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Awareness and Factors Affecting Utilization of Preconception Care among Market Women of Reproductive Age Group in Abakaliki Metropolis, Ebonyi State

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Abstract

Preconception care (PCC) involves preventive, promotive, and curative interventions provided to individuals of reproductive age before pregnancy to reduce maternal and neonatal morbidity and mortality. A descriptive cross-sectional study was conducted from May 15 to 20, 2023, to evaluate awareness, knowledge, and utilization of PCC among market women aged 15-49 years in Margret Umahi International Market, Abakaliki. Of the 420 distributed questionnaires, 412 were correctly completed, yielding a response rate of 98.1%. Nearly half (47.6%) of the respondents were aged 20-29 years, with the majority (40.5%) having attained senior secondary education. Awareness of PCC was reported by only 37.38% of respondents, and good knowledge was noted in just 22.7%. Among previously pregnant women, only 8.6% had utilized PCC. Key reasons for seeking PCC included previous cesarean sections (32.0%) and adverse pregnancy outcomes (24.0%), with common interventions received being counseling on preventing complications (10.4%) and blood pressure/sugar checks (13.7%). Lack of awareness (57.7%) and knowledge of PCC's importance (73.2%) were the primary barriers to utilization. Factors positively associated with PCC utilization included higher educational attainment, increasing age, and occupation. Overall, PCC utilization among market women in Abakaliki remains low, primarily due to inadequate awareness and knowledge. Improved education and targeted awareness campaigns are recommended to enhance PCC uptake in this population.

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Introduction

Preconception care (PCC) encompasses interventions designed to identify and manage biomedical, behavioral, and social risks that may affect a woman's health or pregnancy outcomes [1]. These preventive, promotive, and curative measures are crucial in reducing maternal and perinatal morbidity and mortality, particularly in low-income countries where maternal healthcare often begins mid-pregnancy [2]. The preconception period, typically defined as the three to six months before pregnancy, provides a vital opportunity for health promotion, risk screening, and interventions to optimize maternal and fetal outcomes [3].

The CDC highlights PCC as essential in primary healthcare to reduce risks related to pre-existing medical or behavioral conditions [4]. Recommendations include incorporating PCC into routine healthcare, particularly in well-woman clinics, and addressing factors like family planning, immunizations, medical and genetic history reviews, screenings, and lifestyle assessments. Despite its benefits, PCC utilization remains low globally, with significant gaps in awareness and access in developing countries like Nigeria [5].

WHO's global consensus on PCC emphasizes integrating it within healthcare systems, leveraging innovative delivery channels (e.g., schools and workplaces), and mobilizing resources to implement evidence-based strategies. In Nigeria, the lack of national guidelines and awareness hinders PCC adoption. Awareness levels are generally below 50%, and utilization is even lower, with regional disparities in both metrics. For instance, Lagos exhibits higher awareness (76%) but poor knowledge of service availability, while Sokoto shows minimal awareness (20.6%) and utilization (11.1%) [6].

Cultural, educational, and infrastructural factors influence these trends. Ethnicity, religion, education, marital status, unplanned pregnancies, and poor access to services significantly affect PCC uptake. Notably, studies on PCC in Nigeria focus predominantly on antenatal clinic attendees, overlooking community-based insights [7]. Addressing these gaps through targeted interventions, policy formulation, and community outreach could improve PCC uptake, thereby mitigating adverse maternal and neonatal outcomes [8].

Understanding and addressing the barriers to PCC utilization in Nigeria, including lack of awareness, ignorance, and insufficient healthcare access, could lead to improved maternal and infant health outcomes [9]. Efforts to integrate PCC into community-level healthcare, particularly among underserved populations like market women in Abakaliki, are critical. Researching factors influencing PCC awareness and use in such contexts could inform policies and corrective measures, reducing maternal and neonatal complications while fostering better health outcomes statewide and beyond [10].

Preconception care (PCC) is an evolving concept aimed at preparing women physically, emotionally, and medically for pregnancy to ensure optimal outcomes and reduce maternal and perinatal morbidity and mortality [11]. Previous studies on PCC in Nigeria, including Abakaliki, have primarily focused on hospital attendees who are often educated and from higher socioeconomic classes, limiting their reflection of true community-level awareness and utilization. The last study on PCC in Abakaliki was conducted five years ago [12].

