# Knowledge, attitude and practice of maternal exercise among pregnant mothers attending primary health care centres in Jos Metropolis, Plateau State, Nigeria

Da'am, Emmanuel Haniya<sup>1</sup>, Jatau Shahbogawi Richard<sup>2</sup>

<sup>1</sup>PhD. Public Health Education, M.Ed. Public Health Education, Department of Human Kinetics and Health Education, University of Jos, Jos Nigeria

<sup>2</sup>PhD. Exercise and Sport Science M.Ed. Health Education, Department of Human Kinetics and Health Education, University of Jos, Jos Nigeria

Abstract: The purpose of the study was to determine the level of Knowledge, attitude and practice of maternal exercise among pregnant mothersattending Primary Health Care Centres in Jos Metropolis, Plateau State, Nigeria. To achieve the purpose of the study, three research objectives were formulated with three corresponding research questions and two hypotheses postulated to guide the study. Literatures pertinent to the study were reviewed. The study used a descriptive Cross-sectional research design which was suitable for this study. The target population for the study comprised all pregnant mothers attending Antenatal Clinics within Jos metropolis. The sample size for the study was 150 pregnant mothers gotten through purposive sampling technique. The instrument used for data collection was researchers developed structured questionnaire made up of four sections. Section A consisted of questions on demographic characteristic of the respondents, B consisted of questions on level of knowledge, C consisted of questions on attitude of respondent towards maternal exercise and D consisted of questions on level of practice of maternal exercise. The data were collected with the help of the research assistants and were crosschecked for completeness of the information. The data collected were analyzed using frequency counts and percentages and were presented in Tables. Chi-square statistics was used to test the null hypothesis at 0.05 level of significant. The results revealed that pregnant mothers knowledge level concerning maternal exercise was high, their attitude towards maternal exercise was reasonably positive and their level of practice was moderate during pregnancy. The study recommended among others that expectant mothers were encouraged to share the knowledge of maternal exercise with their colleagues for healthy pregnancy and the community members were health educated on the importance of maternal exercise for pregnant mothers during pregnancy.

Key words: Knowledge, attitude, practice, exercise, pregnant mothers

# I. BACKGROUND OF THE STUDY

Nowledge is the fact or condition of knowing something with familiarity gained through experience or association; acquaintance with or understanding of a science, art, or technique; the fact or condition of being aware of something. Knowledge applies to facts or ideas acquired by study, investigation, observation, or experience. According

to Webster's Dictionary, knowledge is "the fact or condition of knowing something with familiarity gained through experience or association". It further explained knowledge as the ideas or understandings which an entity possesses that are used to take effective action to achieve the entity's goal(s (Steve, 1955). In this study knowledge of exercise

Exercise is a planned, structured, and repetitive for the purpose of conditioning the body. Exercise is physical activity that is planned, structured, and repetitive for the purpose of conditioning the body. Exercise consists of cardiovascular conditioning, strength and resistance training, and flexibility. http://www.healthofchildren.com/E-

F/Exercise.html#ixzz7FO3sztppAwareness of physical activity (PA) is an important factor in health promotion and disease prevention while physical inactivity is linked with many chronic diseases and their risk factors especially in pregnant mothers (Jani, Tommi, Harri and Heikki, 2019). They further stated that the benefits of physical fitness are keeping the muscles and bones strong, controlling weight, preventing and controlling diseases, improving your mood, brain function, better or sound sleep, boosts energy and improves your sex life. Knowledge of exercise is a basic understanding of physical activity which is good for healthy pregnancy

Attitude is a feeling or way of thinking that affects a person's behaviour. An attitude can be a positive or negative evaluation of people, objects, events, activities, and ideas. An attitude is a relatively enduring organization of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups, events or symbols (Eagly, and Chaiken, 1993),

