstrual health support (75.1 percent) indicating awareness and use of preventive health measures. Treatment for sexually transmitted infections (STIs) on the other hand had somewhat lower patronage (67.8%). The results corroborate those of a prior study conducted by Zhou *et al.* (2019) that found that unmarried female Family Planning (FP) had significantly less access to reproductive health (RH) education counseling, free contraceptives and free RH examinations than married female FPs indicating that the use of RH services is still a negative factor among FP females. According to data from the Agbor (2020) study 71 (35.5 percent) of the 200 respondents agreed that raising awareness and treating breast cancer are among the services and 93 (46.5 percent) of the respondents concluded that post-natal care is the only healthcare service available. These findings are

consistent with the findings of Dejong *et al.* (2015) noted that women can generally access and use Sexual and Reproductive Health (SRH) services in Sudan and Morocco. Additionally Afolabi (2019) study showed pregnant women who visited Ibadan maternity centers accessed maternal health care. Also, Darebo *et al.* (2024) study give support to our research as their result indicated that 54. 4 percent of women of reproductive age used sexual and reproductive health (SRH) services

Table 4. Access and Availability of Reproductive Health Services

Statements	SD	D	A	SA	$\bar{X}$	S.D.
Reproductive health education or counseling	13	28	77	115	3.26	0.878
	5.6%	12.0%	33.0%	49.4%		
I know where to access reproductive health services in my community.	14	22	59	138	3.38	0.888
	6.0%	9.4%	25.3%	59.2%		
Reproductive health services are available in nearby health centers.	12	18	77	126	3.36	0.835
	5.2%	7.7%	33.0%	54.1%		
The cost of reproductive health services is affordable for most women in my area.	13	19	69	132	3.37	0.857
	5.6%	8.2%	29.6%	56.7%		
The quality of reproductive health services provided is satisfactory.	20	26	67	120	3.23	0.959
	8.6%	11.2%	28.8%	51.5%		
Health workers are respectful and supportive when I seek reproductive health services.	27	28	61	117	3.15	1.033
	11.6%	12.0%	26.2%	50.2%		
There is no discrimination against women when accessing reproductive health services.	30	30	58	115	3.11	1.063
	12.9%	12.9%	24.8%	49.4%		
Reproductive health services are available at convenient times for women.	32	29	62	110	3.07	1.070
	13.7%	12.4%	26.6%	47.2%		
Transportation to health centers offering reproductive services is easy and affordable.	17	30	71	115	3.22	0.933
	7.3%	12.9%	30.5%	49.4%		
I can freely make decisions about my reproductive health without fear or pressure.	25	28	68	112	3.15	1.007
	10.7%	12.0%	29.2%	48.1%		
Reproductive Health services options are available and accessible in my locality.	16	40	71	106	3.15	0.940
	6.9%	17.2%	30.5%	45.5%		
There is adequate privacy and confidentiality at reproductive health centers.	8	7	66	152	3.55	0.718
	3.4%	3.0%	28.3%	65.2%		
Information about reproductive health is regularly shared in my community.	18	61	74	80	2.93	0.955
	7.7%	26.2%	31.8%	34.3%		
Adolescent girls and young women have equal access to reproductive health services.	9	35	63	126	3.31	0.866
	3.9%	15.0%	27.0%	54.1%		
I feel safe and secure when visiting health centers for reproductive health needs.	6	37	55	135	3.37	0.841
	2.6%	15.9%	23.6%	57.9%		
There are enough trained professionals to provide reproductive health services	7	43	56	127	3.30	0.873
	3.0%	18.5%	24.0%	54.5%		
Weighted Mean	= 3.24					

