



Perceived Effect Of Physical Activity Participation On The Reproductive Health Among Married Couple In Ebonyi State

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Abstract

ABSTRACT

Regular physical activity is seen to play a crucial role in enhancing reproductive health for both men and women within married couples. It improves hormonal balance, enhances blood circulation to reproductive organs, and can positively influence fertility and pregnancy

outcomes. However, little or no studies investigated the effect of physical activity participation among married couple in Ebonyi state, despite the impact of infertility among married couple in the area. This study investigated the perceived effect of physical activity participation on the reproductive health among married couple in Ebonyi State. The descriptive cross-sectional survey research design was adopted for the study. The sample consisted of 296 participants drawn through purposive sampling technique. The instrument for data collection was a structured questionnaire. Data analysis was conducted using descriptive statistics including mean and standard deviation. The findings revealed that married men in Ebonyi State hold a consistently negative perception of the impact of physical activities on various aspects of sexual health. Specifically, participants expressed negative



perceptions regarding the effect of physical activity on sexual functioning ($\bar{x} = 2.16$, $SD=0.56$), sexual desires ($\bar{x}=2.11$, $SD=0.55$), erectile function ($\bar{x}=2.20$, $SD = 0.60$), and sexual stamina ($\bar{x}=2.2$, $SD=0.57$). The mean scores and standard deviations consistently fell below the set criteria for each domain, indicating a consistent trend of negative perceptions. Based on these findings, the

study recommends targeted health education campaigns using multiple channels, including radio, television, and community gatherings, to emphasize the positive impact of regular physical activities on sexual health. Community engagement programs involving local leaders and influencers are also recommended to facilitate direct interaction and foster community discussions. Additionally, the study suggests professional training for health professionals and educators to enhance their communication skills and address concerns universally.

Keywords: Physical Activity, Reproductive Health, Participation, Effect, Married Couple, Ebonyi State

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Introduction

Background of the Study

Infertility affects approximately 10–15% of couples globally, impacting both those in developed and developing countries (Zańko, et al. 2025). Estimates suggest that approximately one in every six people of reproductive age across the globe experience infertility in their lifetime (WHO 2024). In the male reproductive system, infertility is most commonly caused by problems in the ejection of semen, absence or low levels of sperm, or abnormal shape (morphology) and movement (motility) of the sperm. In the female reproductive system, infertility may be caused by a range of abnormalities of the ovaries, uterus, fallopian tubes, and the endocrine system, among others (Hazlina, et al 2022). The increasing prevalence of infertility underlines the importance of research into interventions to improve reproductive health, with a strong focus on physical activity. Physical activity and exercise not only benefits overall health but also plays a vital role in maintaining the health of reproductive organs, including fertility among married couple (Fertility Treatment, 2025).

Research has documented that regular physical activity significantly improves male reproductive health particularly by improving sperm quality and potentially enhancing fertility (Zańko, et al. 2025). Reproductive health associated with sexual desires and sexual functioning amongst married men, plays a crucial role in intimate relationships, health and overall quality of life (Smith, et al. 2021). It encompasses various aspects such as erectile function, arousal, and satisfaction. Research has shown that regular physical activity is associated with higher levels of erectile function and satisfaction among men (Leslie & Sooriyamoorthy, 2024). Engaging in physical activity can improve cardiovascular health, increase blood flow, and promote hormonal balance, all of which can positively influence sexual function (White and Anderson, 2018; Almuqahwi et al. 2023; Smith et al. 2021).

Physical activity refers as any bodily movement that requires energy expenditure, has been widely recognized for its positive effects on overall health and well-being. In recent years, researchers have begun to explore the potential impact of physical activity on the sexual functioning and reproductive health of individuals (Almuqahwi et al. 2023). Empirical evidence reveals that regular physical activity reduces many chronic diseases, such as cardiovascular diseases, stroke, coronary artery disease, and hypertension (Tian, & Meng, 2019; Thompson and Brown, 2021). Physical activity is also important for reducing the risk of osteopenia (reduced bone mass), osteoporosis, and sarcopenia (reduced muscle mass) associated with weak sexual performance (Roberts, Anderson, & Smith, 2019; Almuqahwi et al. 2023).

