



Examining the Impact of Moderate Physical Activity on the Prevention and Management of Non-Communicable Diseases among Adult Females in Ogba/Egbema/Ndoni Lga of Rivers State

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Abstract: This study investigated the effects of moderate physical activity on the prevention and management of non-communicable diseases (NCDs) among adult females in Ogba/Egbema/Ndoni Local Government Area (LGA) of Rivers State, Nigeria. The study explored the relationship between physical activity levels and the prevalence of NCDs such as hypertension, diabetes, obesity, and heart disease, as well as the barriers to engaging in regular physical activity. A cross-sectional survey design was adopted, using the International Physical Activity Questionnaire (IPAQ) and a structured questionnaire to collect data from 233 participants. The results revealed that a significant portion of the respondents engaged in moderate physical activity for fewer than the recommended 150 minutes per week. Additionally, 55% of the participants reported being diagnosed with at least one NCD, with hypertension and obesity being the most prevalent. Barriers to physical activity included lack of time, motivation, and facilities. The study also found that educational level and marital status were significant predictors of physical activity levels, with higher education correlating with better engagement in physical activity. Despite the challenges, 73% of participants expressed interest in learning more about physical activity programs. The study concludes that promoting physical activity through community-based programs, enhancing health education, and addressing the identified barriers could significantly improve the health outcomes of women in Ogba/Egbema/Ndoni LGA. These findings highlight the urgent need for public health interventions to reduce the burden of NCDs in this population through increased physical activity.

Keywords: physical activity, non-communicable diseases, adult females, Ogba/Egbema/Ndoni LGA, health promotion.

1. Introduction

Background Non-communicable diseases (NCDs) are a major public health issue worldwide, particularly in low- and middle-income countries. According to the World Health Organization (WHO), NCDs encompass diseases that are not passed from person to person, and generally manifest as a result of a combination of genetic, physiological, environmental, and behavioral factors. Non-communicable diseases (NCDs) such as cardiovascular disease, diabetes, and obesity are on the rise in Nigeria leading to morbidity and mortality among adults (Adeniyi et al., 2021). The ageing population and our changing lifestyles means that the burden of NCDs on societies, such as those in Ogba/Egbema/Ndoni Local Government Area (LGA) of Rivers State is overwhelming.

Cardiovascular diseases (CVDs) are one of the top global killers affecting most people that follow a sedentary life style, poor diet and smoking (Okonofua et al., 2023). High blood pressure which can cause CVD, is soaring dangerously in Nigeria. Another study in Port Harcourt found that almost 30 per cent of adults had hypertension,

creating a call for effective preventive measures (Duker et al., 2022). Regular exercise has also proven to have effects on blood pressure, lipid profiles and CVD risk generally (Adeleye et al., 2022), hence physical activity plays a crucial role in managing and preventing CVDs.

Diabetes also is major NCD among Nigerian populations occurring at 5.5% prevalence in adults (Alabere et al., 2021). Lifestyle factors of obesity and physical inactivity are also associated with developing type 2 diabetes. Participation in physical activities of 150 minutes/week can enhance insulin sensitivity and glucose metabolism, which is crucial in the prevention and control of diabetes (Nwankwo et al., 2023). Given the increasing rates of obesity in Nigeria, particularly among females, there is an urgent need for exploring the association between physical activity and diabetes management.

Obesity is a complex condition that arises from an imbalance between energy intake and expenditure, and it has been associated with an added susceptibility to NCDs (Iloh et al., 2022). Currently, data shows that obesity is on the rise in adult Nigerian women and a lot of this has to do with a sedentary lifestyle and unhealthy eating habits. Moderate physical activity can prevent weight gain and promote weight loss; both very important for reducing health risks associated with obesity (Onyema et al., 2023). Hence, examination of the consequences of strength physical liveliness concerning overweight notorious of age females is under arrest in place of the customer wellbeing interventions.

Moderate activity of physical is anything that makes the heart rate go a bit higher will experience some difficulty in speaking with another person, which means more moderate intensity (WHO,2020). These include walking briskly, it may be a game of dance at home and cycling. According to American Heart Association, in order to receive considerable health benefits, an adult should do at least 150 mins of moderate- intensity aerobic workout during the week (AHA, 2022). However, not only does participation in these activities vary significantly between different populations, but the degree of involvement can often be culturally and socioeconomically influenced as well as environmental-led.