There is a need to evaluate PCC awareness and utilization among market women in Abakaliki, a group representing diverse socioeconomic and educational backgrounds. Such a study will provide a more accurate picture of PCC uptake in the community [13]. Findings can guide stakeholders, policymakers, and healthcare providers to address barriers, improve awareness, and enhance the uptake of PCC, ultimately contributing to better maternal and perinatal health

outcomes in the region [14].

Materials and Method

Study Area

The study was conducted in Margret Umahi International Market, the largest market in Abakaliki metropolis, Ebonyi State. Abakaliki metropolis comprises Abakaliki and Ebonyi local government areas, with a 2023 projected population of 662,202. Opened in 2020, the market features over 8,000 well-arranged shops and is centrally located along the trans-Saharan highway. It attracts a diverse group of women from various socioeconomic and educational backgrounds, making it an ideal study site. Unlike Margret Umahi Market, the New Kpiri-kpiri and Building Material Markets are smaller and located on the outskirts, further emphasizing the central market's significance for this research.

Study Design

This was a descriptive cross-sectional study among market women of reproductive age group (15-49 years) in Margret Umahi International Market, Abakaliki.

Sample Size

Abakaliki metropolis has a population of 662,202. The study was carried out among market women engaged in selling and buying in Margret Umahi International Market, Abakaliki.

The representative sample size from the total population was calculated using a simple formular for cross-sectional study [15].

$n = (Z^2P(1-P))/d^2$

where: P is the prevalence,

d is the allowable error margin which is 5%,

Z is a constant for standard normal deviate which is 1.96 at 95% Confidence interval.

Taking P as 42.2%, which is the proportion of respondents who had awareness of PCC in a previous study in Abakaliki by Ekem et al.

$$n = \frac{(1.96)^2 \text{ X } 0.422 \text{ X } (1-0.422)}{(0.05)^2}$$

$$\frac{3.8416 \text{ X } 0.422 \text{ X } 0.578}{0.0025}$$

= 375

Applying 10% attrition rate gives 37.5 (approximately 38).

Thus Sample size = 375+38

= 413.

Inclusion Criteria

All women aged 15-49 years who are engaged in buying and selling and who consented to participate in the research were included.

Exclusion Criteria

Market women below 15 years or above 49 years.

Market women who declined consent.

Data Collection

All women of reproductive age group (15-49 years) in Margaret Umahi International market, Abakaliki, who consented to participate in the study were recruited. The participants were counselled on the nature and the objective of the research and their concerns addressed. Informed consent was obtained from all the participants.

The participants were recruited during each market day from Monday to Saturday. A total of 69 participants were recruited each day in order to ensure adequate representation. Thus, 7 (market days) X 69 (participants) = 414 participant

Twenty well-structured pre-tested questionnaires were administered by the researcher and his assistants to detect errors and correct the same before formal distribution/research work commenced.

Women, both sellers and buyers, randomly encountered by the investigators within the market were approached, counselled about the research and recruited after obtaining informed consent.

The researcher administered the questionnaire with the help of 7 research assistants.

Data Analysis

The Data was analyzed using IBM SPSS software (version 23, Chicago 11, USA). The result were expressed as frequency tables, percentages, mean and standard deviation. Association between categorical data were analyzed using Chi-square. Correlation analysis was done with Pearson's correlation.

Comparison between continuous variables were done using z-test. A P- value of < 0.05 was considered statistically significant

Ethical Consideration

Ethical Approval

Ethical approval was obtained from the Human Research and Ethics Committee of Alex Ekwueme Federal University Teaching Hospital Abakaliki, Ebonyi state.

Informed Consent

A written informed-consent was signed by each respondent before recruitment into the study. The objectives of the study and other details of the study were explained to each participant prior to obtaining the consent.

Confidentiality

Information that was gotten from the participants shall not be divulged. The identity of each participant will be kept confidential.

Compensation: Each participant was allowed to go with the pen used in completing her questionnaire as a souvenir and education on PCC was provided in form of counselling after the study.

Non-Maleficence

The study involved no more than minimal harm to the participants.

Results

A total of 420 questionnaires were administered to consenting market women, 412 were correctly filled giving the response rate of 98.1%.

