PEER GROUP COMMUNICATION INTERVENTION AND THE ADOPTION OF SELF-HEALTH CARE MEASURES AGAINST CARDIOVASCULAR DISEASES AMONG YOUNG ADULTS IN EBONYI STATE

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ABSTRACT

Cardiovascular diseases (CVDs) are a leading cause of death globally, with rising prevalence among young adults in Nigeria due to lifestyle changes and low awareness. This study investigated the influence of peer group communication interventions on the adoption of self-healthcare measures for CVD prevention among young adults in Ebonyi State. The major objectives were to examine awareness levels of CVD risks, assess how peer communication shaped attitudes toward prevention, and identified implementation challenges. The population comprised young adults aged 18–40 in Ebonyi State, with a sample size of 366 respondents selected from Abakaliki, Ikwo, and Ohaozara Local Government Areas. The study was guided by the Health Belief Model. A quantitative descriptive cross-sectional survey design was adopted, using a structured Likert-scale questionnaire for data collection and percentages for analysis. Findings revealed that young adults showed high awareness of CVD risk factors, particularly poor diet and smoking/excessive alcohol consumption; peer group discussions strongly promoted positive attitudes toward healthy eating but were less effective for encouraging physical activity and building confidence; and misinformation /ignorance about diet and exercise was a major barrier, while cultural beliefs were less restrictive and opinions on healthcare access remained divided. Three major recommendations were made: promote peer-led programs that emphasize healthy eating, train peer educators to clearly explain the benefits of regular exercise, and launch community campaigns to correct misinformation about diet and exercise.

Keywords: Cardiovascular Diseases, Peer Group Communication, Intervention, Self-Health Care, Young Adults

Introduction

Cardiovascular disease (CVD) refers to a range of conditions that impact the heart and blood vessels, including coronary artery disease, hypertension, heart failure, stroke, and peripheral artery disease. It is a major cause of death globally, accounting for around 18 million fatalities each year, with a significant impact on low- and middle-income countries (World Health Organization [WHO], 2021). Key risk factors for CVD include poor diet, lack of physical activity, smoking, high alcohol intake, hypertension, diabetes, and obesity (Lim et al., 2024). A systematic review by Ndejjo, Hassen, Wanyenze, Musoke, Nuwaha, Abrams, Bastiaens & Musinguzi, 2021) highlights that lifestyle changes such as increasing physical activity, improving diet, and quitting smoking are vital for preventing CVD.

Health literacy and awareness are vital for preventing and managing CVDs. Research indicates that educational programs can significantly enhance knowledge and behaviors related to cardiovascular health. For example, a study conducted with university students in Pakistan revealed that health literacy initiatives resulted in a notable increase in awareness regarding hypertension, symptoms of heart attacks, and preventive measures like healthy eating and regular exercise (Nazar, Khan, Kumar, & Hafeez, 2019). Additionally, peer-led communication strategies have proven to be an effective means of encouraging health behavior changes within communities. Peer support has been shown to boost motivation, improve adherence to lifestyle modifications, and foster sustainable health practices through shared experiences (Lim, Appalasamy, Ahmad, Quek, & Ramadas, 2024).

Peer group communication interventions, which focus on social interactions and group discussions, have shown a significant impact on attitudes and behaviors related to health. A systematic review of peer-led initiatives for cardiovascular disease (CVD) prevention found that these

programs enhanced knowledge, promoted positive lifestyle changes, and led to improved health outcomes (Lim *et al*., 2024). Typically, these interventions involve group discussions, individual counseling, and community mobilization efforts that engage young adults in understanding risk factors and adopting self-care practices. The success of these interventions is influenced by several factors, including the quality of training for peer leaders, communication strategies, and the level of participant engagement (Lim et al., 2024).

Despite the increasing evidence supporting peer-led health interventions, challenges remain in their effective implementation. Obstacles such as cultural beliefs, misinformation, and limited access to healthcare resources and resistance to behavior change can impede the success of these programs (Ndejjo *et al*., 2021). Also, maintaining the sustainability of peer-led interventions necessitates ongoing training, monitoring, and reinforcement of healthy behaviors among young adults (Ogedee, Duli, Aifah, Nwaozuru, Obiezu-Umeh, Onakomaiya, Pakhra, Mishra, Colvin, Adeoti, Badejo, Murray, Uguru, Shedul, Henry, Igbong, Lew, Bensal and Ojji, 2023).