Research has shown that regular exercise is associated with improved reproductive health and higher levels of body satisfaction among married men (Dabiri, et al. 2024). By improving



reproductive health, physical activity can enhance sexual confidence and contribute to healthier sexual experiences within marital relationships (Vélez, 2024). Moreover, erectile function, or libido, is a key component of sexual functioning (Johnson & Davis, 2017). This is influenced by a complex interplay of biological, psychological, and social factors (White and Anderson, 2018; Smith et al., 2021). Research has also demonstrated that men who engage in regular physical activity, such as endurance training or resistance exercises, experience improvements in their endurance and stamina during sexual activities (Shahid, & Noor, 2025).

The important of physical activity on the reproductive health among married couple cannot be overemphasized, however, despite several empirical research conducted in various studies, there is little or no research conducted on the knowledge of the benefit of physical activity on the reproductive health among married men in Ebonyi State. Most of the studies conducted to the on benefit of physical activity on the reproductive health among married men were done in another location and countries not necessarily in Ebonyi State. The mentioned scenarios have prompted the current study on the perceived effect of physical activity on the reproductive health among married men in Ebonyi State. Specifically, the study sought to ascertain the: 1. perceived effect of physical activities on sexual functioning among married men in Ebonyi State. 2. Perceived effect of physical activity on sexual desires among married men in Ebonyi State. 3. Influence of physical activity on sexual erectile function among married men in Ebonyi State. 3. Perceived effect of physical activity on sexual stamina among married men in Ebonyi State.

METHODOLOGY

Research Design/ Sertting

The study was community based cross-sectional quantitative survey research design conducted from January through May 2025, to assess the perceived effect of physical activity on the reproductive health among married men in Ebonyi State, Nigeria. Ebonyi state is one of the five Igbo dominated states in the southeast Nigeria with their population characterized by the diverse Igbo tradition, region and cultures (Obande-Ogbuinya, Aleke, et al. 2022). The state has an estimated population of over 3,242,500; landmass 6,488 km² and population density 499.8/km² (NBS, 2022).

Population and Sample

The exact population of married men in Ebonyi State is not readily available. Nevertheless the study focused on all the married couple in Ebonyi state. Inclusion criteria were all the legally married couple in Ebonyi state who are available and consented to participate in the study. Exclusion criteria are those who are cohabiting illegally, who are sick, not available during the time of the study. The sample size of the study is two hundred and ninety six (296). Purposive/convenience sampling was used to draw 296 participants from Ebonyi State.



Instrument of Data Collection

A semi-structured questionnaire entitled, “Perceived Effect of Physical Activity on the Reproductive Health among Married Couple ‘PEPARHMC’ Questionnaire” was the instrument used to assess the participants' perceptions on the effect of physical activity, sexual functioning, and reproductive health. The questionnaire comprises a socio-demographic factors, including age, marital status, education level, and employment status. The questionnaire also explores the number of children the participant has, if applicable. In the subsequent section, participants are asked to respond to statements related to their engagement in physical activities, sexual health, and reproductive functions. The four point-Likert scale is employed for responses, ranging from "Never" to "Very Often" for physical activity-related questions and from "SA" (Strongly Agreed) to "SD" (Strongly Disagreed) for sexual health-related statements. The questionnaire aims to gather valuable on the perceived effect physical activity and sexual/reproductive health among married couple in Ebonyi State.

Reliability of instrument

To establish reliability, a test-retest method was employed. A subset of respondents was asked to complete the questionnaire twice, with a reasonable time interval in between, and the responses from the two administrations. This was compared for internal consistency using cronbach-Alpha. This method enables the assessment of the questionnaire's stability and consistency. Ensuring the reliability of the instrument enhances the overall validity and trustworthiness of the study's findings, which is crucial for drawing meaningful conclusions about the perceived effects of physical activity on sexual functioning and reproductive health among married men in Ebonyi State.

Validity of the Instrument

This instrument was face validated by 3 experts drawn from the field of physical and health education, measurement/evaluation and community medicine departments.

Method of Data Collection

In order to gain access to and cooperation from the respondents, the researchers obtained a consent letter to conduct the research from the married couples in Ebonyi state. Introductory letter was also obtained from the Department health Education, physical education and exercise physiology. The researchers stated the purpose of the study. The letter was presented to the respondents for their approval and consent.