Table 1 shows the sociodemographic parameters of the respondents. Many of the respondents, 47.6% (196/412), were aged between 20-29 years. Women with senior secondary education constituted the majority accounting for 40.5% (167/412), this was followed by respondents with tertiary education 26.5% (109/412) whereas those with no formal education were the least, 1% (4/412). Respondents that dwell in the urban area constituted 91% (375/412) of the market women. Retailers composed 76.7% (316/412) of the respondents.

Table 1: Socio-Demographic Parameters of Respondents, Awareness and Factors Affecting Utilization of Preconception care.

Characteristics	Awareness N (%)		χ2	P-Value
	Aware of PCC	Not Aware of PCC		
Age Group				
15-19	6 (10.5)	51 (89.5)	70.901	0.000*
20-29	52 (26.5)	144 (73.5)		
30-39	65 (69.1)	29 (30.9)		
40-49	31 (47.7)	34 (52.3)		
Marital status				
Single	19 (22.6)	65 (77.4)	15.754	0.000*
Married	135 (42.2)	185 (57.8)		
Divorced	0 (0.0)	8 (100.0)		
Parity				
0	10 (13.7)	63 (86.3)	28.660	0.000*
1	31 (48.4)	33 (51.6)		
2-4	90 (38.1)	146 (61.9)		
≥5	23 (59.0)	16 (41.0)		
Tribe				
Igbo	143 (35.7)	258 (64.3)	18.035F	0.000*
Hausa	7 (100.0)	0 (0.0)		
Yoruba	4 (100.0)	0 (0.0)		
Religion				
Islam	4 (100.0)	0 (0.0)	7.778F	0.007*
Christianity	149 (36.6)	258 (63.4)		
African Traditional Religion	1 (100.0)	0 (0.0)		
Level of Education				
None	2 (50.0)	2 (50.0)	22.022	0.000*
Primary	20 (46.5)	23 (53.5)		
Junior Secondary	20 (22.5)	69 (77.5)		
Senior Secondary	55 (32.9)	112 (67.1)		
Tertiary	57 (52.3)	52 (47.7)		
Occupation				
Retailer	113 (35.8)	203 (64.2)	21.544	0.000*
Wholesaler	35 (60.3)	23 (39.7)		
Artisan	5 (20.0)	20 (80.0)		
Sales girl	1 (7.7)	12 (92.3)		
Area of Residence				
Urban	144 (27.0)	27 (73.)	1.861	0.173
Rural	10 (38.4)	231 (61.6)		

*Significant [F]Fisher's Exact test used

Figure 1 below shows those who were aware of preconception care. Less than half of the respondents (37.4%; 54/412) were aware of preconception care

Figure 1

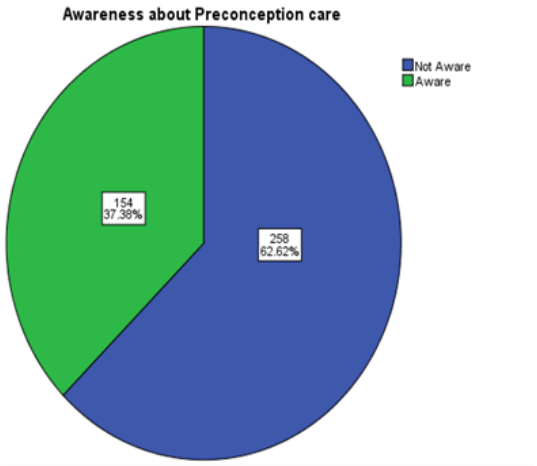

Figure 2 below depicts the source of information on preconception care among the participants. The most likely place they heard about preconception care was in the hospital (39%; 60/154), followed by friends (20.8%; 32/154) whereas the least likely place they heard about it were school and places of worship (1%).ast likely place they heard about it were school (1%) and places of worship (1%).