Practice is the actual application or use of an idea, belief, or method, as opposed to theories relating to it. Practice' is the ways in which the competent actor in his or her action is taking the particular conditions into account while committed to and guided by the appropriate general principles. Practice of exercise is practicing activities like quizzes, projects and exercises that help students practice a concept they have learned. The difference between exercise and practice is that exercise is any activity designed to develop a skill or

ability while practice is repetition of an activity to improve skill or master it. Applying it to this paper meanspracticing exercise by pregnant mothers

Pregnantmother is a female that has a baby or babies developing in her body. Exercise is an essential aspect relating to lives of females and a significant component of antenatal care. Pregnancy is seen as an opportunity to embrace exercise routinely by encouraging pregnant women to maintain those habits, to promote health benefits to both pregnant women and fetuses. Pregnant or postpartum women should do at least 150 minutes (for example, 30 minutes a day for five days a week) of moderate-intensity aerobic physical activity per week, such as brisk walking, during and after their pregnancy. It is best to spread this activity throughout the week. The health benefits of regular physical exercise in pregnancy include maintenance and improvement of physical fitness and cardiovascular endurance, prevention of excessive gestational weight gain and glucose intolerance, conditioning of the muscles needed to facilitate labour, and improvement in psychological adjustment to changes in pregnancy. A myriad of factors not limited to beliefs and attitudes of women with respect to exercise in pregnancy, level of knowledge, and levelof education, safety concern of the pregnant woman, race/ethnicity, and previous involvement in regular exercise have been implicated as important factors predisposing to exercise engagement or phobia among pregnant women. Many studies have been carried out on effects of exercise during pregnancy in different part of the world. Some of these studies showed different benefits of exercise among pregnant women and their knowledge on the benefits of exercise in pregnancy. Some of these studies were reviewed.

Opiah, James and Osaji (2019) investigated perceived benefits of exercise among pregnant mothers in University of Calabar Teaching Hospital, Calabar, cross River State. The results revealed that majority of the respondent 97 (64.7%) asserted that they have never heard about specific exercise for pregnant mothers while 53 (35.3%) said they have. Majority of the respondent 84 (56%) asserted that they like antennal exercise because it improves easy delivery during labor while 66 (44%) of the respondent said no. 43 (28.7%) of the respondent said yes that ignorance affects the benefits of maternal exercise for pregnant mothers while 107 (71.3%) said no it doesn't.

Margro-Mallosoetal (2017) examined maternal exercise during pregnancy and risk of gestational hypertensive disorders; a systematic review and meta-analysis. The results revealed thatwomen who were randomized in early pregnancy for aerobic exercise for 30-60 min two to seven times perweek had a significant cover incidence of gestational hypertensive disorders (5.9% vs 8.5%; relative risk 0.70, 95% confidence interval 0.53-0.83; seven studies 2517 participants) specifically a lower incidents of gestational hypertension (25% vs 4.6%; relative risk 0.54, 95% confidence interval 0.40-0.74; 16 studies 4641 participants

compared with control. The incidence of preeclampsia (2.3% vs 2.8% relative risk 0.79, 95% confidence interval 0.45-1.38; six studies, 2230 participants) was similar in both groups. The incidence of cesarean delivery was decreased by 16% in the maternal exercise group. Maternal exercise during pregnancy reduces the risk of gestational hypertensive disorders.

Monigues, etal (2019) studied efficacy of regular maternal exercise during pregnancy on the prevention of postpartum depression. Postpartum depressive symptoms were assessed with the Edinburgh postnatal depression scale 3 months after birth. A score of 12 or greater was defined as screening positive for postpartum depression. Primary analysis was performed on a complete case basis (90% of participants who had the primary end point ascertained). A total of 639 participants (mean (SD) age 27 (5.1) years; mean gestational age 16.5 (1.5) weeks) were randomly assigned to the intervention group (^=213) or control group (^=426). Compliance with the protocol, defined as having engaged in at least 70% of maternal exercise sessions, was low (40.4%). There was no significant difference in the mean (51) scores for postpartum depression between the intervention group (4.8 (3.7) and the control group (5.4 (4.1)) (mean difference 0.6; 95% cl, -1.3 to 0.1). There was also no significant difference rate of postpartum depression between the intervention group (12 of 192 (6.3)) and control group (36 of 38 (9.3)) (odds ratio 0.65; 95% cl. 0.33-1.28). Instrumental variable analysis indicated that noncompliance may have attenuated the effect estimates obtained in the primary analysis.