Method of Data Analysis

The data collected was cross-checked for completeness and responses. SPSS version 28 was used for the analysis; all the instrument properly filled and fit for data analysis were analyzed using mean, standard deviation, and Chi-square statistics. The percentages, Mean, and Standard



Deviation were used in taking decisions thus, any mean above 2.50 was interpreted as positive perceptions while below 2.50 was interpreted as negative perception towards the effect of physical activity on the reproductive health among married couple in Ebonyi state. The results were presented using tables.

RESULTS

Research Question 1: What is the perceived effect of physical activity on the sexual functioning among married men in Ebonyi State?

Table 1 Mean and Standard Deviation of perceived effect of physical activities on sexual functioning and married men in Ebonyi State:

S/N	Item	$\bar{x}$	SD	Decision
1	I engage in regular physical activities, such as jogging, walking, or sports.	2.17	0.95	Negative
2	I make time for physical exercise as a part of my daily routine.	2.14	0.87	Negative
3	I prioritize physical fitness and strive to maintain an active lifestyle.	2.21	0.92	Negative
4	I find it easy to incorporate physical activities into my daily life.	2.12	0.96	Negative
	Overall Mean $\bar{x}$	2.16	0.56	Negative

Result on Table 1 show that all the item score below 2.50 criteria set for this study. Overall ($\bar{x} = 2.16$, $SD=0.56$) is also below 2.50 criteria set for this study. This means that married men in Ebonyi State have negative perception of effect of physical activities on sexual functioning

Research Question 2: What is the perceived effect of physical activities on the sexual desires among married men in Ebonyi state?

Table 2: Mean and Standard Deviation of Perceived Effect of Physical Activities on the sexual desires among Married men in Ebonyi State

S/N	Item	$\bar{x}$	SD	Decision
5	I have adequate sexual drive	2.23	0.95	Negative
6	I achieve desired satisfaction during sexual intercourse	2.18	0.096	Negative
7	My partner and I engage in sexual activities at more twice a week	1.90	0.87	Negative
8	I usually satisfy my partner duration sexual encounters.	2.14	0.97	Negative
	Overall Mean $\bar{x}$	2.11	0.55	Negative



Data on table 2 show that item 5-8 score below 2.50 criteria set for the study. Overall ($\bar{x}=2.11$, $SD=0.55$) is below 2.50 set for this study. This implies that married men in Ebonyi State have negative perception of the physical activity on the reproductive health.

Research Questions 3: What is the perceived effect of physical activity on the sexual erectile function?

Table 3: Mean and Standard Deviation of perceived effect of physical activities on the sexual erectile functions (n=296)

S/N	Item	$\bar{x}$	SD	Decision
9	I do not need sexual enhancers to perform sexual activities	2.09	0.87	Negative
10	I can create and maintain an erection	2.26	0.90	Negative
11	I do not experience painful erections	2.30	0.93	Negative
12	I do not experience inconsistent performance ability	2.17	0.89	Negative
	Overall Mean $\bar{x}$	2.20	0.60	Negative

Data on Table 3 indicated that the entire items were below 2.50 set for this study. Overall ($\bar{x}=2.20$, $SD = 0.60$) is also below 2.50 criteria set for this study. This suggests that married men in Ebonyi state have negative perception on the effect of physical activities on the sexual erectile function.

Research Question 4: What is the perceived effect of physical activities on sexual stamina among married men in Ebonyi State?

Table 4: Means and Standard Deviation of perceived effect of physical activities on sexual stamina among married men in Ebonyi State (n=296)

S/N	Item	$\bar{x}$	SD	Decision
13	I last longer than 10 minutes in one round of sexual activity	2.25	0.99	Negative
14	I can engage in more than one round of sexual activity in one session.	2.14	0.99	Negative
15	I usually maintaining a satisfying speed during sexual intercourse.	2.37	0.91	Negative
16	I can take on different sexual positions	2.12	0.96	Negative
	Overall Mean $\bar{x}$	2.22	0.57	Negative

Data on table 4 show that item 13-16 score below 2.50 criteria set for the study. Overall ($\bar{x}=2.22$, $SD=0.57$) is equally below 2.50. Criteria set for this study. This means that married men in Ebonyi State have negative perception of effect of physical activities on sexual stamina ($\bar{x}=2.22$, $SD=0.57$).