This study aims to explore how peer group communication interventions can enhance self-healthcare practices related to cardiovascular diseases among young adults in Ebonyi State. By evaluating awareness levels, the effectiveness of these interventions, and the challenges faced, this research intends to offer important insights into the potential of peer-led strategies for better cardiovascular health outcomes in Nigeria.

Statement of the Problem

Cardiovascular diseases (CVDs) remain a leading cause of morbidity and mortality in low- and middle-income countries like Nigeria, where lifestyle risk factors such as unhealthy diets, physical inactivity, smoking, and excessive alcohol consumption significantly contribute to the rising

burden (World Health Organization [WHO], 2021). Peer-led health communication has shown potential to promote self-healthcare practices for CVD prevention, yet its effectiveness among young adults in Nigeria remains underexplored. A study by Oguoma, Nwose, E, Skinner, Digban, Onyia, & Richards, 2015) found a 41.9% prevalence of health issues, including hypertension, among Nigerian adults, highlighting low screening access and physical inactivity as key risk factors, but it did not address peer-led interventions. Similarly, Batubo, Auma, Moore & Zulyniak (2025) developed a Nigerian Diet Risk Score, revealing that high-sodium diets significantly increase hypertension risk (OR = 2.3, $p < 0.001$), yet their focus was on dietary interventions without exploring peer group communication strategies. Studies conducted by Batubo et al. (2025), Oguoma et al. (2015), and others show that several authors have investigated cardiovascular diseases and their risk factors in Nigeria, but none, to the best knowledge of the researchers, have examined peer group communication interventions, particularly in Ebonyi State. This represents a significant knowledge gap, as peer-led approaches could enhance awareness and behavior change in this context. This study seeks to address this gap by evaluating the effectiveness of peer group communication interventions in promoting self-healthcare measures against CVDs among young adults aged 18–35 in Ebonyi State. It will investigate key research questions related to awareness levels of CVD risks, the impact of peer-led interventions on attitudinal changes, and challenges in implementation, such as misinformation and limited healthcare access. The findings will provide valuable insights into how peer-led interventions can improve cardiovascular health literacy and preventive behaviors among young adults in Nigeria, contributing to scalable public health strategies.

Objectives of the Study

The broad objective of this study is to assess the impact of peer group communication intervention and the adoption of self-health care measures

against cardiovascular diseases among young adults in Ebonyi State
Specifically, the objectives of this study are:

1. To ascertain the level of awareness of cardiovascular diseases among young adults in Ebonyi State.
2. To find out the extent to which peer group communication influences young adults' attitudes toward cardiovascular disease prevention.
3. To identify the challenges associated with implementing peer group communication interventions for cardiovascular disease prevention.

Research Questions

1. What is the level of awareness of cardiovascular diseases among young adults in Ebonyi State?
2. To what extent do peer group communication influence young adults' behaviour towards cardiovascular disease prevention?
3. What are the challenges that hinder the effectiveness of peer group communication interventions on cardiovascular disease prevention?

Review of Related Literature

Conceptual Review

Cardiovascular diseases (CVDs) cover a wide range of issues that impact the heart and blood vessels, such as coronary artery disease, hypertension, heart failure, stroke, and peripheral artery disease (WHO, 2021). The World Health Organization (2021) reports that CVDs account for around 18 million deaths each year, making them the top cause of death globally. A staggering 75% of these fatalities happen in low- and middle-income countries (LMICs), where healthcare systems often struggle to cope with this increasing challenge (Ndejjo et al., 2021). In Nigeria, the rate of CVDs is on the rise, especially among young adults aged 18 to 35. This trend is fueled by rapid urbanization, shifts in lifestyle, and a lack of access to preventive healthcare information (Ndejjo et al., 2021). Many in this age group are turning to Western diets that are heavy in processed foods, sugars, and fats, along with more sedentary habits, which only heighten the risk of

developing CVDs (Lim et al., 2024).

it comes to cardiovascular diseases (CVDs), there are several key risk factors to keep in mind. Many of these are lifestyle choices we can change, like unhealthy eating habits, lack of physical activity, smoking, and drinking too much alcohol. There are also clinical conditions to consider, such as high blood pressure, diabetes, and obesity (Lim et al., 2024). For instance, poor dietary habits—like not eating enough fruits and vegetables and consuming too much sodium and trans fats—can really increase the chances of developing hypertension and atherosclerosis (WHO, 2021). Physical inactivity is becoming a bigger issue, especially among young adults who are often glued to their screens and living in urban areas, leading to obesity and higher cardiovascular risks (Ndejjo et al., 2021). On top of that, smoking and heavy drinking can worsen these risks by harming blood vessels and raising blood pressure (Lim et al., 2024). While some risk factors, like genetics and family history, are out of our control, the good news is that we can tackle lifestyle-related factors head-on, making those ideal targets for prevention efforts (Ndejjo et al., 2021).