Table 4 displayed women's availability and access to reproductive health services. The study found that respondent's perceptions of their communities' availability of these services were largely positive. Women feel safe and informed about where to get reproductive health services as evidenced by the highest ratings for privacy and confidentiality at reproductive health centers (mean = 3. 55) and knowing where to get them (mean = 3.38). Additional highly rated areas reveal satisfactory access in terms of cost and proximity including the availability of services at nearby health centers (mean = 3.36) and the affordability of services (mean = 3.37). But some areas received slightly lower ratings like the availability of services at convenient times (mean = 3.07) and the regular sharing of reproductive health information in communities (mean = 2.93) indicating areas that could use improvement. Additionally, there is potential for improving service delivery methods based on perceptions of freedom in making reproductive health decisions (mean = 3.15) and respect and support from healthcare professionals (mean = 3.15). Therefore, with a weighted mean of 3.24 the results showed that while respondents in the study area generally view access to and availability of reproductive health services favourably user satisfaction could be raised with additional improvements in staff attitudes timing and communication. According to Akanbi *et al.* (2024) the types of reproductive healthcare services that women of reproductive age in the Akinyele LGA access include: postpartum support, pregnancy testing and counseling, menstrual health care and management, family planning services, testing and contraception counseling, labour and delivery services, cesarean section (C-section) and vaginal birth after Csection (VBAC) and preventive care services like vaccinations and health screenings. Utaka and associates(2023) noted that family planning information and services, safe motherhood and child survival prevention and management of abortion complications, provision of safe abortion services where permitted by law and prevention and management of STIs including Human Immunodeficiency Virus (HIV) /Acquired immunodeficiency syndrome (HIV/AIDS are elements of sexual and reproductive health services .Moreover Zepro *et al.* (2023) stated that achieving the 2030 Sustainable Development Goals (SDGs) for gender equality, good health and well-being depends on everyone having access to SRH services. Comprehensive sexual and reproductive health services must be available, reasonably priced and customised to meet the specific needs of each woman. In 2020 Omokhabi found that married women use modern family planning methods because they are simple inexpensive and effective at preventing unintended pregnancies. All these previous findings supports the results of our current study

Research question two: To what extent are women in semi urban and urban areas economically empowered in Oyo State?

Table 5. Extent to which women in oyo states semi urban and urban areas are economically empowered

Statements	SD	D	A	SA	$\bar{X}$	S.D.
I have the freedom to work or run a business of my choice.	8	14	67	144	3.49	0.761
	3.4%	6.0%	28.8%	61.8%		
I can access financial resources (loans, savings) when needed.	6	7	62	158	3.60	0.676
	2.6%	3.0%	26.6%	67.8%		
I contribute meaningfully to household expenses.	12	22	65	134	3.38	0.858
	5.2%	9.4%	27.9%	57.5%		
I feel economically secure and independent.	13	32	69	119	3.26	0.898
	5.6%	13.7%	29.6%	51.1%		
I can make long-term financial plans for myself and my family.	8	12	69	144	3.50	0.749
	3.4%	5.2%	29.6%	61.8%		
Weighted Mean	= 3.48					

The degree of women's economic empowerment in semi urban and urban areas was displayed in Table 5. The respondents perceived level of empowerment was found to be high overall. The majority of women reported having access to financial resources like loans and savings (mean = 3. 60 and they concurred that they are free to work or operate a business of their choosing with high mean scores of 3.49. These results showed that a sizable percentage of women in the research regions believe they can independently generate income and maintain financial independence. Women also showed confidence in their capacity to make long-term financial plans (mean = 3.50) and make significant contributions to household expenses (mean = 3. 38).However despite having a lower mean score (mean = 3. 26) the perception of economic security and independence still shows a generally positive outlook. According to the weighted mean of 3.48 the women who participated in the survey felt generally very economically empowered especially when it came to financial access household contribution and the freedom to work or own a business. Health *et al* (2024) concur with this, argues that in certain instances women's labour force participation does empower them to the extent that economic participation may increase their bargaining power within the household. Additionally, Gammage, Joshi and Rodgers (2020) study aligns with ours which found that women's labour force participation is a pathway (a necessary condition) for women's economic

empowerment but it is by no means a sufficient condition to ensure empowerment. According to the debate surrounding the key indicators for measuring women's empowerment women's empowerment can be assessed based on their ability to participate in household decision-making which reflects their economic domestic and mobility autonomies (Hameed, 2014). Omokhabi found in 2021 that women's entrepreneurial activity in the informal sector was influenced by vision goal-oriented mindset risk-taking decision-making money management optimism network ability and innovation. This indicates that women are working in the informal sector to gain empowerment and this supports the finding.

Research question three: What effects does women's economic participation and productivity have on access to reproductive health services (such as family planning, maternal care and education) in Oyo State?