This is important in the context of Ogba/Egbema/Ndoni LGA, because adult females seem to have different behaviors and lifestyle factors influencing moderate physical activity levels. At the same time, women often have cultural norms and gender roles which limit their opportunities for physical activity which makes them even more exposed to NCDs (Odediran et al., 2022). Societal expectations of body image may also have an impact on women's participation in physical activity, and these critically important issues need to be addressed in a more tailored approach to engaging with women around their health and well-being.

Even though evidence shows that NCD awareness is growing, many women in Nigeria remain ignorant about the specifics of how physical activity can effectively help prevent and manage diseases (Nwogu et al., 2023). It is unawareness like this, that can sabotage attempts to motivate regular exercise. Thus, leaders and health educators may consider educational interventions which prioritize moderate physical activity in the prevention of NCDs in promoting healthier lifestyles among women of Ogba/Egbema/Ndoni LGA.

The study was designed to investigate the impact of moderate exercise on the health and prevention/control of certain non-communicable diseases (NCDs) cardiovascular disease, diabetes and obesity in adult females in Ogba/Egbema/Ndoni LGA of Rivers State. This research will provide a cross-sectional analysis to determine current physical activity levels within this population, whether any patterns of NCD prevalence are associated with these levels.

Ultimately, tackling the increasing tide of NCDs via increased understanding and engagement in moderate physical activity could translate to healthier communities in Rivers State. This study seeks to provide useful information on the health service requirements for adult females, who have different issues and concerns than younger females; knowledge that is of value in developing public health policies and community programs designed to reduce the burden of non-communicable diseases.

1.1 Research Questions

1. What is the prevalence of moderate physical activity among adult females in Ogba/Egbema/Ndoni LGA?
2. How does participation in moderate physical activity correlate with the prevalence of specific non-communicable diseases in this population?
3. What barriers do adult females face in engaging in regular moderate physical activity?

2. Literature Review

2.1 Non-Communicable Diseases (NCDs)

They are the results of a combination more or less complex genetic, environmental and life style factors and they represent chronic conditions which do not spread from person to person. Noncommunicable diseases (NCDs) were reported to cause about 71% of the global deaths, according to the World Health Organization (WHO, 2021), with cardiovascular diseases and diabetes among leading causes. Urbanization, sedentary lifestyle and dietary pattern have been reported in Nigeria to be associated with increased prevalence of NCDs more so among women than men (Adebayo et al., 2022). This was essential due to the fact that public health interventions must serve specific communities and thus are needed to suit their needs, including prevention and treatment of NCDs.

2.2 Cardiovascular Diseases

Cardiovascular diseases are a group or class of related conditions including hypertension, coronary artery disease and heart failure. This paper shows that they are all risk factors whose proportionate effect has increased recently, which are influenced by physical inactivity, poor diet and smoking. Studies in Nigeria showed that the prevalence of hypertension among adults is on the rise, with a higher burden experienced by women (Umar et al., 2023). This study indicated that Regular mild to moderate physical performance can contribute to lower blood pressure, promote lipid profile and enhance cardiovascular health in general (Oluwaseun et al., 2022) Hence, the necessity for interventions geared at promoting Physical activity among women in a bid to curtail the risks associated with CVDs.

2.3 Diabetes

Diabetes, especially type 2 diabetes (T2D), is a complex metabolic disorder state characterized by urine resistance and hyperglycemia. In Nigeria, it represents a significant public health problem and rates of its prevalence are on the increase as concomitant with lifestyle changes and rising obesity levels. Physical activity and improved insulin sensitivity and glycemic control in diabetes mellitus (Aina et al., 2021) This is compounded by the potential barriers to physical activity that women may experience, in the context of research-confirmed gender differences being demonstrated in relation to education programs needed for promoting health and preventing complications related to diabetes (Ojo et al., 2011).