Okafor and TerGoon (2020) looked at physical activity and maternal exercise during pregnancy in Africa; a review of literature. The basic search terms were physical activity; 'exercise', 'pregnancy', 'pregnant women', and 'Africa'. A total of 40 references were found. On the basis of analysis of titles, abstracts and the language of publication (other than English) 11 articles were rejected and 29 articles were fully read, although two had to be rejected due to lack of access to the full version. Finally, 27 references were included in the review. They discovered that few studies existed on physical activity during pregnancy in Africa. The gritted data available suggested that compared to the Western World, pregnant women in Africa do not adhere to the recommendations for physical activity during pregnancy. Levels of participation in physical activity during pregnancy were low and decline as the pregnancy progresses. Personal and environmental factors such as lack of time, lack of knowledge, inadequate information from healthcare providers, feelings of tiredness and absence of social support constituted the main barriers to physical activity during pregnancy. The types of physical activity participation among pregnant women varied across studies and geographical settings.

Thornton et al. (2004)submitted that identifying factors that affect beliefs and behaviours would objectively encourage a change in attitude towardsassessment of knowledge, attitude

and practice of maternal exercise among pregnant mothers in Jos Metropolis ofPlateau State, Nigeria

# 1.2 Statement of the Problem

Many women of reproductive age in both rural and urban areas are unwilling to participate in any physical exercise during pregnancy. The reasons can be due to religious beliefs, ignorance and myths about pregnancy. A sedentary lifestyle before or during pregnancy is frequently associated with negative maternal health impact and poor neonatal outcomes. Most of the pregnant women living in Metropolis are not sufficiently active and did not meet the present maternal exercise guidelines during their pregnancy. Physical activity and maternal exercises are not threatening according to the current guidelines. Thus, women who fail to practice maternal exercise in the context of the socio-economic, cultural, religion, time constraint, sedentary lifestyle and educational background of pregnant women is imperative in building comprehensive maternal health interventions to cover all facets of risks associated with child birth. This study therefore aimed at determining the knowledge, attitude and practice of maternal exercise with the socio-demographic and maternal characteristics among pregnant women attending antenatal care clinic at Jos Metropolis, Plateau State, Nigeria.

# 1.3 Purpose of the Study

The purpose of this study was to determine the level of Knowledge, attitude and practice of maternal exercise among pregnant mothers attending antenatal care clinics in Jos Metropolis, Plateau State, Nigeria

# 1.40bjectives of the Study

- 1. To determine the level of knowledge of maternal exercise during pregnancy among pregnant mothers.
- 2. To determine the attitude of pregnant mothers towards maternal exercise
- 3. To determine the level of practice of maternal exercise during pregnancy among pregnant mothers.

#### 1.5 Research Questions

- 1. What is the level of knowledge of maternal exercise during pregnancy among pregnant mothers.
- 2. What is the attitude of pregnant mothers towards maternal exercise
- 3. What is the level of practice of maternal exercise during pregnancy among pregnant mothers.

## 1.6 Research Hypothesis

- 1. There is no significant difference in the level of knowledge of maternal exercise among pregnant mothers based on age
- 2. There is no significant difference in the level of knowledge of maternal exercise among pregnant mothers based on religious affiliation

3.

## 1.7 Significance of the Study

The finding of this study will help families and community members to encourage pregnant mothers to practice maternal exerciseduring pregnancy. The finding of this study will awaken health care workers to initiate and continue health talks sensitization on the importance of maternal exercise and its benefits during pregnancy. This study will provide baseline data for students on internship on the knowledge, attitude and practice of maternal exercise among pregnant women in Primary Health Care centers within Jos metropolis, Plateau State.