Table 6. Effect of women's economic participation and productivity on access to reproductive health services

Effect of economic participation	**SD**	**D**	**A**	**SA**	**$\bar{X}$**	**S.D.**
Family planning (Weighted mean = 3.26)						
Access to family planning services has enabled women to pursue employment opportunities	11	19	58	145	3.45	0.835
	4.7%	8.2%	24.9%	62.2%		
I am more productive because I can choose when to have children.	10	19	55	149	3.47	0.820
	4.3%	8.2%	23.6%	63.9%		
Family planning has enabled me to start or grow a business.	6	15	55	157	3.56	0.730
	2.6%	6.4%	23.6%	67.4%		
Family planning helps women better plan their careers and educational goals.	9	25	50	149	3.45	0.835
	3.9%	10.7%	21.5%	63.9%		
Use of contraceptives reduces economic pressure on women due to unplanned pregnancies.	10	21	55	147	3.45	0.830
	4.3%	9.0%	23.6%	63.1%		
Family planning has increased women's ability to participate in income-generating activities.	20	30	55	128	3.25	0.982
	8.6%	12.9%	23.6%	54.9%		
Spacing of children through contraception contributes to greater work productivity for women.	75	84	31	43	2.18	1.080
	32.2%	36.1%	13.3%	18.5%		
Maternal Health Care (Weighted mean=2.81)						
Access to quality maternal care improves women's physical ability to work after childbirth.	84	97	27	25	1.97	0.953
	36.1%	41.6%	11.6%	10.7%		
Maternal health services reduce time lost from work due to pregnancy complications.	68	79	42	44	2.27	1.078
	29.2%	33.9%	18.0%	18.9%		
Good maternal care has enhanced women's confidence in returning to work after childbirth.	19	44	58	112	3.13	0.992
	8.2%	18.9%	24.9%	48.1%		
Affordable maternal healthcare allows women to save more for economic activities.	8	30	73	122	3.33	0.828
	3.4%	12.9%	31.3%	52.4%		
Safe delivery services contribute to the long-term economic stability of women and their families	10	25	71	127	3.35	0.839
	4.3%	10.7%	30.5%	54.5%		
Reproductive Health Education (Weighted mean=3.36)						
Reproductive health education empowers women to make informed career and family decisions.	12	18	64	139	3.42	0.842
	5.2%	7.7%	27.5%	59.7%		
Women with reproductive health knowledge are more likely to participate in formal and informal employment.	5	17	65	146	3.51	0.726
	2.1%	7.3%	27.9%	62.7%		

Education about reproductive health increases women's awareness of their rights in the workplace.	23	47	41	122	3.12	1.053
	9.9%	20.2%	17.6%	52.4%		
Reproductive health education reduces absenteeism related to health issues among working women.	15	24	52	142	3.38	0.912
	6.4%	10.3%	22.3%	60.9%		
Overall Economic Participation (Weighted mean = 2.93)						
Access to reproductive health services has positively affected women's economic independence.	42	24	43	124	3.07	1.165
	18.0%	10.3%	18.5%	53.2%		
Reproductive health support enables women to balance work and family life effectively.	58	29	47	99	2.80	1.230
	24.9%	12.4%	20.2%	42.5%		
Women with access to reproductive health services are more likely to stay in the workforce.	68	31	40	94	2.69	1.270
	29.2%	13.3%	17.2%	40.3%		
Reproductive health services contribute to a more productive female labour force.	40	18	42	133	3.15	1.148
	17.2%	7.7%	18.0%	57.1%		
Weighted Mean	= 3.10					

The effects of women's productivity and economic engagement on access to reproductive health services in Oyo State were displayed in Table 6. It demonstrated the strong correlation between women's economic activity and their ability to access reproductive health services especially those related to family planning and reproductive health education. According to the responses women's employment prospects productivity and capacity to launch or grow businesses have all benefited from having access to family planning services (high mean scores ranging from 3.25 to 3.56). This demonstrated that family planning which gives women control over their reproductive options improves their ability to participate in the economy. Contrarily the effect of maternal healthcare on economic participation seems to be mixed. While some indicators such as safe delivery and affordable healthcare scored moderately high (means between 3.33 and 3.35) others such as better physical ability to work after childbirth and a decrease in time lost to complications had significantly lower mean scores (1.97 and 2.27) suggesting that maternal health has a direct impact on women's productivity at work. With consistently high mean scores (3.12 to 3.51) the responses support the positive impact of reproductive health education on women's empowerment and workforce participation emphasising that it empowers women to make well-informed decisions that support their career and family goals. Nonetheless the overall effect on long-term workforce participation and economic independence received a somewhat lower score (means ranging from 2. 69 to 3.15) indicating that although access to reproductive health services boosts productivity structural and cultural barriers may still prevent it from having the full economic impact.