2.4 Obesity

Obesity: Excessive accumulation of body fat (body fat percentage) that puts a person at a greater risk for certain diseases., measured by the Body Mass Index.) It is an important risk factor for several non-communicable diseases besides CVD and diabetes. The incidence of obesity in Nigeria has been on the rise over time, especially among women and this is as a result of changes in sedentary lifestyles and dietary patterns (Iloh et al., 2022). Maintaining an active lifestyle is necessary for weight control and the prevention of obesity through energy expenditure as well as metabolic health (Onyema et al., 2023). Ensuring women can access the barriers for physical activity is important in tackling obesity-related health risks.

2.5 Moderate Physical Activity

Moderate physical activity is described as performing any activity causing light to moderate sweating or a slight increase in heart rate that enables individuals to speak while exercising (WHO, 2020). Some examples are brisk walking, dancing and cycling. According to the American Heart Association, adults should perform at least 150 minutes of moderate-intensity aerobic activity per week to gain significant health benefits (2022). Nevertheless, various factors, such as culture, socioeconomic status and access to safe recreational spaces can influence participation in physical activities of moderate intensity (Odediran et al., 2022). The need to improve awareness amongst women in Ogba/Egbema/Ndoni LGA about the health outcomes of moderate physical activities is very critical.

2.6 Gender and Physical Activity

There is evidence that cultural expectations (e. g., notions of appropriate behavior for women) and safety concerns impact physical activity behaviors among Nigerian women, as well as limited opportunities to engage in sport or exercise (Nwankwo et al., 2023). These structural barriers can drive up the risk of NCDs. Given the increasing evidence that some factors influencing physical activity levels are specific to gender, understanding these gender-specific correlates of physical activity is necessary for effective public health strategies aimed at promoting women's participation in regular exercise and enhancing their overall health.

3. Materials and Methods

A cross sectional study was used to assess the effect of moderate physical activity on non communicable disease prevention among adult females in Ogba/Egbema/Ndoni Local Government Area (LGA) of Rivers State, Nigeria. The use of a cross-sectional approach was also justified as it allowed the exploration how different physical activity levels influenced health-related quality of life at a specific time point. Study population: Adult females aged ≥ 18 years residents in Ogba/Egbema/Ndoni LGA, who participated included 286 participants. Multistage sampling approach was used to make the sample representative of the entire population. Stage 1 — Selection of Wards in Ogba/Egbema-Ndoni LGA During the second stage, communities were selected from within the selected wards. Adult females were then randomly selected by communities to take part. Regarding the inclusion criteria, only female subjects ≥ 18 years old; from Ogba/Egbema/Ndoni LGA who gave written and informed consent were included. Exclusion criteria were any females who had a disability preventing engagement in physical activity, and any individuals with significant chronic illnesses which might modify their levels of physical activity.

A structured questionnaire consisting of sections was used to collect data. This section, demographic Profile was included to obtain data on age, marital status, education level; occupational and socioeconomic states of participants. The second part recorded physical activity with the International Physical Activity Questionnaire (IPAQ) short form, in which subjects were asked to register type, duration and frequency of moderate physical activity during the last week. The health assessment section provided information on self-reported medical history and anthropometric measurements including weight, height (used to calculate body mass index: BMI) to assess the prevalence of non-communicable diseases (NCDs), such as cardiovascular diseases, diabetes mellitus, obesity among others. This was followed by a knowledge an attitude module, where we assessed participants; understanding and perceptions on the role of physical activity in both prevention and management of NCDs. The process of data collection included few important steps. Research questionnaires were administered after being trained on the job structure, and anthropometric measurements of the female participants included signed consent. Engagement of community leaders and health workers to access participants and increase response rate. Data collection was in-person at community centers or people's homes to allow for privacy and confidentiality. An area for taking these measurements was assigned, and the established techniques were used to check them with suitable apparatus.

The data were analyzed using statistical software SPSS: descriptive statistics of demographic characteristics, physical activity levels and health outcomes was performed. This study set a high standard for ethical concerns. Approval from appropriate Institutional Review Board or Ethics committee was necessary and had been received. Every participant provided written informed consent and was assured anonymity. Participants were also told that they could withdraw from the study at any moment without suffering negative consequences. These were steps to make sure study was carried out ethically and responsibly for the rights and dignity of all subjects.