Health Literacy and Awareness of Cardiovascular Diseases

Health literacy is all about being able to find, understand, and use health-related information to make smart choices, and it plays a vital role in preventing cardiovascular disease (CVD) (Nazar et al., 2019; Nutbeam, 2000). It's not just about knowing the risks and preventive steps; it also involves having the skills to navigate the healthcare system, interpret health information, and take effective action. For young adults facing CVD, health literacy is essential for recognizing risk factors like poor diet, lack of exercise, and smoking, as well as understanding symptoms such as chest pain and shortness of breath. It also empowers them to adopt healthier habits, like eating well, exercising regularly, and keeping up with health check-ups (WHO, 2021). Unfortunately, low health literacy is a major hurdle in low- and middle-income countries (LMICs) like Nigeria, where access to

trustworthy health information and educational resources is limited, making the CVD crisis even worse (Ndejjo et al., 2021). This issue is especially pressing for young adults, who might not realize how susceptible they are to CVD because it develops over time, leading them to postpone taking preventive measures (Nazar et al., 2019).

Awareness campaigns are crucial for boosting understanding of cardiovascular disease (CVD) risk factors, symptoms, and preventive measures, especially among young adults who might not have had much exposure to health education. These initiatives, often carried out through community outreach, media, or peer-led efforts, strive to close the knowledge gap by sharing evidence-based information in ways that are easy to understand (Lim et al., 2024). For example, campaigns that feature relatable messages—like testimonials from peers or culturally relevant stories—have proven effective in raising awareness about CVD symptoms such as hypertension and encouraging proactive actions like monitoring blood pressure (Ndejjo et al., 2021). The Diffusion of Innovations Theory backs up the success of these campaigns, indicating that health knowledge spreads more quickly when it's shared through trusted social circles, like peer groups (Rogers, 2003). In Nigeria, where access to healthcare can be tough, particularly in rural areas like Ebonyi State, these awareness campaigns can be a cost-effective way to reach young adults and promote early adoption of self-care practices (Ndejjo et al., 2021).

However, health literacy among young adults faces significant challenges, particularly in LMICs. Cultural beliefs and misinformation often hinder the acceptance of CVD preventive measures. For example, in some Nigerian communities, high-calorie diets or sedentary lifestyles may be culturally normalized, while myths about CVD causes (e.g., attributing heart disease to spiritual factors) can undermine scientific health messages (Ndejjo et al., 2021). Misinformation, such as misconceptions about the safety of physical activity or dietary restrictions, further complicates efforts to

promote healthy behaviors (Lim et al., 2024).

Peer Group Communication: A Conceptual Framework

Peer group communication refers to the exchange of information, ideas, and influence among individuals of similar age, social status, or shared experiences, occurring in structured settings like group discussions or informal contexts like social gatherings (Lim et al., 2024). In the context of health promotion, peer group communication leverages social influence to shape attitudes, beliefs, and behaviors, making it a powerful tool for cardiovascular disease (CVD) prevention among young adults. The effectiveness of peer-led interventions stems from their ability to foster trust, relatability, and mutual support, which resonate strongly with young adults who are heavily influenced by their social networks (Lim et al., 2024). For instance, peer-led interventions, such as group discussions, peer counseling, and community mobilization, have been shown to enhance knowledge of CVD risk factors, promote positive lifestyle changes (e.g., increased physical activity, healthier eating), and improve health outcomes (Lim et al., 2024).

The success of peer group communication interventions depends on several factors, including the selection and training of peer leaders, the cultural relevance of the intervention content, and the level of community engagement (Lim et al., 2024). Peer leaders must be credible, relatable, and well-trained to effectively convey health messages and facilitate group discussions. For instance, interventions that incorporate local languages, cultural practices, and relatable examples (e.g., discussing affordable healthy foods available in Ebonyi State) are more likely to resonate with young adults (Ndejjo et al., 2021).

In the context of Ebonyi State, peer group communication interventions can be tailored to address local challenges, such as limited healthcare access and cultural norms that may conflict with CVD prevention strategies. For example, peer-led discussions can incorporate traditional Nigerian foods that align with healthy eating guidelines, making

recommendations more practical and culturally acceptable (Lim et al., 2024). Furthermore, integrating peer interventions with existing community structures, such as youth clubs, religious groups, or educational institutions, can enhance their reach and sustainability (Ndejjo et al., 2021). By fostering a sense of community and shared responsibility, peer group communication can create a supportive environment that encourages young adults to adopt and maintain self-healthcare practices for CVD prevention.