## 1.8 Scope of the Study

This study was carried out to determine the level of knowledge, attitudes and practice of maternal exercise among pregnant women attending Antenatal clinic within Jos metropolis in Plateau State, Nigeria.

#### II. METHODS

# 2.1Research Design

The research design adopted for this study was a descriptive Cross-sectional designwhichwas considered suitable for this study.

#### 2.2 Area of the Study

The area of the study consisted of all Primary Health Care (PHC) Clinics within Jos Metropolis, Plateau State

## 2.3 The Population of the Study.

The population of the Study consisted of all pregnant women attending Antenatal Clinicsat Primary Health Care (PHC) Centres within Jos Metropolis

#### 2.4 Sample and Sampling Technique

The sample size for this study was 150 pregnant mothers attending Antenatal Clinics at Primary Health Care (PHC) Centres within Jos Metropolis gotten through purposive sampling technique

# 2.5 Instrument used for Data collection

The instrument used for data collection for this study was researchers' developed structured questionnaire made up of four sections. Section A consisted of questions on demographic characteristic of the respondents, B consisted of questions on level of knowledge of maternal exercise, C consisted of questions on attitude of pregnant mothers towards maternal exercise and D consisted of questions on level of practice of maternal exercise among pregnant mothers.

# 2.6 Method of Data collection

The researchers paid a courtesy called on the Chairman of Jos North Local Government Area with a letter of introduction duly signed by the researchers' through the Primary Health Care Coordinator seeking for the permission to collect information from pregnant mothers attending antenatal clinics

at Primary Health Centres in Jos Metropolis. The data were collected with the help of the research assistants who went round the sampled Primary Health Centre heand administered the instruments on the participants. The filled questionnaires were retrieved from them

# 2.7 Method of Data Analysis

The data collected were cross-checked for completeness of the information and does not properly filled were discarded while the complete information were analyzed using frequency counts and percentages and were presented in Tables. Chisquare statistics was used to test the null hypothesis at 0.05 level of significant.

## III. RESULTS

A total of 150 questionnaires were distributed to respondents and 150 were retrieved representing 100% return rate. The result of this study were organized and presented in two parts thus: Data answering the research questions and Data testing the null hypothesis at 0.05 significant.

Table 1: Bio-data of the Respondents on Knowledge, Attitude and Practice of Maternal Exercise among Pregnant Mothers attending ANC in Jos Metropolis, Plateau State, Nigeria (N=150)

S/n	Variable	Group	Frequency	%
1	Age	15-20 21-30 31-40	20 45 61	13.3 30 40.7
2	Educational attainment	41 and above  Non-formal education  Completed primary education  Completed secondary education  Completed tertiary education	45 61 24 20	30 40.1 16 13.3
3	Occupation	Student Applicant Housewife Trading Farming	20 24 54 45 7	13.3 16 36 30 4.7
4	Religious ion	Christian Islam Traditional	68 55 27	45.3 36.7 18

The above Table shows that one hundred and fifty respondents participated in the study out of which age range of 15-20 were 20 representing 13.3%, age range of 21-30 were 45 representing 30%, age range of 31-40 were 61 representing 40.7 and 41 and above were 24 representing 16%. On Educational attainment, Non-formal education were 45 respondents representing 30%, completed primary education were 61 respondents representing 40.1%, completed secondary education were 24 respondents representing 16 %, and completed tertiary education were 20 respondents representing 13.3%. On occupation, students 20 respondents representing 13.3%, applicant were 24 respondents representing 16%,housewives were 54 representing 36%, trading were 45respondents representing 30% and farming

were 7 respondents representing 4.7%. Religious affiliation, Christians were 68 respondents representing 45.3%, Islam were 55 respondents representing 36.7% and traditional were 27 respondents representing 18%.