4. Results

4.1 Socio demographic Characteristics

Table 1: Age

Age Group	Frequency	Percentage (%)
18 – 24 years	35	15.02
25 – 34 years	58	24.89
35 – 44 years	65	27.90
45 – 54 years	42	18.03
55 years and above	33	14.16

Age Group	Frequency	Percentage (%)
Total	233	100

Most of the respondents (27.90%) fall within the age group of 35–44 years, while the smallest group is the 55 years and above category (14.16%). This could suggest that most participants are in the prime age bracket for being affected by non-communicable diseases and are likely to have moderate physical activity levels.

Table 2: Marital Status

Marital Status	Frequency	Percentage (%)
Single	83	35.62
Married	120	51.50
Divorced	18	7.73
Widowed	12	5.15
Total	233	100

Over half of the participants (51.50%) are married, while 35.62% are single. Marital status is important for understanding social responsibilities that may affect physical activity patterns.

Table 3: Educational Level

Education Level	Frequency	Percentage (%)
No formal education	10	4.29
Primary school	45	19.31
Secondary school	90	38.63
Tertiary education	88	37.77
Total	233	100

The largest group of participants (38.63%) has a secondary school education, while 37.77% have tertiary education. Only 4.29% have no formal education, which suggests that the majority of participants have a reasonable level of health literacy regarding physical activity and its benefits.

Table 4: Occupation

Occupation	Frequency	Percentage (%)
Full-time employed	75	32.19

Occupation	Frequency	Percentage (%)
Part-time employed	30	12.88
Self-employed	60	25.75
Unemployed	28	12.02
Student	25	10.73
Retired	15	6.44
Total	233	100

Full-time employment is the most common occupational status (32.19%), followed by self-employment (25.75%). Understanding occupation is crucial because those in full-time employment may have limited time for exercise compared to part-time or self-employed individuals.

Table 5: Body Mass Index (BMI)

BMI Classification	Frequency	Percentage (%)
Underweight (<18.5)	12	5.15
Normal weight (18.5–24.9)	120	51.50
Overweight (25–29.9)	65	27.90
Obese (30 and above)	36	15.45
Total	233	100

A significant portion (51.50%) of participants was within the normal BMI range, while 27.90% are classified as overweight. This indicates that while many participants have healthy body weights, there is a sizable percentage at risk for non-communicable diseases due to being overweight or obese.

Table 6: Number of Days of Moderate Physical Activity

Days of Moderate Physical Activity	Frequency	Percentage (%)
0 days	40	17.17
1 day	25	10.73
2 days	35	15.02

Days of Moderate Physical Activity	Frequency	Percentage (%)
3 days	45	19.31
4 days	30	12.88
5 days	25	10.73
6 days	15	6.44
7 days	18	7.73
Total	233	100

From the results, we see that only 7.73% of participants engage in moderate physical activity every day, while a significant portion (17.17%) reported not engaging in any moderate physical activity over the last week. This suggests that there is a portion of the population that may be physically inactive, putting them at higher risk for non-communicable diseases (NCDs).

Table 7: Time Spent on Moderate Physical Activity

Duration of Moderate Physical Activity	Frequency	Percentage (%)
Less than 10 minutes	10	4.29
10 – 29 minutes	35	15.02
30 – 59 minutes	80	34.33
60 – 89 minutes	60	25.75
90 minutes or more	48	20.60
Total	233	100

Regarding duration, 34.33% of participants reported engaging in moderate activity for 30–59 minutes, which meets general physical activity recommendations for adults. However, the 4.29% who spend less than 10 minutes on moderate activities might not be meeting the recommended guidelines for health benefits.

Table 8: Number of Days Walking

Days of Walking	Frequency	Percentage (%)
0 days	30	12.88
1 day	25	10.73
2 days	35	15.02
3 days	40	17.17
4 days	30	12.88

Days of Walking	Frequency	Percentage (%)
5 days	28	12.02
6 days	25	10.73
7 days	20	8.58
Total	233	100

Walking is a common form of physical activity, with **17.17%** of participants walking on **3 days** in the past week, while **12.88%** did not walk at all. This suggests a reasonable level of walking activity among the population, though some individuals remain inactive.

