RECREATIONAL EXERCISE INDICES ON HEALTH STATUS OF PREGNANT WOMEN ANTE - NATAL SESSIONS IN ILORIN METROPOLIS, KWARA STATE

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ABSTRACT

Exercise as a type of physical activity, planned structured and repetitive bodily movement requiring physical or mental efforts in executing to improve health status. Pregnant women are advised to engage in mild physical fitness during the antenatal session doing so will enhance safe delivery of the unborn fetus and keep the mother healthier. Inability to comply may lead to maternal mortality rate. This study therefore, examined the recreational exercise indices on health status of pregnant women ante - natal sessions in Ilorin metropolis, Kwara state. The objective of the study were to; (i) assess the knowledge of recreational exercise on health status of pregnant women; (ii) evaluate the effectiveness of recreational exercises on health status of pregnant women and (iii) examine the consistency of recreational exercises on health status of pregnant women attending antenatal session in Ilorin metropolis in Kwara state.

A descriptive research design of survey method was used with the population that consisted of 3000 (100%) pregnant women from university of Ilorin teaching hospital (UITH) and general hospital Ilorin Kwara state for the study. Simple random sampling technique was used to select 350 (857.14%) respondents of the total population. The researchers - developed questionnaire was used and critically examined and reviewed. Test re-test was ascertained the reliability with co-efficient of (0.76). Data collection was adequately conducted. Frequency, percentages and chi square (x2) were used to analyze the formulated hypotheses at 0.05 alpha level.

The findings from the study were that;

i. Knowledge of recreational exercise significantly influences the health of pregnant women antenatal session in Ilorin metropolis with calculated x2 value of 62.537 >16.92 with 9 degree of freedom at 0.05 alpha level.

ii. Achievement of recreational exercise significantly influence the health status of pregnant women antenatal session in Ilorin Metropolis with calculated x2 value of 67.288 >16.92 with 9 degree of freedom at 0.05 alpha level.

iii. Consistency of recreational exercise significantly influence the health status of pregnant women antenatal session in Ilorin Metropolis with calculated x2 value of 53.408 >16.92 with 9 degree of freedom at 0.05 alpha level.

Based on the findings, the study concluded that knowledge of recreational exercise, achievement of recreational exercise and consistency of recreational exercise significantly influenced the health status of Pregnant women in Ilorin metropolis Kwara state. The study recommended based on the conclusion that recreational exercise for pregnant women should be approved in various sporting organizations and gyms, in order to reduce health problems faced by women during childbirth or after birth, pregnant women should be encouraged to engage in light recreational exercise and make it a daily routine to enable them prevent excess weight gain during pregnancy and maternal morbidity.

KEY WORDS:
Effect: Recreational exercise: Pregnancy: Antenatal clinic.

CHAPTER ONE
INTRODUCTION

Background to the Study

Pregnancy is a time that women's lives are associated with considerable physiological and psychological changes which may promote sedentary behaviours and low levels of physical activity. When women are in state, the body experiences dramatic physiological and psychological changes which are natural at that particular point in time to maintain healthy life styles. The pregnant woman must indulge in regular personal and recreational activities called exercise. In country like Brazil, her Ministry of Health stipulates that in addition to consultation and antenatal care, breathing and relaxation techniques should be taught for better control of labour and general well-being of its people living with fetus (*de Souza, Nery, Gomides, da Silva, de Moraes Forjaz, Mion, & Tinucci, 2010).*

Exercise is beneficial to the health of individuals across all ages, it is even more critical for pregnant women because partially a sedentary lifestyle places them at increases risks of pregnancy related health complications which may compromised baby's health. Exercise is a physical or mental activity that when one engages in and is capable to make us stay healthier and stronger. Exercise session in antenatal session should be designed to stimulate and address any would be physical changes occurring to promote body awareness and to facilitate physical and mental relaxation of the expectant mothers. Exercise has been known scientifically and physically to promote prompt blood circulation of the mother through the fetal vital organs such as the brain, liver and heart among others. Exercise also improve pelvic bones and muscle tone thus enhancing normal safe delivery of baby the mother finally falls into labour.