Women who are more empowered are more likely to give birth in a medical facility use contemporary contraception and have a trained attendant (Corroon *et al.*, 2014). One such quality that could affect a woman's experience with pregnancy childbirth and postpartum care is empowerment. In many areas women's empowerment results in notable improvements. Research has shown a correlation between lower mortality and morbidity and greater empowerment (Waiswa, 2016). Regarding reproductive health empowerment has been linked to lower rates of STIs like chlamydia and gonorrhea in high-risk groups (Shain, 1999 cited in Yaya *et al.*, 2018) and unwanted pregnancies (Upadhyay *et al.*, 2014). Pratley (2016) earlier research found a positive correlation between women's empowerment and health care service utilisation in 67 developing nations which agrees with our study that found that women's economic participation and productivity affects access to reproductive health services (such as family planning, maternal care and education .This outcome agrees with the findings of Sado *et al.* (2014) study on Albania found that women's use of maternal health care services was influenced by their level of empowerment within the family. Furthermore the outcome is in agreement with Tiruneh *et al.* (2017) in an Ethiopian study and Akram *et al.* (2019) in a study carried out in Pakistan both agreed that the three stages of maternal health care service facilities were significantly improved when women were empowered.

Research question four: What is the relationship between women's economic empowerment and reproductive health in Oyo State?

Table 7. Pearson Product Moment Correlation (PPMC) showing the relationship between Women's Economic Empowerment and Reproductive Health

Variables	Mean	Std. Dev.	n	R	P value	Remarks
Women's Empowerment	27.8412	4.80173	233	.708*	.001	Sig.
Reproductive Health	61.9957	7.82100				

** Correlation is significant at the 0.05 level (2-tailed).*

The results of a Pearson Product Moment Correlation (PPMC) study examining the connection between women's economic empowerment and reproductive health were displayed in Table 7. The table demonstrated a statistically significant correlation between women's empowerment and reproductive health. (r=.708, n=233, p (.001)<.05). Accordingly women's reproductive health in the study was impacted by and improved by their economic empowerment. Development according to Omokhabi and Egunyomi (2016) is contingent upon improving and protecting women's health especially reproductive health. Aly (2021) study showed that women's empowerment and education were significantly associated with receiving reproductive healthcare particularly among rural and impoverished women which gives support to our research. Butler *et al.* (2021) study also highlights the importance of women's autonomy in making healthcare decisions especially when it comes to choosing modern contraceptives and found that women who made healthcare decisions on their own were significantly more likely to use modern contraceptives which highlights the importance of empowering women to manage their reproductive choices on their own which will ultimately lead to a rise in the use of modern contraceptives which agrees with our research and also Asaolu *et al.* (2018) looked into how important healthcare access influenced women's empowerment which aligns with our study.

Research question five: What are main obstacles to women's economic empowerment and access to reproductive health services in Oyo State?

Table 8. Obstacles to women's economic empowerment and access to reproductive health services in oyo state

Main obstacles to empowerment	SD	D	A	SA	$\bar{X}$	S.D.
Policy-Related Obstacles						
Government policies do not prioritize women's reproductive health needs.	21	9	21	182	3.56	0.932
	9.0%	3.9%	9.0%	78.1%		
There is insufficient public funding for reproductive health services in my area.	17	14	20	182	3.58	0.898
	7.3%	6.0%	8.6%	78.1%		
Legal restrictions make it difficult for women to access family planning services.	25	14	22	172	3.46	1.008
	10.7%	6.0%	9.4%	73.8%		
Maternity leave policies are inadequate to support working mothers.	11	7	17	198	3.73	0.738
	4.7%	3.0%	7.3%	85.0%		
protect women from workplace discrimination related to reproductive health.	13	9	17	194	3.68	0.795
	5.6%	3.9%	7.3%	83.3%		
Cultural and Social Obstacles						
Cultural beliefs discourage the use of reproductive health services.	93	17	20	103	2.57	1.391
	39.9%	7.3%	8.6%	44.2%		
Community stigma prevents women from openly discussing reproductive health issues.	103	25	22	84	2.38	1.356
	43.8%	10.7%	9.4%	36.1%		
Traditional gender roles limit women's participation in economic activities.	17	9	25	182	3.60	0.871
	7.3%	3.9%	10.7%	78.1%		
Religious beliefs in my community conflict with the use of contraception or reproductive health education.	13	7	25	188	3.67	0.788
	5.6%	3.0%	10.7%	80.7%		
Women need permission from their husbands or male family members to access health services or employment.	89	25	28	91	2.52	1.343
	38.2%	10.7%	12.0%	39.1%		
Financial and Economic Obstacles						
Reproductive health services are too expensive for many women.	19	13	20	181	3.56	0.923
	8.2%	5.6%	8.6%	77.7%		
Transportation costs make it difficult for women to access health facilities.	27	11	36	159	3.40	1.017
	11.6%	4.7%	15.5%	68.2%		