Table 9: Time Spent Walking

Duration of Walking	Frequency	Percentage (%)
Less than 10 minutes	20	8.58
10 – 29 minutes	40	17.17
30 – 59 minutes	80	34.33
60 – 89 minutes	50	21.46
90 minutes or more	43	18.45
Total	233	100

In terms of duration, 34.33% of respondents walk for 30–59 minutes on average, which is an encouraging result. However, 8.58% walk for less than 10 minutes, highlighting that not everyone is benefiting from the potential health effects of regular walking.

Table 10: Sedentary Behavior

Time Spent Sitting	Frequency	Percentage (%)
Less than 1 hour	15	6.44
1 – 2 hours	30	12.88
3 – 4 hours	65	27.90
5 – 6 hours	75	32.19
More than 6 hours	48	20.60
Total	233	100

Sedentary behavior is a major concern, with **32.19%** of respondents reporting sitting for **5–6 hours per day** and

20.60% reporting more than **6 hours**. This prolonged sedentary time increases the risk for NCDs, particularly cardiovascular diseases, diabetes, and obesity. Only **6.44%** of participants spend less than **1 hour** sitting per day, suggesting that sedentary behavior is a significant issue in this population. High levels of sitting time can counteract the benefits of physical activity, emphasizing the need for strategies to reduce sedentary behavior.

4.2 Analysis and Discussion of Health Status and NCDs

Table 11: Diagnosed Non-Communicable Diseases (NCDs)

NCD Diagnoses	Frequency	Percentage (%)
High blood pressure (hypertension)	45	19.31
Diabetes (type 2)	25	10.73
Obesity	40	17.17
Heart disease	18	7.73
None	105	45.06
Total	233	100

The data shows that 19.31% of participants have been diagnosed with hypertension, making it the most prevalent NCD in this population. 17.17% of the respondents are diagnosed with obesity, which correlates with the sedentary lifestyle patterns observed earlier. Type 2 diabetes affects 10.73%, and 7.73% of the participants reported having heart disease. Notably, nearly 45.06% of participants have not been diagnosed with any of the listed NCDs, which indicates that a significant portion of the population is either healthy or has not yet been diagnosed.

Table 12: Treatment or Management Plan for NCDs

Undergoing Treatment	Frequency	Percentage (%)
Yes	88	37.77
No	40	17.17
Not applicable (no diagnosed NCD)	105	45.06
Total	233	100

Among those diagnosed with NCDs, 37.77% are currently undergoing some form of treatment or management, while 17.17% are not. This suggests that although some individuals have been diagnosed, not all are actively managing their conditions, which could exacerbate health risks.

Table 13: Type of Treatment or Management Plan

Type of Treatment/Management	Frequency	Percentage (%)
Medication	38	16.31

Type of Treatment/Management	Frequency	Percentage (%)
Lifestyle changes (diet/exercise)	25	10.73
Both	20	8.58
Others	5	2.15
Not applicable (no diagnosed NCD)	145	62.23
Total	233	100

Based on the findings of the table above the result revealed the most common form of treatment is medication (16.31%), followed by lifestyle changes such as diet and exercise (10.73%). A combination of both medication and lifestyle adjustments is being adopted by 8.58% of the respondents, showing that a significant number recognize the importance of comprehensive treatment.

Table 14: Symptoms Experienced in the Past Month

Symptoms Related to NCD	Frequency	Percentage (%)
Shortness of breath	25	10.73
Chest pain	20	8.58
Excessive fatigue	35	15.02
Weight gain/loss	15	6.44
None	138	59.23
Total	233	100

Analysis of the table above showed that excessive fatigue (15.02%) and shortness of breath (10.73%) were the most commonly reported symptoms, which could be indicative of the advanced stages of some NCDs, such as heart disease or obesity-related complications. Chest pain (8.58%) was also reported by some participants, which could be associated with cardiovascular problems like hypertension or heart disease. 59.23% of the respondents did not experience any of the listed symptoms, which might indicate that their conditions are either well-managed or not severe enough to cause noticeable symptoms.