Exercise as found to be part of fundamental components of antenatal care routine in the day to day activities. However, women's physical activity lessens, as the perception of risk in pregnancy without exercising is high (Motolla and Mclaughlin, 2011). Down, Chasan-Taber, Evenson, Leiferman & Yeo, (2012), affirmed that lifestyle intervention targeting physical activity have the potential to prevent gestational diabetes, pre-eclampsia and excessive gestational weight gain in pregnant women. The International Association of Diabetes and Pregnancy Study Group Consensus Panel, (2010) reported estimated 18 percent of all pregnant women will be diagnosed with gestational diabetes mellitus (GDM). Excessive gestational weight gain has a risk factor for gestational diabetes mellitus while pre - eclampsia is one of the hypertensive disorders that women with gestational diabetes mellitus can develop during first trimester periods. In light of the increasing prevalence of these disorders, and their relationship to increasing obesity rates, the need to identify strategies that might trigger it off as well as their short and long term sequel for the mother and the offspring becomes critical (Evenson and Wen, 2010).

Antenatal exercises are those activities that are performed by pregnant women to improve their strength and fitness. During pregnancy, there are several changes in

the pregnant women's body due to effects of hormonal changes experiencing in pregnancy. Increased progesterone and relax in (hormones of pregnancy) during pregnancy reduce support and increased mobility in structures to which muscles and tendons are attached. Examples include softening of the cervix, mobility of the syphilis pubis, and relaxation of the joints of the pelvis and lower back especially the sacroiliac joints (Ribeiro and Milanez, 2011, Dignon and Reddington, 2013). Other changes occur in different organs of the body causing some discomfort in the pregnant women. Some of the minor discomforts in pregnancy include; low back pain, loss of balance, edema, weakness of the pelvic floor muscles, urinary incontinences, sciatica among others. These discomforts can be relieved through appropriate antenatal exercises.

The American Congress of Obstetrician and Gynecologists (2015) recommended that pregnant women can exercise moderately for thirty minutes on most days of the week. This report further stated that most distinct changes in pregnancy are increased weight gain, and a shift in the centre of gravity that results in Lordosis. Some of the recreational exercises recommendations during pregnancy include; breathing exercise, aerobics, pelvic floor exercise, brisk walking, and indoor stationary cycling among others (Nkhata, Nkadu Schula & Mweshi, 2016). Breathing exercise ensures a steady intake of oxygen as well as prepares the woman for the need to maintain uniform and rhythmic breathing before and during labour. Pelvic floor exercise reduces the possibility of urinary incontinence or difficulty with postpartum urination and helps prevent the prolapse of the uterus (Down, Chasan-Taber, Evenson, Leiferman & Yeo, 2012). Another importance of the pelvic floor exercise is their active contraction to enhance enjoyment during coital activity and reflex contraction during orgasm (Evenson & Wen, 2010).

Aerobics such as brisk walking and cycling improves cardiovascular fitness and endurance (Ribeiro & Milanez, 2011). The effects of these exercises on the fetus are also enormous. Green (2015) submitted that breathing and relaxation exercises that were widely used and were most successful for the relief of labour pain and to enhance better emotional well-being. The health of the mother and that of the foetus is improved when the mother performs some simple exercises during pregnancy.

In another perception, some less informed mothers believed that exercise increases risks associated with pregnancy, Evenson and Wen (2010) asserted that these beliefs have not been proved scientifically and that not only is exercise during pregnancy safe but it is beneficial for both the mother and the unborn baby. Nkhata, Nkandu & Schula (2015), confirmed that babies born from exercising women seem energetic, calmer, more intelligent with improve neurological and mental development and adapt faster to the outside world. These benefits generated from exercise notwithstanding, pregnant women in the study area seem not to be engaging in most of these exercises. Abugu, Abah, Ekong, Echezona, Ugwu & Ejeh (2016) reported that low proportion (pelvic floor exercise - 27.8%, static cycling-19.7%,

swimming - 9.2%) of pregnant women in Enugu State engaged in some of these exercises during pregnancy. This could be as a result of their beliefs and attitudes towards antenatal exercise.

The concept of education plays a significant role in the perceptive and the level of Knowledge of pregnant women. Wilson (2015) describes knowledge are placed in contrast with practice or experience, emphasizing the distinction between these two operations in both meaning and purpose. Knowledge is critical to man's quality of life because everything that is done depends on knowledge. Knowledge is the sum of conceptions, views and propositions which have been established and tested. In the context of this study, knowledge refers to the act of having adequate information and understanding of the concept of focused antenatal care services. This knowledge can be obtained through health education, electronic media, prints and health education programmes.