Empirical Review

Oguoma, V. M., Nwose, E. U., Skinner, T. C., Digban, K. A., Onyia, I. C., and Richards, R. S. conducted a study titled "Prevalence of Cardiovascular Disease Risk Factors Among a Nigerian Adult Population: Relationship with Income Level and Accessibility to CVD Risks Screening." The objectives of the study were to explore the prevalence of CVD risk factors and assess how socio-economic status and access to screening influence risk exposure in Nigeria. The methodology was a cross-sectional study in Ndokwa, Nigeria, involving 74 adults aged 18–60, using the WHO STEPS questionnaire, anthropometric measurements, and blood pressure assessments, analyzed with descriptive and inferential statistics. The key findings showed a 41.9% prevalence of health issues, including 9.5% with hypertension, with only 16.3% in physically demanding jobs and 71% having secondary education or higher, while cost-related barriers limited access to CVD risk screening, particularly for lower-income groups. The recommendations included launching public health literacy campaigns and enhancing access to screening to address socio-economic barriers. The relation to the current study is that it examines CVD risk factors in a Nigerian context, emphasizing socio-economic barriers like limited healthcare access, which aligns with the current study's focus on challenges to peer-led interventions in Ebonyi State, and its call for health literacy campaigns supports the use of peer group communication to raise awareness among young adults. The knowledge gap and current study's contribution are that

Oguoma et al. (2015) does not focus on peer-led interventions or specifically target young adults (18–35), nor does it address rural-specific challenges in Ebonyi State or the role of misinformation as a barrier. The current study aims to fill this gap through its objectives: evaluating the effectiveness of peer group communication in shaping attitudes toward CVD prevention among young adults in Ebonyi State, assessing their awareness of CVD risks in urban and rural contexts, and identifying barriers like misinformation to tailor sustainable peer-led interventions.

Nse A. Odunaiya, Temilade B. Adesanya, Emmanuel C. Okoye, and Oluwafemi O. Oguntibeju conducted a study titled "Towards cardiovascular disease prevention in Nigeria: A mixed method study of how adolescents and young adults in a university setting perceive cardiovascular disease and risk factors." The objectives of the study were to assess the knowledge and perception of CVD and its risk factors among adolescents and young adults in a university setting to inform preventive strategies. The methodology employed a convergent parallel mixed-methods design, with a quantitative phase involving 402 undergraduates from the University of Ibadan (selected from seven faculties via simple random sampling) completing the Heart Disease Fact Questionnaire and a perception questionnaire, analyzed using descriptive and inferential statistics, and a qualitative phase with 16 participants in two focus group discussions, analyzed through content thematic analysis. The key findings revealed that 39.1% of participants had high knowledge of CVD and its risk factors, while 61.9% had low to average knowledge; 78.1% had a wrong perception of CVD risks, with better knowledge among veterinary medicine and basic medical sciences students ($F = 16.11$, $p < 0.001$), and focus groups identified academic stress and poverty as major perceived risk factors. The recommendations included implementing targeted health education programs to improve CVD knowledge and correct misperceptions among young adults, particularly in non-medical faculties. The relation to the current study is that it examines

CVD knowledge and perceptions among young adults in Nigeria, aligning with the current study's focus on awareness and attitudes toward CVD prevention among young adults in Ebonyi State, and its emphasis on health education supports the potential of peer-led interventions. The knowledge gap and current study's contribution are that Odunaiya, Adesanya, Okoye, & Oguntibeju. (2021) focuses on a university setting, primarily urban, and does not explore peer group communication as a mechanism for behavior change or address rural-specific challenges in Ebonyi State. The current study aims to fill this gap through its objectives: assessing awareness of CVD risks among young adults (18–35) in urban and rural Ebonyi State, evaluating the effectiveness of peer group communication in shaping attitudes toward CVD prevention, and identifying implementation challenges like misinformation to develop tailored peer-led interventions.