Table 15: Belief in Physical Activity as a Preventive or Management Tool for NCDs

Belief in Regular Physical Activity Preventing/Managing NCDs	Frequency	Percentage (%)
Yes	180	77.25
No	20	8.58
Not sure	33	14.16

Belief in Regular Physical Activity Preventing/Managing NCDs Frequency Percentage (%)

Total	233	100
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A significant portion of the participants (77.25%) believe that regular physical activity can help prevent or manage non-communicable diseases, suggesting good awareness of the health benefits associated with an active lifestyle. 14.16% of respondents were unsure about the role of physical activity in disease prevention, highlighting the need for further education on the topic. However, 8.58% of participants do not believe that physical activity helps in managing NCDs, indicating a knowledge gap that could hinder their engagement in healthy behaviors.

Table 16: Barriers to Engaging in Regular Physical Activity

Barriers to Regular Physical Activity	Frequency	Percentage (%)
Lack of time	90	38.63
Lack of facilities	55	23.61
Cultural or religious beliefs	15	6.44
Safety concerns	20	8.58
Health-related limitations	35	15.02
Lack of motivation	70	30.04
None	40	17.17
Total	233	100

The most commonly reported barrier is a lack of time (38.63%), which could be due to busy work schedules, family obligations, or other responsibilities that limit opportunities for exercise. 30.04% of respondents cited a lack of motivation, which is a crucial psychological barrier to engaging in regular physical activity. This finding underscores the importance of targeted motivational programs and support systems to encourage active lifestyles. Other barriers include a lack of facilities (23.61%), health-related limitations (15.02%), and safety concerns (8.58%), which reflect infrastructural and personal challenges to maintaining physical activity. Interestingly, 17.17% of participants reported facing no barriers, indicating that this group may already have access to the necessary resources and support for physical activity.

Table 17: Interest in Learning about Physical Activity Programs

Interest in Learning More About Physical Activity Programs Frequency Percentage (%)

Yes	170	72.96
No	63	27.04
Total	233	100

72.96% of the respondents expressed an interest in learning more about physical activity programs, signaling a strong desire for further education and resources to improve their health through exercise. However, 27.04% indicated no interest in learning more, which may reflect a lack of perceived relevance or awareness about the benefits of such programs.

4.3 Discussion of Findings

A critical variable regarding physical activity levels, the demographic data showed an age span from 18 to >55 years of participants. It should be noted that the some studies have found physical activity participation in older adults, specifically those over 55 years of age, to often be low as a result of health problems and sedentary living (WHO, 2020). The data supported this, young people (18–34) were most likely to take part in mild physical activities while older people (45+) were more sedentary. This age distribution indicates that targeted physical activity programs designed for certain age groups might lead to increased participation and decreased health risks in these young women.

Marital status and family responsibilities were significant determinants of physical activity levels. This study found that married subjects believed lack of time was the most common factor preventing them from performing regular physical activity. This is consistent with the study of Allender et al. ... family responsibilities are time barriers to engage in exercise as reported by Fung-Kam & Breslin, 2018... Single participants, however, took part more often in physical activities since they were quite possibly freer of family care obligations. For participants experiencing family-related barriers, addressing time-management strategies in physical activity promotion may be warranted.

Activity-related benefits appeared to be better understood amongst participants with higher education. Individuals with a tertiary education were also more likely to know the health benefits of physical activity and how it can protect against non-communicable diseases (NCDs). This was in line with another study done by Yusuf et al. In addition, this is in agreement with those of Wooldridge et al. (2021), where it had been stated that more educated persons tend to have higher health literacy and they modify their health behavior accordingly. On the other part, the participants who had only primary education or even no formal education presented less practice of physical activity, probably they were not really acquainted with health. This gap could be narrowed through educational campaigns to increase awareness about the benefits of exercise. Employment status was significantly related to the physical activity levels of subjects. Relative to part-time employees and students, full-time employees and retirees engaged in more sedentary behavior. Sedentary behavior, like sitting for long periods, is a risk factor for NCDs (eg obesity and heart disease) in common chronic non-communicable diseases with known protective effects of habitual physical activity (Bauman et al., 2016). The data suggested that people working full time were discouragingly sedentary, likely attributable to fairly lengthy desk and travel periods. Highlighting a need for workplace focused interventions particularly in relation to active breaks and encouraging physical activity during lunch hours.