Figure 2

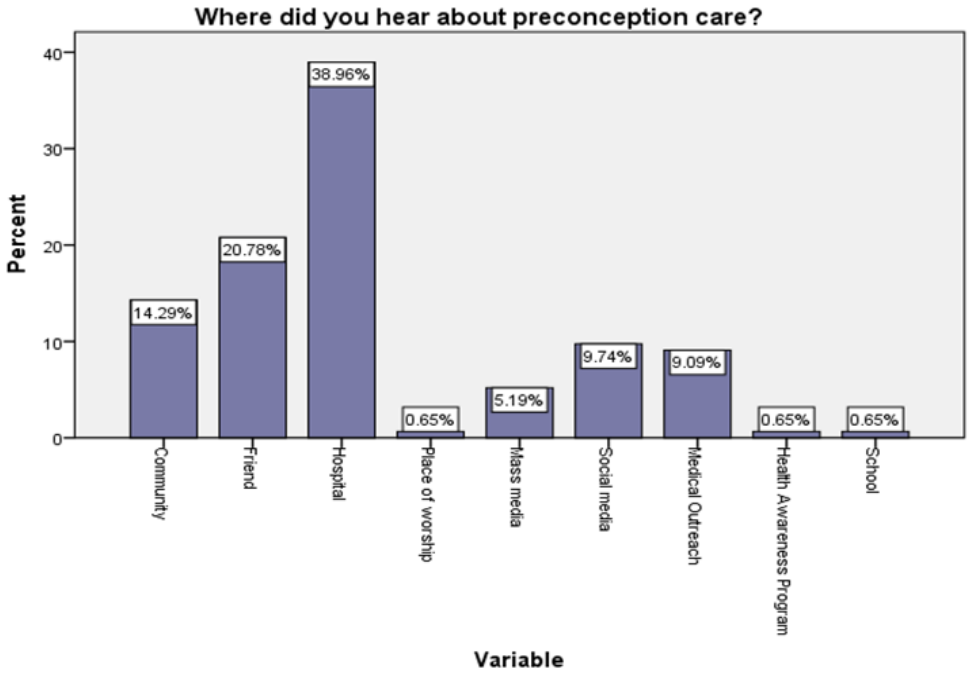

Table 2 and 3 shows knowledge of factors that affect pregnancy and knowledge of effect of optimizing maternal health before pregnancy. The most commonly identified factor that affect the outcome of pregnancy by the respondents were self-medication (92.6%) followed by infection (90.9%), alcohol (90.3%) and smoking (86.1%). A little more than half of the respondents were aware that lack of folic acid supplementation (54%)

and hypertension (51.0%) can affect the outcome of pregnancy. The respondents that knew that preconception care has good effect (80.2%) outnumber those that knew it has bad effect (18.6%)

Table 2: knowledge of Factors that could Affect Pregnancy Outcome (n=339)

ITEM	YES N(%)	NO N(%)
Alcohol use	306 (90.3)	33 (9.7)
Smoking	292 (86.1)	47 (13.9)
Infections	308 (90.9)	31 (9.1)
Lack of Folic acid supplementation	183 (54.0)	156 (46.0)
Self-medication	314 (92.6)	25 (7.4)
Hypertension	173 (51.0)	166 (49.0)
Diabetes Mellitus	119 (35.1)	220 (64.9)
Obesity	103 (30.4)	236 (69.6)
I don't know	20 (5.9)	319 (94.1)

Table 3: Responses about Optimizing Maternal Health before Pregnancy (n=339)

ITEM	YES N(%)	NO N(%)
Has good effect	272 (80.2)	67 (19.8)
Has no effect	2 (0.6)	337 (99.4)
Has bad effect	63 (18.6)	276 (81.4)
I don't know	6 (1.8)	333 (98.2)

Table 4 shows the knowledge and level knowledge of the participants about preconception care. Of the respondents that were aware of preconception care, only 54.5% (84/154) admits they were knowledgeable whereas 45.5% (70/154) have no knowledge. A little less than one-third (28.6%; 44/154) of the aware group knew it is care given to women before pregnancy whereas a few (9.1%) of the aware group believes it is a care given to only women with health problem. Just below one-fourth (22.7%; 35/154) believes it improves pregnancy outcome. Only 21.4% (33/154) of respondents that were aware of preconception care were knowledgeable that preconception care benefits the mother, father and child. The commonly identified components of preconception care by the aware group were folic acid supplementation (29.9%) and family planning (29.2%) whereas only a handful were able to identified avoidance of environmental toxin (10.4%) and vaccination (9.1%) as components of preconception care.