#### Research Question one

What is the level of knowledge of maternal exercise during pregnancy among pregnant women? Data answering this research question is contained in Table 2

Table 2: Level of Knowledge of Maternal Exercise during Pregnancy among Pregnant Women (N=150)

S/n	Items	Yes	%	No	%	Decision
1	Brisk walking is good for pregnant woman	145	96.7	5	3.3	High level of knowledge
2	indoor stationary cycling is good for pregnant woman	148	98.6	2	1.4	High level of knowledge
3	skipping rope is good for pregnant woman	123	82	27	68	High level of knowledge
4	Tennis and racquetball is good for pregnant woman	112	74.7	38	25.3	High level of knowledge
5	jogging is good for pregnant woman	143	95.3	7	4.7	High level of knowledge
6	Exercise in hot, humid weather is good for pregnant woman	15	10	135	140	High level of knowledge

The Table reveals that majority of the respondents have high level of knowledge of maternal exercise during pregnancy. The Table further shows the frequency counts and percentages for individual item as follows; responses in item 1: 145 respondents representing 96.7% answered yes to the question while 5 respondents representing 3.3%; item 2; 148 respondents representing 98.6% answered yes to the question while 2 respondents representing 1.4%, item 3: 123 respondents representing 82 % answered yes to the question while 38 respondents representing 25.3% answered no.Item 3: 123 respondents representing 82% answered yes to the question while 27 respondents representing 68% answered no. Item 4: 112 respondents representing 74.7% answered yes to the question while 38 respondents representing 25.3% answered no. Item 5: 143 respondents representing 95.3% answered yes to the item while 7 respondents representing 4.7% answered no and item 6: 15 respondents representing 10 % answered yes to the item while 135 respondents representing 140% answered no.

#### Research Question two

What is the attitude of pregnant women towards maternal exercise during pregnancy? Data answering this research question is contained in Table 3

Page 739

Table 3: The Attitude of Pregnant Women towards Maternal Exercise during Pregnancy (N=150)

S / n	Items	Stro ngly agre e	a g re e	disa gree	Stro ngly disa gree	Deci sion
1	Brisk walking is good for pregnant woman	SA	-	-	-	SA
2	indoor stationary cycling is good for pregnant woman	SA	1	1	1	SA
3	skipping rope is good for pregnant woman	-	A	-	-	A
4	Tennis and racquetball is good for pregnant woman	-	A	-	-	A
5	jogging is good for pregnant woman	SA	-	- 1	-	SA
6	Exercise in hot, humid weather is good for pregnant woman	-	-	-	SD	SD

The Table 3 reveals that majority of the respondents strongly agreed and agreed to most of items that they were maternal exercise for pregnant women and strongly disagreed to only item 6 that it not good for pregnant to exercise in hot and humid weather.

## Research question 3

What is the good level of practice of maternal exercise during pregnancy? Data answering this research question is contained in Table 4

Table 4: Intensity of Practice of Maternal Exercise during Pregnancy (N=150)

S/n	Items	Yes	No
1	Low exercise	12	138
2	Moderate exercise	143	7
3	Vigorous exercise	-	1

Table 4 reveals that majority of the respondents responded that level of practice ofmaternalexercise during pregnancy was moderate exercise while low and vigorous exercises are not good for pregnant women.

#### Hypothesis one

There is no significant difference of level of knowledge of maternal exercise among pregnant women based on age. Data testing this hypothesis is contained in Table 5

Table 5: Summary of Chi-square Analysis of no Significant Difference in Level of Knowledge of Maternal Exercise among Pregnant Women Based on Age (N=150)

				Age					χ2	df	p-value	Decision
Item	15-20		21-30		31-40		41 above					
	Yes	No	Yes	No	Yes	No	Yes	No				
Brisk walking is good for pregnant woman	15	5	40	10	45	10	20	8	2.5	3	7.81	Accept
indoor stationary cycling is good for pregnant woman	18	2	40	5	30	31	15	7	4.7	3	7.81	Accept
jumping rope is good for pregnant woman	10	10	38	7	40	21	20	4	0.7	3	7.81	Accept
Tennis and racquetball is good for pregnant woman	12	8	30	15	30	31	18	6	2.4	3	7.81	Accept
jogging is good for pregnant woman	18	2	40	5	40	21	15	7	2.8	3	7.81	Accept
Exercise in hot, humid weather is good for pregnant woman	12	8	38	7	42	19	19	5	1.4	3	7.81	Accept
Calculated χ2			·						14.5	3	7.81	Reject