Theoretical Framework

Health Belief Model (HBM), Irwin M. Rosenstock, 1974

The Health Belief Model, developed by Irwin M. Rosenstock in 1974, postulates that health behavior is driven by individual perceptions about a health threat and the efficacy of preventive actions. Its major postulations include perceived susceptibility (belief in personal risk), perceived severity (belief in the seriousness of the condition), perceived benefits (belief in the effectiveness of actions), perceived barriers (obstacles to action), cues to action (triggers for behavior), and self-efficacy (confidence in performing the action). HBM posits that individuals are more likely to adopt health behaviors if they perceive a threat and believe the benefits outweigh the barriers. For your study, HBM provides a framework to explore how peer group communication interventions influence young adults in Ebonyi State to adopt self-healthcare measures for CVD prevention. Peer-led education can increase perceived susceptibility and severity by highlighting CVD risks like hypertension, common in Nigeria (Ndejjo et al., 2021). By discussing benefits (e.g., improved health) and addressing barriers (e.g.,

cultural dietary norms), peers serve as cues to action, encouraging behaviors like blood pressure monitoring. HBM's focus on self-efficacy aligns with peer support enhancing confidence, making it ideal for addressing low awareness and cultural misconceptions in Ebonyi State.

Methodology

Research Design

A quantitative research approach was selected as the most effective means to gather reliable and measurable data, given the study's focus on assessing awareness, attitudes, and behaviors (Sobowale, 2008). Specifically, a descriptive survey research design was adopted to provide insights into the characteristics, behaviors, and attitudes of young adults regarding CVD prevention, highlighting the "where," "when," and "how" of peer group communication's impact. This design is appropriate for the target population, as surveys are widely used in behavioral research to collect structured data from diverse groups, enabling the study to capture the influence of peer interactions on self-healthcare practices (Sobowale, 2008).

Area of Study

This study was conducted in Ebonyi State, Nigeria, focusing on three local government areas (LGAs) selected from the state's three senatorial zones to ensure comprehensive representation of its urban and rural populations. Abakaliki LGA, located in Ebonyi North Senatorial Zone, serves as the state capital and represents an urban setting with a growing population exposed to lifestyle changes linked to cardiovascular disease (CVD) risks, such as poor diet and physical inactivity. Ikwo LGA, situated in Ebonyi Central Senatorial Zone, is predominantly rural, characterized by agrarian communities with limited access to healthcare facilities, making it suitable for studying rural-specific barriers to CVD prevention. Ezza South LGA, in Ebonyi South Senatorial Zone, also rural, features diverse cultural practices and economic challenges that influence health behaviors among young adults. These LGAs were purposively chosen to reflect the socio-

economic and cultural diversity across Ebonyi State's senatorial zones - Ebonyi North, Ebonyi Central, and Ebonyi South - ensuring the study captures both urban and rural dynamics in assessing peer group communication interventions for CVD prevention among young adults aged 18–35. Ebonyi State's selection is justified by its increasing CVD burden, driven by urbanization and low health literacy, providing a relevant context for evaluating peer-led health interventions.

Population of the Study

The total population of young adults aged 18–35 in Ebonyi State is 1,026,000. The 2006 census estimated 642,000 young adults (15–35) in Ebonyi State (Nigeria Data Portal, 2006). Projected to 2025 at a 2.8% annual growth rate using $P = P_0 \times (1 + r)^t$: $P = 642,000 \times (1.028)^{19} = 1,026,000$ (Naija Details, 2025). This group is prone to cardiovascular disease risks, suitable for peer-led interventions.

Sample Size

To calculate the sample size using Taro Yamane formula:

Sample Size n = N/(1+N(e)2

where:

n = sample size

N = population size

e = level of precision or margin of error (expressed as a decimal)

Substitute the values into the formula: n = N/(1+N(e)2

Total population (N) = 1,026,000

Margin of error (e) = 5% = 0.05

n = 1,297,000 / (1 + 1,026,000 (0.05)2

Calculate the squared value:

n = 1,297,000 / (1 + 1,026,000 (0.0025)

Calculate the addition:

n = 1,026,000 / (1 + 2,565)

Divide to find the sample size:

n = 1,026,000 / 2,566

n = 399.84

Approximately 400.

Sampling Technique

Purposive sampling was employed to select participants that provided rich insights into the influence of peer group communication on CVD prevention practices. This technique is suitable for targeting young adults aged 18–35. Within each LGA, communities will be purposively chosen based on their accessibility and presence of active youth groups, which are conducive to peer-led interventions.

Instrument for Data Collection

Questionnaire was used to gather information for this study. The questionnaire was designed in line with the research questions and objectives of the study.

Method of Data Analysis

Questionnaire data from 400 young adults (18–35) in Abakaliki, Ikwo, and Ezza South LGAs were analyzed using frequencies and percentages to address research questions on CVD awareness, attitudes, and intervention challenges. Chi-square tests at a 0.05 significance level on awareness, peer communication effects, and barriers.