Regular exercise is one of the best things you can do for your health. It has many benefits, including improving your overall health and fitness, and reducing your risk for many chronic diseases. There are many different types of exercise; it is important that you pick the right types for yourself. Most people benefit from a combination of them:

- **Endurance, or aerobic,** activities increase your breathing and heart rate. They keep your heart, lungs, and circulatory system healthy and improve your overall fitness. Examples include brisk walking, jogging, swimming, and biking.
- **Strength, or resistance training,** exercises make your muscles stronger. Some examples are lifting weights and using a resistance band.
- **Balance** exercises can make it easier to walk on uneven surfaces and help prevent falls. To improve your balance, try tai chi or exercises like standing on one leg.
- **Flexibility** exercises stretch your muscles and can help your body stay limber. Yoga and doing various stretches can make you more flexible.

Fixing regular exercise into your daily schedule may seem difficult at first. One can start slowly, by breaking one exercise time into repetitions. Even doing ten minutes at a time is fine. One can work more on doing the recommended amount of exercise. World Health Organization (2020) guidelines and recommendations provide details for different age groups and specific population groups on how much physical activity is needed for good health. WHO (2020) recommends:

All pregnant and postpartum women without contraindication should:

- do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week
- incorporate a variety of aerobic and muscle-strengthening activities

- should limit the amount of time spent being sedentary. Replacing sedentary time with physical activity of any intensity (including light intensity) provides health benefits.

However, how much exercise one need depends on individual age and health (United State, National Library of Medicine, 2017). Physical exercises are generally grouped into three types, depending on the overall effect they have on the human body (*National Institutes of Health, 2006).*

Consistency is disposition or state of mind. When an individual takes to a skill or duty regularly, it then becomes internalized and turned to an attitude. Antenatal exercise therefore means the pregnant women's disposition towards antenatal exercise. This disposition can be favourable or unfavourable, positive or negative. Attitude influences behavioural change. Behavioural change is difficult in individuals who have the appropriate knowledge and skills to perform the behaviour but are still unable to do so due to competing barriers. Studies suggested that perceived barriers which can affect engagement in antenatal exercise include physical discomfort from nausea, fatigue, beliefs such as inferiority and superiority complex, embarrassment about appearances, uncertainty about how to exercise safely during pregnancy, concern about injury, lack of or incorrect information from health care providers, lack of care due to child care commitments (Evenson, Moos, Carnet & Siena-Rizl, 2014; Vladutiu, Evenson & Marshall, 2010; Leifermann Swibas, Marshall, & Dunn, 2011). Other factors that can metamorphose to inability to engage in antenatal exercise could be number of children, mothers' occupation, age and educational level. These later factors will be investigated in this study.

Recreational exercise during pregnancy improves cardiovascular fitness, limits weight gain, and improves attitude and mental state, easier and less complicated birth and a speedy postnatal recovery. Miles, (2020) pointed out that the pregnant woman should be advised to exercise for physical fitness during the antenatal visit, they should be asked about what they do daily, recreational and work related exercises and plans for changes during pregnancy. There are fetus benefits from maternal exercise in pregnancy which include decreased growth of the adipose tissue, improved stress tolerance and advanced neuro-behavioural relaxation. Furthermore, general benefits of exercise during pregnancy are relief of pain, strengthened muscles in preparation for labour and support for loosened joints, enhanced circulation, no traces of swollen of legs increased flexibility, increased capacity (endurance), increased energy level, combats fatigue, decreases muscle tension, promotes relaxation and a positive self-image.

Studies have recommended that women should initiate and consistently exercise in most pregnancies as it is safe for mother and not harmful to the fetus. The health benefits of physical and recreational 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. Furthermore, exercise in pregnancy is correlated with a decrease in many common problems of pregnancy and the stress of exercises produces certain adaptation such as healthier placenta and increased ability to deal with short decrease in oxygen.

Statement of the Problem

In spite of the fact that recreational exercise programmes during pregnancy and after childbirth are designed to minimize impairment and help the woman maintain and regain functional while she is preparing for the arrival of a new baby and then caring for the infant, it is submitted that pregnant women are not meeting the exercise recommendations of the previous studies (American Congress of Obstetrician and Gynaecologists, 2015). Some recreational exercises recommendations during pregnancy include; breathing exercise, aerobics, pelvic floor exercise, brisk walking, and indoor stationary cycling among others (Nkhata, Nkadu Schula & Mweshi, 2016). A myriad of factors not limited to beliefs and attitudes of women with respect to exercise in pregnancy, level of knowledge, level of education, safety concern of the pregnant woman and her physician, race/ethnicity, and previous involvement in regular exercise have been implicated as important factors predisposing to exercise engagement or phobia among pregnant women. Jhangiani and Tarry (2014) viewed principles of self-perception to help understand how Joachim (2011) is interpreting behaviour, as such identifying factors that affect beliefs and behaviours would objectively encouraging a change in attitude. Therefore, an assessment of knowledge and attitude about exercise in pregnancy may help to determine whether or not women will participate in exercise during and after pregnancy.