Table 4: Knowledge of Components/Benefit of Preconception Care (n=154)

ITEM	YES N(%)	NO N(%)
What do you know about preconception care?		
I have no knowledge of preconception	70 (45.5)	84 (54.5)
It is care given to women before pregnancy	44 (28.6)	110 (71.4)
It is only for women with health problems	14 (9.1)	140 (90.9)
Men can also receive it	19 (12.3)	135 (87.7)
Optimizes mother's health before pregnancy	36 (23.4)	118 (76.6)
Helps improve pregnancy outcome	35 (22.7)	119 (77.3)
Who are the beneficiaries of preconception care?	103 (30.4)	236 (69.6)
Child only	5 (3.2)	149 (96.8)
Mother only	16 (10.4)	138 (89.6)
Father only	3 (1.9)	151 (98.1)
Mother and child only	19 (12.3)	135 (87.7)
Child, Mother, and Father	33 (21.4)	121 (78.6)
Tick the components of pre conception care that you know of		
Family planning	45 (29.2)	109 (70.8)
Prevention of unwanted pregnancy	38 (24.7)	116 (75.3)
Vaccination e.g. tetanus	14 (9.1)	140 (90.9)
Screening for genetic diseases (e.g. sickle-cell anaemia)	22 (14.3)	132 (85.7)
Screening for medical conditions (raised BP, diabetes)	22 (14.3)	132 (85.7)
Avoidance of environmental toxins (e.g. solvent, herbicide)	16 (10.4)	138 (89.6)
Cessation of alcohol, smoking	18 (11.7)	136 (88.3)
Stoppage of some medications	24 (15.60	130 (84.4)
Lifestyle changes (e.g. healthy weight, healthy nutrition)	28 (18.2)	126 (81.8)
Folic acid supplementation	46 (29.9)	108 (70.1)
Screening for infectious diseases (e.g. syphilis, HIV)	41 (26.6)	113 (73.4)

Table 4a displays the level of knowledge of the participants and only 22.7% of those knowledgeable of pre-conception care demonstrated good knowledge of the concept whereas 77.3 had poor knowledge.

Table 4a: Knowledge level

Knowledge Level	Frequency (n=154)	Percentage
Poor Knowledge	119	77.3
Good Knowledge	35	22.7

A total of 22 items were used to assess knowledge of respondents about preconception care. A score of 1 is given for each correct answer and a score of 0 is given for each wrong or neutral answer. Total score obtainable is 22. Those who scored between 0 – 11 were graded to have poor knowledge about preconception care, while those who scored between 12 - 22 have good knowledge.

Table 5 shows the utilization of preconception care by respondents. Very few of the respondents (8.6%: 29/339) had utilized preconception care in their pregnancies. Only 10.3% (35/339) were pregnant as at time

of filling the questionnaire of which 62% (13/21) planned the pregnancy.

Table 5: Utilization of Preconception care

ITEMS	YES N (%)	NO N (%)
Have you ever Been pregnant? (n=412)	339 (82.2)	73 (17.7)
Are you or your wife currently pregnant? (n=339)	35 (10.3)	304 (89.7)
Have you or your wife utilized preconception care in any of your pregnancies? (n=339)	29 (8.6)	310 (91.4)

Table 6 depicts reasons for seeking preconception. The most common reason for seeking preconception care was previous Cesarean section (32.0%; 16/29), this was followed by bad outcome in previous pregnancy (24.0%; 12/29) and recurrent miscarriage (18.0%; 9/29). Only 4.5% would seek consultation for preconception care due to both diabetes and as a routine care prior to conception.

Table 6: Reason for Seeking Preconception Care (Multiple Responses)

ITEMS	Frequency (n=29)	Percentage
Routine	1	2.0
Hypertension	10	20.0
Diabetes	2	4.0
Previous Caesarean section	16	32.0
Recurrent miscarriage	9	18.0
Bad outcome of previous pregnancy	12	24.0
Total	50	100.0

Table 7 demonstrates preconception care received by respondents. The most common preconception care received was folic acid supplementation (16.0%), followed by both blood pressure check and counselling on how to prevent previous pregnancy complication (10.4%). Only 4.7% had control of hypertension and diabetes as preconception care. The least likely preconception care received was immunization (1.4%).