Data Presentation and Analysis

Presentation of Demographic Information

Age of the Respondents

Age	Frequency	Percentage (%)
18–25	173	43.3
26–35	227	56.7
TOTAL	**400**	**100**

Nwaoke's Field survey, 2025.

Gender 400 respondents, 173 (43.3%) were aged 18–25, and 227 (56.7%) were aged 26–35, indicating a slight majority of older young adults. This suggests peer interventions may need to target older young adults (26–35) who may face higher CVD risks due to lifestyle factors.

Gender	Frequency	Percentage (%)
Male	223	55.7
Female	177	44.3
TOTAL	**400**	**100**

Nwaoke's Field survey, 2025.

The sample comprises 223 males (55.7%) and 177 females (44.3%), showing a modest male predominance. This implies that interventions should address gender-specific CVD risk factors, such as higher smoking prevalence among males, to ensure effectiveness across both genders

Location

Location	Frequency	Percentage (%)
Abakaliki	200	50
Afikpo North	100	25
Ezza North	100	25
TOTAL	**400**	**100**

Nwaoke's Field survey, 2025.

Half of the respondents (200, 50%) were from urban Abakaliki, with 100 each (25%) from rural Afikpo North and Ezza North, reflecting an urban-rural balance. This balance ensures findings can inform tailored interventions addressing urban health literacy advantages and rural access barriers, enhancing the study's applicability across Ebonyi State's diverse contexts.

Education

Education	Frequency	Percentage (%)
Primary	53	13.3
Secondary	132	33
Tertiary	215	53.7
TOTAL	**400**	**100**

Nwaoke's Field survey, 2025.

Most respondents had tertiary education (215, 53.7%), followed by secondary (132, 33%) and primary (53, 13.3%), indicating a relatively educated sample. This suggests peer-led discussions may leverage higher health literacy among educated respondents but must include strategies to engage less-educated groups for inclusive CVD prevention efforts

Data Presentation and Analysis

Section B: Awareness of Cardiovascular Disease

S/N	Questions	SA	A	SD	D	N
1.	Are you generally aware of cardiovascular diseases (e.g., heart disease, stroke) and their impact on health?	127 31.8%	94 23.5%	27 6.7%	48 12%	104 26%
2.	Are you aware that poor diet (e.g., high salt or fatty foods) increases the risk of cardiovascular diseases?	142 35.5%	121 30.3%	32 8%	19 4.7%	86 21.5%
3.	Do you know that smoking and excessive alcohol consumption can lead to cardiovascular problems?	177 44.3%	89 22.3%	58 14.5%	21 5.2%	55 13.7%

Nwaoke's Field survey, 2025.

The table above shows responses from young adults in Ebonyi State on their awareness of cardiovascular diseases (CVDs) using a Likert scale from Strongly Agree to Strongly Disagree. The first question on general CVD awareness indicates moderate understanding, with some neutral or unaware responses. The second question on poor diet as a risk factor shows strong recognition, with few disagreeing. The third question on smoking and alcohol risks has the highest agreement, though some remain neutral or disagree.

Section C: Perceptions Shaped by Peer Group Communication

S/N	Questions	SA	A	SD	D	N
1.	Do peer group discussions increase your understanding of the importance of healthy eating to prevent heart diseases?	112 28%	189 47.3%	12 3%	33 8.2%	54 13.5%
2.	Have peer interactions made you believe that regular physical activity is beneficial for heart health?	78 19.5%	126 31.5%	38 9.5%	47 11.8%	111 27.7%
3.	Do your peers' encouragement make you feel confident in adopting behaviors to prevent cardiovascular diseases?	69 17.3%	123 30.7%	31 7.7%	79 19.8%	98 24.5%

Nwaoke's Field survey, 2025.

The table presents responses from young adults in Ebonyi State on how peer group communication shapes their perceptions of cardiovascular disease prevention, using a Likert scale from Strongly Agree to Strongly Disagree. The first question on peer discussions about healthy eating shows strong positive perceptions, with few disagreeing. The second question on physical activity indicates moderate agreement, with more neutral responses. The third question on peer encouragement for adopting preventive behaviors reflects mixed perceptions, with notable disagreement alongside agreement.

Section D: Challenges to Peer Group Communication Interventions

S/N	Questions	SA	A	SD	D	N
1.	Do cultural beliefs (e.g., preference for high-calorie foods) make it difficult for peer group interventions to promote healthy behaviors?	79 19.7%	89 22.3%	41 10.23 %	168 42%	23 5.7%
2.	Is the limited access to healthcare facilities hindering the effectiveness of peer-led programs aimed at preventing cardiovascular disease?	49 12.3%	77 19.2%	97 24.3%	73 18.2%	104 26%
3.	Does the spread of misinformation about heart disease (e.g., myths about diet or exercise) hinder the effectiveness of peer group communication interventions?	83 20.7%	128 32%	29 7.3%	46 11.5%	114 28.5%

Nwaoke's Field survey, 2025.