Childcare responsibilities prevent women from working or accessing health services.	151	22	13	47	1.81	1.217
	64.8%	9.4%	5.6%	20.2%		
Lack of financial independence makes it difficult for women to prioritise their health.	34	12	21	166	3.37	1.103
	14.6%	5.2%	9.0%	71.2%		
Many women cannot afford to miss work to attend health appointments	50	12	27	144	3.14	1.231
	21.5%	5.2%	11.6%	61.8%		
Weighted Mean	= 3.20					

Table 8 listed the primary barriers to women's access to reproductive health care and economic empowerment. The study found that cultural social financial and policy-related factors significantly influence the barriers. Most people agreed that government policies, inadequate funding, legal restrictions, inadequate maternity leave policies and weak employment protections were among the main policy-related barriers (mean scores ranging from 3.46 to 3.73). This demonstrated a high level of discontent with the systems in place to protect women's economic and reproductive rights. Cultural and social barriers showed a mixed pattern while religious beliefs and traditional gender roles scored highly (3.60 and 3.67 respectively) indicating that they continue to be major barriers to women's empowerment other factors such as community stigma, cultural beliefs and the need for male approval scored lower (means around 2.38 to 2.57) indicating that these factors are present but less common. The high costs of reproductive health services, transportation costs, lack of financial independence and inability to miss work for medical appointments are just a few of the financial and economic barriers that women reported (means between 3. 14 and 3. 56). Childcare duties however were seen as less of a barrier (mean = 1. 81) which may be a reflection of changes in how women manage work and family. It was evident from the weighted mean of 3. 20 that the main obstacles to women's empowerment and health access in Oyo State are systemic and structural rather than cultural or personal. This finding aligns with the findings of Omokhabi and Fajimi's (2023) study which found that women often face financial healthcare and educational barriers as development agents. Olajide and Omokhabi's (2014) study also supports this study, establishing that cultural factors, religious beliefs, financial constraints lack of knowledge about reproductive health, lack of knowledge about reproductive health rights and lack of facilities are all contributing factors. Social conventions and cultural values prevent timid women from having candid discussions about their sexual health according to Afolabi and Hendricks (2025). In addition to raising the risk of unwanted pregnancies ,illegal abortions and Sexually Transmitted Diseases (STDs) this leads to misconceptions and a lack of relevant resources which negatively impacts knowledge and management of reproductive health.

Research question six: What strategies can be adopted to strengthen the link between reproductive health and economic empowerment among women in Oyo State?

Table 9. Strategies adopted to strengthen the link between reproductive health and economic empowerment among women in oyo state

Strategies to Strengthen the Link	**SD**	**D**	**A**	**SA**	**$\bar{X}$**	**S.D.**
Health Service Accessibility						
Improving access to affordable reproductive health services will promote women's economic participation.	28	8	24	173	3.47	1.021
	12.0%	3.4%	10.3%	74.2%		
Providing mobile reproductive health clinics in rural areas will enhance women's health and empowerment.	29	11	19	174	3.45	1.046
	12.4%	4.7%	8.2%	74.7%		
Integrating reproductive health education into existing women empowerment programs is necessary.	27	6	31	169	3.47	1.000
	11.6%	2.6%	13.3%	72.5%		
Encouraging male involvement in reproductive health decisions supports women's economic growth.	10	7	15	201	3.75	0.713
	4.3%	3.0%	6.4%	86.3%		
Education and Awareness						
Reproductive health education should be included in adult literacy and vocational training programmes.	44	10	21	158	3.26	1.190
	18.9%	4.3%	9.0%	67.8%		
Awareness campaigns on reproductive health rights can empower women economically.	30	24	42	137	3.23	1.077
	12.9%	10.3%	18.0%	58.8%		