Table 7: Intervention Received (Multiple Responses)

ITEMS	Frequency (n=29)	Percentage
Blood pressure check	29	13.7
Blood sugar check	29	13.7
Treatment of hypertension/diabetes	10	4.7
Cessation of alcohol/smoking	10	4.7
Optimizing weight	18	8.5
Folic acid	34	16.0
Screening for STI	6	2.8
Screening for HIV	9	4.2
Healthy nutrition	19	9.0
Avoid environmental toxin	9	4.2
Immunization	3	1.4

Family planning	14	6.6
Counselling on how to prevent previous pregnancy complication	22	10.4
Total	212	100.0%

Table 8 shows the reason for not utilization of preconception care. The commonest reason for not receiving preconception care was that respondents were not knowledgeable of the importance of preconception care (73.2%), this was followed by both those who were not aware of preconception care (57.7%). Twenty-two point nine percent did not receive the care because their doctors never discussed it with them. Other reasons given by respondents for not accessing preconception care were unplanned pregnancy (2.9%), it is of no need (8.4%), it is for the rich (5.5%) and no approval by the husband (2.6%).

Table 8: Reasons for not Utilizing Preconception Care (n = 310)

ITEMS	YES N (%)	NO N (%)
Not aware of preconception care	179 (57.7)	131 (42.3)
No knowledge of its importance	227 (73.2)	83 (26.8)
Pregnancy was not planned	9 (2.9)	301 (97.1)
It is of no need	26 (8.4)	284 (91.6)
It is only for people who have problem	28 (9.0)	282 (91.0)
It is for the rich people	17 (5.5)	293 (94.5)
No money	3 (1.0)	307 (99.0)
Lack of privacy	1 (0.3)	309 (99.7)
No hospital in my locality	0 (0.0)	310 (100.0)
Unfriendly health workers attitude	2 (0.6)	308 (99.4)
My doctor never discusses it with me	71 (22.9)	239 (77.1)
My husband did not approve it	8 (2.6)	302 (97.4)
No time	20 (6.5)	290 (93.5)

Table 9 shows the effect of demographic characteristic on the level of knowledge of preconception care. There was significant relationship between increasing level of education and occupation of participants. The higher the level of education, the more likelihood of having knowledge of preconception care.

Table 9: Factors Associated with Knowledge of Preconception care (n=154)

Characteristics	Knowledge of PCC, N (%)		$\chi 2$	P-Value
	Good Knowledge	Poor Knowledge		
Age Group				
15-19	3 (50.0)	3 (50.0)	4.046	0.257
20-29	9 (17.3)	43 (82.7)		
30-39	17 (26.2)	48 (73.8)		
40-49	6 (19.4)	25 (80.6)		
Marital status				
Single	6 (31.6)	13 (68.4)	0.967	0.325
Married	29 (21.5)	106 (78.5)		
Parity				
0	4 (40.0)	6 (60.0)	6.940	0.074
1	9 (29.0)	22 (71.0)		
2-4	14 (15.6)	76 (84.4)		
≥5	8 (34.8)	15 (65.2)		
Tribe				
Igbo	33 (23.1)	110 (76.9)	0.970F	0.606
Hausa	2 (28.6)	5 (71.4)		
Yoruba	0 (0.0)	4 (100.0)		
Religion				
Islam	1 (25.0)	3 (75.0)	0.674F	1.000
Christianity	34 (22.8)	115 (77.2)		
African Traditional Religion	0 (0.0)	1 (100.0)		
Level of Education				
None	1 (50.0)	1 (50.0)	9.280F	0.044*
Primary	3 (15.0)	17 (85.0)		
Junior Secondary	2 (10.0)	18 (90.0)		
Senior Secondary	9 (16.4)	46 (83.6)		
Tertiary	20 (35.1)	37 (64.9)		
Occupation				
Retailer	22 (19.5)	91 (80.5)	7.013F	0.044*
Wholesaler	12 (34.3)	23 (65.7)		
Artisan	0 (0.0)	5 (100.0)		
Sales girl	1 (100.0)	0 (0.0)		
Area of Residence				
Urban	34 (23.6)	110 (76.4)	0.986	0.321
Rural	1 (10.0)	9 (90.0)		

*Significant [F]Fisher's Exact test used

Table 10 shows the effect of demographic characteristic on utilization of preconception care. Significant relationship exist between utilization of preconception care and age, increasing level of education and occupation of participants. Increasing level of education is associated with utilization of preconception care.