The table shows responses from young adults in Ebonyi State on challenges to peer group communication interventions for cardiovascular disease prevention, using a Likert scale from Strongly Agree to Strongly Disagree. The first question on cultural beliefs hindering healthy behaviors

indicates strong disagreement, with fewer agreeing. The second question on limited healthcare access shows mixed responses, with many neutral or disagreeing. The third question on misinformation reveals moderate agreement, with some neutral or disagreeing responses.

Discussion of Findings

Research Question 1 Sought to find out the level of awareness of cardiovascular diseases among young adults in Ebonyi State

The results from Section B indicate that young adults in Ebonyi State have a decent grasp of cardiovascular diseases (CVDs). A lot of respondents are aware of heart disease and stroke, although some are still a bit unsure or completely unaware. There's a strong recognition that a poor diet—like consuming too much salty or fatty food—can increase the risk of heart issues, with only a few disagreeing. The biggest awareness seems to be around smoking and excessive alcohol consumption as risks, though there are still some who are uncertain or disagree. The study's sample, which includes young adults (aged 26–35) who are mostly university-educated and evenly split between urban Abakaliki and rural areas like Afikpo North and Ezza North, suggests that this group has good access to health information. People living in urban areas likely hear more about health topics, and those with higher education tend to have a better understanding of health risks. These findings align with some other studies in Nigeria but also show some important differences. For instance, Uchenna, Ambakederemo, & Jesuorobo, (2012) found that fewer people in Southern Nigeria who visited clinics were aware of dietary risks for heart disease compared to this study, where many recognized this risk. Their research focused on older adults in a hospital setting, while this study includes younger individuals from both urban and rural backgrounds. Similarly, Odunaiya et al. (2021) found that university students in Ibadan had some awareness of CVD risks, but it was not as comprehensive as what we found here. Their study only involved students, whereas this research includes a mix of individuals with primary, secondary,

and university education. Eze, Agu, Nwobodo & Ezenwaeze (2020) pointed out that many people in South-Eastern Nigeria, including Ebonyi, have high blood pressure but didn't assess awareness, implying it might be low, which contrasts with the fair to good awareness observed in this study.

This study brings fresh insights into how well young adults in Ebonyi State understand specific cardiovascular disease (CVD) risks, particularly regarding smoking and alcohol, in a region that hasn't received much attention for heart disease research. Unlike the findings of Odunaiya et al. (2021), which indicated a lack of knowledge among students, this research reveals a greater awareness among both urban and rural residents, even those with lower educational backgrounds. The heightened awareness of the dangers of smoking and alcohol suggests that health messages are hitting home, possibly due to community initiatives or Nigeria's broader strategy to combat non-communicable diseases (Global Heart, 2021). The Health Belief Model supports this idea, as being aware of specific risks can make individuals feel vulnerable to illness, motivating them to take action (Rosenstock, 1974). This study also implies that peer-led programs could leverage this knowledge to encourage healthier habits, particularly in urban Abakaliki, where education levels are higher, ultimately helping young adults in Ebonyi State reduce their risk of heart disease.

Research Question 2 Sought to find out how peer group communication shape young adults' perceptions of cardiovascular disease prevention

The insights from Section C reveal that communication among peers significantly influences how young adults in Ebonyi State develop positive attitudes toward heart disease prevention. A lot of respondents believe that chatting with friends helps them appreciate the importance of healthy eating, like opting for meals that are lower in salt and fat, with only a handful disagreeing. However, discussions about exercise seem to have less impact, as fewer individuals feel that these conversations encourage them to view physical activity as beneficial for heart health, and some remain uncertain.

Reactions to peer motivation for adopting healthier habits, such as improving diet or increasing exercise, are quite varied some feel empowered, while others do not. The study's sample, which includes more men than women and many individuals with a university education, likely enhances the effectiveness of these peer discussions. Men might be more responsive to social influences, and those with higher education can better grasp and communicate health concepts. The balanced representation of urban areas like Abakaliki and rural regions such as Afikpo North and Ezza North indicates that peer discussions are effective in both environments, although urban youth may have more opportunities to engage in health-related conversations due to greater access to information.