Community-based workshops linking reproductive health with business skills are effective.	12	8	8	205	3.74	0.756
	5.2%	3.4%	3.4%	88.0%		
Traditional and religious leaders should be involved in reproductive health sensitisation efforts.	6	18	13	198	3.73	0.701
	2.6%	6.9%	5.6%	85.0%		
Policy and Government Support						
Government policies should link reproductive health programmes with economic development initiatives for women.	6	3	5	219	3.88	0.539
	2.6%	1.3%	2.1%	94.0%		
Funding for women's health and entrepreneurship programmes should be increased.	5	3	2	223	3.90	0.494
	2.1%	1.3%	0.9%	95.7%		
Local governments should partner with NGOs to deliver combined health and financial services.	4	3	5	221	3.90	0.468
	1.7%	1.3%	2.1%	94.8%		
Monitoring and evaluation should be done to measure the impact of reproductive health on women's economic outcome	4	6	2	221	3.89	0.505
	1.7%	2.6%	0.9%	94.8%		
Weighted Mean	= 3.64					

The ways used to improve the relationship between Oyo State women's economic empowerment and reproductive health were displayed in Table 9. There was broad agreement among participants in the study regarding the significance of multi-level integrated interventions. Statements about increased funding (mean=3. 90), policy integration (mean=3. 88), NGO collaborations (mean=3. 90) and monitoring and evaluation (mean=3. 89) received the highest mean scores indicating that these are thought to be the most effective strategies. The results also showed particularly high levels of agreement regarding the role of government policy funding and partnerships in strengthening this link. The necessity of community-based workshops (mean=3.74), male involvement (mean=3.75) and interaction with traditional and religious leaders (mean=3.73) are also strongly agreed upon highlighting the importance of household dynamics and cultural gatekeepers in promoting women's empowerment and health. In addition although they received somewhat fewer responses than policy-driven strategies to increase accessibility through mobile clinics (3.45) incorporating health education into empowerment programs (3.47) and awareness campaigns (mean=3. 23) also received favorable feedback. The moderate rating of adult literacy integration (mean=3.26) suggests that its importance is acknowledged but that there may not be as much urgency surrounding it as there is for more direct interventions.

5. CONCLUSION

This study looked at the crucial connection between women's access to reproductive health services and their economic empowerment in Oyo State Nigeria .Strong maternal health engagement among women in the area was indicated by the findings which showed high levels of utilisation of important reproductive health services like family planning, postnatal care, delivery services and STI treatment. Positive opinions of access were expressed by the majority of participants particularly with regard to confidentiality, service affordability and service location awareness. However it was observed that there was a lack of community-level reproductive health education and restrictions on availability during convenient times. The study also revealed that women had a generally high degree of economic empowerment with respondents expressing access to financial resources and freedom to participate in activities that generate income. Crucially a statistically significant positive correlation between women's economic empowerment and access to reproductive health services was found. According to this women's capacity to engage in economic activity is improved when they have access to health services particularly family planning and reproductive health education. Even with these encouraging signs the results showed some enduring difficulties. Maternal healthcare has had little effect on women's productivity at work and financial policy and cultural barriers still prevent women from being fully empowered. These difficulties highlight how comprehensive multifaceted interventions are required to improve the relationship between women's economic outcomes and health.

RECOMMENDATIONS

The following recommendations were made based on the findings

i. Policy Integration: Implementing national and state-level development policies that incorporate women's economic empowerment and reproductive health should be a top priority for the government.

ii. More Funding and Collaborations: Public funding and collaborations with non-governmental organisations and foreign organisations should be used to increase investment in reproductive health services.

iii. Community Involvement: To overcome cultural barriers and promote women's health rights programmes should actively involve men, local authorities and places of worship.

iv. Boost Service Accessibility: More flexible hours for health services should be offered and mobile clinics should be extended

to more underserved areas.

v. Adult literacy and health education programmes should incorporate reproductive health education to give women the information they need to make wise decisions. Economic empowerment programmes should also incorporate reproductive health education.

vi. Monitoring and Evaluation: In order to guarantee impact and accountability it is crucial to conduct ongoing assessments of both health service delivery and economic empowerment initiatives.

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