Discussions

Result of the study as presented in Table 1 showed that married couple in Ebonyi State has negative perception of effect of physical activities on sexual functioning. This finding is not expected thus, amazing. However, the findings is in line with the study who found no influence of the physical activity level be it low, moderate, high physical activity on the married couple sexual function (Sacomori, et al. 2013). The current finding is a rebuttal of the study who revealed that PA improves pregnancy rates in women with reproductive health problems (Hoffmann et al. 2009). It is also in consonance with the Comparative studies which indicate that PA intervention may be as effective as other commonly used clinical intervention strategies for improving reproductive health outcomes (Mena, et al. 2019). Nevertheless, while the type, intensity, frequency, and duration of optimal PA intervention, and the role of PA independent of weight loss, remain unclear, these preliminary findings suggest that PA may be an affordable and feasible alternative or complementary therapy to fertility treatments (Mena, et al. 2019).

Married couple in Ebonyi State has negative perception towards the effect of the physical activity on the reproductive health. The findings of the current study is not expected and consequently a surprise. However, the negative perception among the married couple may be influenced by cultural beliefs and misconceptions of the negative impact of physical activity engagement during pregnancy. Some married couples hold negative perceptions about the negative impact of physical activity on reproductive health, potentially impacting their family planning choices and overall well-being (Odii et al. 2024). The finding is however, in line with the study which reported that high-intensity or excessive physical activity can negatively impact reproductive health in both men and women. In women, it may lead to menstrual irregularities, hormonal imbalances, and potentially reduced fertility. In men, it could affect semen parameters and testosterone levels, also potentially impacting fertility (Suberu, & Adeoye, 2024). The findings of the present study differs from the results found by Hoffmann et al. (2009) in a supervised exercise program for the treatment of depression that concomitantly improved the sexual function of the participating women.

Married couple in Ebonyi state has negative perception on the effect of physical activities on the sexual erectile function. The current finding is anticipated and consequently not a surprise. This is because it somewhat agree with the study which revealed that while there's a common misconception that excessive exercise can negatively impact erectile function, the prevailing scientific evidence suggests that physical activity, particularly at moderate levels, generally improves erectile function and overall sexual health (La Vignera, et al. 2012). It however disagree the study which revealed that physical inactivity is a known risk factor for erectile dysfunction



(ED), and regular exercise, especially aerobic exercise, can be a beneficial intervention (Gerbild et al., 2018).

The respondents in Ebonyi State had negative perception of the effect of physical activities on sexual stamina. The outcome of the finding is amazing thus, the finding is a rebuttal to the study who reported that male sexual function is regulated by vascular function and impaired vascular function is closely related with erectile dysfunction (ED). Vascular functions are positively influenced by physical fitness (i.e., aerobic capacity, muscle strength, and flexibility) (Kosaki, et al. 2019). Kosaki and Colleague further maintained that the detailed associations between physical fitness and male sexual function remain poorly understood by majority of people including married couple (Kosaki, et al. 2019). The present finding agrees with a study which reported that excessive, high-intensity exercise, particularly endurance training, can potentially lead to decreased libido or erectile dysfunction in some individuals due to hormonal fluctuations and fatigue. However, moderate physical activity and strength training are widely recognized for improving sexual function and overall well-being (Kumagai et al. 2019; Mussawar et al. 2023). This agreement and disagreement with reference to the findings could be attributed to varied geographical locations, subject' composition and other demographic factors associated with the study locations.

Conclusion

This study delved into the perceived effect of physical activities on various aspects of sexual health among married couple in Ebonyi State. The negative perceptions revealed in the findings highlight the need for targeted interventions and health education programs to address misconceptions and promote a more accurate understanding of the relationship between physical activity and sexual health. The results suggest that cultural and societal factors may play a significant role in shaping these negative perceptions. Therefore, any intervention strategy should be culturally sensitive and tailored to the specific context of Ebonyi State. Health promotion campaigns could leverage community influencers, local leaders, and established communication channels to disseminate accurate information and challenges of misconceptions regarding physical activity and reproductive health. Further, future research is recommended to explore the specific cultural and contextual factors influencing these perceptions among people in the present study location.



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