Table 10: Factors Associated with Utilization of Preconception care (n = 339)

Characteristics	Utilization of PCC		$\chi 2$	P-Value
	Yes (%)	No (%)		
Age Group				
15-19	0 (0.0)	18 (100.0)	11.609	0.009*
20-29	11 (6.5)	157 (93.5)		
30-39	15 (16.3)	74 (83.1)		
40-49	3 (4.7)	61 (95.3)		
Marital status				
Single	3 (13.6)	19 (86.4)	1.146F	0.504
Married	26 (8.4)	283 (91.6)		
Divorced	0 (0.0)	8 (100.0)		
Parity				
1	9 (14.1)	55 (85.9)	3.577	0.167
2-4	16 (6.8)	220 (93.2)		
≥5	4 (10.3)	35 (89.7)		
Tribe				
Igbo	26 (7.9)	303 (92.1)	6.205F	0.056
Hausa	2 (28.6)	5 (71.4)		
Yoruba	1 (33.3)	2 (66.7)		
Religion				
Islam	0 (0.0)	4 (100.0)	0.379F	1.000
Christianity	29 (8.7)	306 (91.3)		
Level of Education				
None	0 (0.0)	4 (100.0)	14.946F	0.003*
Primary	1 (2.3)	42 (97.7)		
Junior Secondary	2 (2.7)	71 (97.3)		
Senior Secondary	10 (7.4)	125 (92.6)		
Tertiary	16 (19.0)	68 (81.0)		
Occupation				
Retailer	18 (6.7)	250 (93.3)	6.526F	0.028*
Wholesaler	10 (17.9)	46 (82.1)		
Artisan	1 (6.7)	14 (93.3)		
Sales girl				
Area of Residence				
Urban	29 (9.3)	283 (90.7)	2.744	0.098
Rural	0 (0.0)	27 (100.0)		

*Significant [F]Fisher's Exact test used

Discussion

This study revealed a low level of preconception care (PCC) utilization (8.6%) among market women in Abakaliki, comparable to prior local findings but lower than results from other regions in Nigeria, Ghana, and Ethiopia. Similar studies among better-educated antenatal clinic attendees showed slightly higher utilization

rates, such as 10.3% in Abakaliki and 15% in Ghana. In Kenya, utilization was notably higher (25.8%), likely due to participants' higher educational attainment and professional backgrounds [16]. The aim of PCC is to prepare women for healthy pregnancies, ensuring favorable maternal and fetal outcomes. However, poor utilization highlights potential risks of adverse maternal outcomes in Abakaliki [17].

Awareness of PCC was 37.4%, influenced by factors like age, parity, marital status, education, and occupation. This level of awareness aligns with other local studies but remains low compared to 90% in China, where government promotion significantly boosts awareness [18]. Knowledge of PCC was similarly low, with only 22.7% demonstrating good knowledge. Commonly identified PCC components included folic acid supplementation, family planning, and prevention of unwanted pregnancy, contrasting with findings in antenatal settings where HIV screening and smoking cessation were prioritized.

Barriers to PCC uptake included lack of knowledge (73.2%), awareness (57.7%), and unplanned pregnancies. Addressing these barriers through targeted education, community engagement, and healthcare provider involvement could improve awareness and utilization, thereby enhancing maternal and perinatal outcomes [19].

Conclusion

There is low level of awareness, knowledge and utilization of preconception services among market women of Abakaliki metropolis. Although the awareness is low, there is a disconnection between level of awareness, level of knowledge and utilization of preconception care among these market women. This speaks volume of the large amount of work to be done through community education, women empowerment, and integration of preconception care into school curriculum and strengthening and improving available health facilities to be able to deliver preconception care. This will ensure that all the benefit inherent in the utilization of preconception care especially in the prevention of maternal mortality/morbidity is harnessed.

Recommendation

The findings of this study is a valuable indicator of the need for government to formulate health policies and programme design targeted at intensifying enlightenment, health education, as well as promote the establishment and integration of functional multidisciplinary PCC clinics into routine obstetrics and gynaecology services.

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Competing interests

The authors declare that they do not have any conflicts of interest.

Ethics Approval and Consent to Participate

Ethical clearance for this study was obtained from the Research and Ethics Committee of Alex Ekwueme Federal University Teaching Hospital and informed consent was obtained and confidentiality ensured (AE-FUTHA/REC/VOL.3/2023/212).

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