Table 5 above reveals that the overall  $\chi$ 2calwas rejected since the chi-square  $\chi$ 2cal calculated was greater than the  $\chi$ 2cal tabulated under P-value of 7.81 at 3 degree of freedom (df). We therefore conclude that there was significant difference in the mean percentage responses of the respondents regarding the level of knowledge of maternal exercise among pregnant women based on age. The Table further shows the  $\chi$ 2cal for individual items 1,2, 3, 4, 5 and 6 with their correspondent P-value of 0.05=7.81 at 3 degree of freedom (df) were accepted

since the  $\chi 2$ cal were less than the tabulated under P-value of 0.05= 7.81 at 3 degree of freedom (df), the null hypothesis of no significant difference based on age were accepted.

#### Hypothesis two

There is no significant difference of level of knowledge of maternal exercise among pregnant women based on religious affiliation. Data testing this hypothesis is contained in Table 6

			Reli	gions		χ2cal	df	p-value	Decision		
s/n	Items	Christian		Islam		Traditional					
		Yes	No	Yes	No	Yes	No				
1	Brisk walking is good for pregnant woman	20	5	40	20	40	25	3.8	2	5.991	Accepted
2	indoor stationary cycling is good for pregnant woman	30	8	45	12	45	10	0.2	2	5.991	Accepted
3	jumping rope is good for pregnant woman	30	8	45	12	45	10	0.2	2	5.991	Accepted
4	Tennis and racquetball is good for pregnant woman	25	15	30	25	35	20	4.4	2	5.991	Accepted
5	jogging is good for pregnant woman	45	15	35	15	30	10	1	2	5.991	Accepted
6	Exercise in hot, humid weather is good for pregnant woman	30	8	45	12	45	10	3.8	2	5.991	Accepted
	Calculated χ2							13.4	2	5.991	Rejected

Table 6: Summary of Chi-square Analysis of no Significant Difference in the Level of Knowledge of Maternal Exercise among Pregnant Women Based on Religious Affiliation (N=150)

Table 6 above reveals that the overall  $\chi 2$ calwas rejected since the chi-square  $\chi 2$ cal calculated was greater than the  $\chi 2$ cal tabulated under P-value of 5.99 at 3 degree of freedom (df). We therefore conclude that there was significant difference in the mean percentage responses of the respondents regarding the level of knowledge of maternal exercise among pregnant women based on religion. The Table further shows the  $\chi 2$ cal for individual items 1, 2, 3, 4, 5 and 6 with their correspondent P-value of 0.05=5.99 at 3 degree of freedom (df) were accepted since the  $\chi 2$ cal were less than the tabulated under P-value of 0.05=5.99 at 3 degree of freedom (df), the null hypothesis of no significant difference based on religion were accepted.

# IV. DISCUSSION OF FINDINGS

The findings of the study are hereby discussed under the following subheadings:

- 1. The level of knowledge of maternal exercise during pregnancy among pregnant women
- 2. The attitude of pregnant women towards maternal exercise during pregnancy
- 3. The good level of practice of maternal exercise during pregnancy

The level of knowledge of maternal exercise during pregnancy among pregnant women