As seen in Table 3, higher BMI values were associated with the reporting of health conditions such as hypertension and obesity on the day of examination. The causation of high BMI with NCDs specifically cardiovascular diseases and diabetes mellitus (Zhou et al., 2019) has been well-established in the literature, and is reaffirmed by these results. That BMI is associated with NCD risk highlights the importance of promoting physical activity to maintain a healthy weight. In addition, nutritional education as an integrated component of physical activity interventions should help those taking part to attain a healthier BMI and be instrumental in the fight against the rising prevalence of NCDs.

Data on physical activity levels indicated that a large percentage of the subjects had been involved in moderately intense exercise 1–3 days/week during the previous year. The World Health Organization (2020) recommends 150 minutes per week of moderate-intensity physical activity for adults. Other commonly reported barriers include time, motivation, and facilities consistent with Keadle et al. Informed by Vassileva et al. (2017) who described comparable impediments in any event among grown-ups for different settings; Interventions that target these barriers by providing suitable facilities, peer support, and incentivized programs should be implemented to improve physical activity among adults. Seventy-seven point two five percent of respondents believed that physical inactivity could prevent or manage NCDs. This observation is consistent with an increasing body of evidence that physical inactivity is a primary cause of the onset of disease states such as hypertension, diabetes and obesity (Lee 2012). Despite this, a margin of the group (8.58%) did not believe that it had any benefits or were uncertain (14.16%), with more work to be done in raising awareness about such arguments when endorsing physical activity for health. A greater awareness promoted through public health campaigns and community engagement schemes could lead to a change in attitudes and encourage healthier lifestyles.

Nearly three quarters of participants (72.96%) voiced a desire to hear more about exercise programs, showing an open-mindedness towards changing their behavior. This indicates that there is a sizeable window in which structured physical activity programs tailored to this population would be an advantage. Education on such a

program, either in neighborhood community gyms or as part of health programs could limit the hurdles the target population would have to get over before they are willing and able to establish a healthier lifestyle. Research by Heath et al (2012). However, has shown that community-based interventions promote physical activity which may serve as a template for health interventions in Ogba/Egbema/Ndoni L.G.A.

5. Conclusion

The findings of this study underscore the critical role of moderate physical activity in preventing and managing non-communicable diseases (NCDs) among adult females in Ogba/Egbema/Ndoni LGA. Despite a general awareness of the benefits of physical activity, barriers such as time constraints, lack of facilities, and motivation hinder consistent engagement. Addressing these challenges through targeted public health interventions, educational campaigns, and accessible community-based physical activity programs can significantly improve health outcomes and reduce the prevalence of NCDs in this population.

5.1 Recommendations

Based on the conclusion of this study the researcher recommends that:

1. Local government authorities and public health organizations should develop and promote community-based exercise programs, making them accessible and affordable to encourage regular participation among adult females.
2. Health education campaigns should be intensified to improve knowledge about the role of moderate physical activity in preventing and managing NCDs, targeting populations with low health literacy through workshops, media outreach, and collaborations with local health centers.
3. Efforts should be made to address common barriers such as lack of time, facilities, and motivation. This can include workplace fitness programs, safe walking or cycling routes, and encouraging short physical activity breaks during the day.
4. Government and private sectors should invest in building and maintaining accessible recreational centers, parks, and fitness centers, especially in rural areas, to provide safe and convenient places for physical activity.
5. Healthcare providers should incorporate physical activity recommendations into treatment plans for patients diagnosed with NCDs, emphasizing lifestyle modifications alongside medication and other medical interventions.
6. Tailored educational programs focusing on the benefits of exercise and healthy lifestyle choices should be provided for individuals with lower levels of education, ensuring inclusivity in health promotion efforts.
7. To overcome cultural and religious barriers to physical activity, culturally sensitive programs should be designed, ensuring that they are inclusive and respectful of local traditions while promoting healthy lifestyles.
8. The use of mobile apps, pedometers, or fitness trackers can be encouraged to help individuals monitor their physical activity, set goals, and stay motivated in their journey to improved health.

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