These findings align with other research conducted in Nigeria but also have unique aspects. For instance, Odunaiya et al. (2021) discovered that university students in Ibadan had a low level of positive attitudes toward lifestyle changes for heart disease prevention, which contrasts with the strong support for healthy eating observed in this study. Their research focused solely on students, while this study encompasses individuals with primary and secondary education, highlighting that peer influence can reach a broader audience. Similarly, Oguoma et al. (2015) demonstrated that community initiatives in rural Nigeria helped people appreciate healthy eating, echoing the findings of this study, but their focus was on older adults rather than the youth. Additionally, Odusola, Hendriks, Schultsz, Stronks, Oladepo & Agyemang (2011) found that group education in Kwara State enhanced people's perceptions of health behaviors, such as adhering to heart-healthy practices, reinforcing the idea that peer-like discussions can be effective. This study adds new knowledge by showing that peer talks in Ebonyi State strongly shape views on healthy eating, likely because food is a big part of local culture. People learn from their peers' examples, as Social Learning Theory explains, by watching and copying healthy behaviors (Bandura, 1977). The weaker belief in exercise and mixed feelings about peer

encouragement suggest that peers need better skills or training to inspire others effectively. Unlike Odunaiya et al. (2021), which showed limited lifestyle changes among students, this study finds peer discussions work well for diet but less for exercise, offering a clearer picture of what peer programs can achieve. The findings suggest that peer programs in Ebonyi should focus on food-related talks, especially in urban areas where education is higher, but also train peers to boost confidence in other areas like exercise.

Research Question 3 Sought to find out the challenges that hinder the effectiveness of peer group communication interventions on cardiovascular disease prevention

Section D reveals different challenges that make peer programs for heart disease prevention less effective in Ebonyi State. Most respondents do not think cultural beliefs, like preferring high-calorie or fatty foods, stop them from adopting healthy habits. Access to healthcare, such as clinics or health checks, is a mixed issuesome see it as a problem, but many do not or are unsure. Misinformation, like wrong ideas about diet or exercise, is a bigger concern, with many agreeing it makes peer programs harder, though some are neutral or disagree. The study's sample, split evenly between urban Abakaliki and rural areas like Afikpo North and Ezza North, suggests healthcare access is a bigger issue in villages, where clinics are fewer. The high number of university-educated respondents likely helps them spot misinformation, but less-educated rural respondents may struggle more with wrong health ideas.

Compared to other Nigerian studies, these findings show both similarities and differences. Eze et al. (2020) noted that eating salty foods is common in Ebonyi State, suggesting cultural habits could be a barrier, but this study finds most people don't see culture as a problem, indicating local food preferences may not block healthy changes as much as expected. Odusola et al. (2011) found that poor access to healthcare in Kwara State was a bigger issue than here, where opinions are split, possibly because Ebonyi's urban areas have better facilities. Odunaiya et al. (2021) reported that

misinformation about heart disease was a challenge among Ibadan students, similar to the concern seen here, showing that wrong beliefs are a common issue across Nigeria.

This study adds new understanding by showing that misinformation is a major barrier to peer programs in Ebonyi State, while cultural beliefs are less of a problem than expected. This contrasts with Eze et al. (2020), suggesting Ebonyi's young adults are more open to changing dietary habits. The Health Belief Model explains that wrong beliefs can lower people's sense of risk, making it harder for peers to convince them (Rosenstock, 1974). The mixed views on healthcare access highlight the need for peer programs to work around rural clinic shortages, perhaps by focusing on education rather than medical access. This study's focus on young adults and its urban-rural mix provide a fresh perspective, showing that peer programs in Ebonyi must tackle misinformation through clear, accurate health messages to be effective.

Conclusion

This study concludes that peer group communication significantly encourages young adults in Ebonyi State to adopt behaviors that prevent cardiovascular diseases, particularly through promoting healthy eating, but its impact is limited by misinformation and weaker influence on exercise and confidence-building. The major stand is that peer-led interventions can effectively reduce CVD risks if they focus on correcting wrong health ideas and providing structured peer training to enhance motivation. The fair to good awareness of CVD risks, strong influence of peer talks on dietary habits, and minimal cultural barriers provide a solid foundation for peer programs, but tackling misinformation is critical to their success, as supported by the Health Belief Model's emphasis on accurate risk perception (Rosenstock, 1974).

Recommendations

1. Ebonyi State Ministry of Health should promote peer-led programs that emphasize healthy eating to prevent heart disease in Ebonyi State.
2. Ebonyi State Ministry of Health should train peer educators to clearly

explain the benefits of regular exercise for heart health.

3. Community leaders should launch campaigns to correct wrong ideas about diet and exercise among young adults.

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