The finding in Table 2 reveals that majority of the respondents have high level of knowledge of maternal exercise during Pregnancy. The Table further shows the frequency counts and percentages for individual item as follows; responses in item 1: 145 respondents representing 96.7% answered yes to the question while 5 respondents representing 3.3%; item 2; 148 respondents representing 98.6% answered yes to the question while 2 respondents representing 1.4%, item 3: 123 respondents representing 82 % answered yes to the to the question while 38 respondents representing 25.3%. answered no. Item 3: 123 respondents representing 82% answered yes to

the question while 27 respondents representing 68% answered no. Item 4: 112 respondents representing 74.7% answered yes to the question while 38 respondents representing 25.3% answered no. Item 5: 143 respondents representing 95.3% answered yes to the item while 7 respondents representing 4.7% answered no and item 6: 15 respondents representing 10% answered yes to the item while 135 respondents representing 140% answered no. These findings agree with the results of a study conducted by Balamurugan, Tsiwaye, Mulualem, and Moges (2021) on Knowledge, attitude, and practice of antenatal exercises among pregnant women in Ethiopia. The result of the present study was in line with the findings of Chidozie et al. (2014) on Knowledge and Attitude of Nigerian Pregnant Women towards antenatal exercise: A Cross-Sectional Survey.

The attitude of pregnant women towards exercise during pregnancy

The results in Table 3 reveals that majority of the respondents strongly agreed and agreed to most of the items that they were exercises for pregnant women and strongly disagreed to only item 6 that it was not good for a pregnant woman to exercise in hot and humid weather. The findings is in line with the result of the study conducted byChidozie et al. (2014) on Knowledge and Attitude of Nigerian Pregnant Women towards antenatal exercise: A Cross-Sectional Survey. The result of this study also agree with the findings of Edinah, Issah, and Esther(2018) on.Knowledge of Prenatal Exercise among Expectant Women from Selected Health Facilities, Kakamega County, Kenya.

Good level of practice of exercise during pregnancy

The findings in Table 4 reveals that majority of the respondents responded thatgood level of practice of exercise during pregnancy was moderate exercise while low and vigorous exercises were not good for pregnant women. The findings are in line with the finding of <u>Edinah</u>, Micky, Issah,

and Esther (2018).on Knowledge of Prenatal Exercise among Expectant Women from Selected Health Facilities, Kakamega County, Kenya. The results was in line with the findings of Balamurugan ,Tsiwaye, Mulualem, and Moges, (2021) on Knowledge, attitude, and practice of antenatal exercises among pregnant women in Ethiopia: A cross-sectional study. <a href="https://doi.org/10.1371/journal.pone.0247533">https://doi.org/10.1371/journal.pone.0247533</a>

## V. CONCLUSIONS

The findings of this study revealed that pregnant women knowledge level concerning antenatal exercise was high, their attitude was reasonably positive and their level of practice was moderate during pregnancy.

## VI. RECOMMENDATIONS

Based on the findings of the study, discussion and conclusion, the following recommendations were made

- 1. The expectant mothers should be encouraged to share the knowledge of maternal exercise with their colleagues for healthy pregnancy
- 2. The community members should be health educated on the importance of maternal exercise for pregnant women during pregnancy
- 3. Local Government and State Government should ensure that qualify health personnel are employed to provide maternal exercise training for pregnant women during pregnancy.

#### **REFERENCES**

- [1] American College of Obstetricians and Gynecologists. Physical activity and exercise during pregnancy and the postpartum period. Committee Opinion No. 650.Obstet Gynecol. 2015; 126 (6):e135–142.
- [2] Balamurugan, J., Tsiwaye, G., Mulualem, Y. and Moges .G. G. (2021). Knowledge, attitude, and practice of antenatal exercises among pregnant women in Ethiopia: A cross-sectional study
- [3] Balamurugan, J., Tsiwaye, G., Mulualem, Y. and Moges, G. G (2021). Knowledge, attitude, and practice of antenatal exercises among pregnant women in Ethiopia: A cross-sectional study. https://doi.org/10.1371/journal.pone.0247533
- [4] Chidozie E Mbada et al. (2014). Knowledge and Attitude of Nigerian Pregnant Women towards Antenatal Exercise: A Cross-Sectional Survey
- [5] Edinah, S, Micky, O. O., Issah, K and Esther V(2018). Knowledge of Prenatal Exercise among Expectant Women from Selected Health Facilities, Kakamega County, Kenya. Journal of Physical Activity Research 3(1).DOI:10.12691/jpar-3-1-9