Several studies have been carried out on the important of exercise among pregnant women such as: Okafor and Goon (2020) recreational exercise as a modifiable health risk factor has been shown to contribute to the maternal health of women and their offspring. The findings of the study revealed that levels of participation in recreational exercise during pregnancy are low and decline as the pregnancy progresses. The majority of the studies used direct, objective measures to assess exercise during pregnancy. Personal and environmental factors such as lack of time, lack of knowledge, inadequate information from healthcare providers, feelings of tiredness and an absence of social support constituted the main barriers to exercise during pregnancy (Ruchat, Mottola, Skow, Nagpal, Meah & James, 2018).

Mbada, Adebayo, Adeyemi, Arije, Dada, Akinwande, Awotidebe & Alonge (2014) worked on knowledge and attitude of Nigerian pregnant women towards antenatal exercise: a cross-sectional survey. The findings of the study revealed that majority of Nigerian pregnant women demonstrated inadequate knowledge but had positive attitude towards antenatal exercises. Knowledge about benefits and contraindications

to antenatal exercises significantly influenced the attitude towards exercise in pregnancy.

Adinma, Adinma, Umeononihu, Oguaka and Oyedum (2018) conducted a study on perception and practice of exercise during pregnancy by antenatal women in Southeastern Nigeria. The findings of the study revealed that majority of the antenatal women in the population studied engage in exercise, this is oftentimes restricted to "walking". In addition, a number of the respondents had negative perception as to the value of exercise in pregnancy. There is an urgent need to educate the women during the pre-conception and early pregnancy periods to initiate, sustain, modify and expand the range of exercises undertaken while pregnant. This will go a long way to avail the women and their unborn babies the potential benefits associated with attaining the recommended level of exercise in pregnancy.

To the best of the researcher's knowledge not much research works have been directed towards the effect of recreational exercise among pregnant women antenatal sessions in Ilorin metropolis. This indicates the need for more to be done; therefore, this study intends to fill the gap left by previous researchers by examined the recreational exercise indices on health status of pregnant women ante - natal sessions in Ilorin metropolis, Kwara state. Antenatal exercise is of benefit to every pregnant mother. Dianne & Myles (2014) posited that exercise can reduce the length of labour, shorten the recovery time and even help with post-partum weight management. The physiotherapists in the hospital always come to the clinic as early as possible but they usually meet only few pregnant mothers because they come late to the clinic for the exercise as they see little or no need for antenatal exercise. The purpose of this study therefore is to know the recreational exercise indices on health status of pregnant women ante - natal sessions in Ilorin metropolis, Kwara state

Specifically the study aims:

Objective of the Study

The main objective of this study investigated recreational exercise indices on health status of pregnant women ante - natal sessions in Ilorin metropolis, Kwara state. Specifically the study aims:

1. to assess the knowledge of recreational exercise on health status of pregnant women antenatal session in Ilorin metropolis in Kwara state.
2. to evaluate the effectiveness of recreational exercises on health status of pregnant women antenatal session in Ilorin metropolis in Kwara state.
3. to examine the consistency of recreational exercises on health status of pregnant women attending antenatal session in Ilorin metropolis in Kwara state

Research Questions

The following research questions were raised to guide the study.

1. Does knowledge of recreational exercise have influence on health status of pregnant women antenatal session in Ilorin metropolis in Kwara state?

2. Does effectiveness of recreational exercise have influence on health status of pregnant women antenatal session in Ilorin metropolis in Kwara State?
3. Does consistency of recreational exercise recreational exercises on health status of pregnant women antenatal session in Ilorin metropolis in Kwara state?

The following hypotheses were tested in the study.

1. Knowledge of recreational exercise will not significantly have influence on health status of pregnant women antenatal session in Ilorin metropolis in Kwara state.
2. Effectiveness of recreational exercises will not significantly have influence on health status of pregnant women antenatal session in Ilorin Metropolis in Kwara state.
3. Consistency of recreational exercises pregnancy will not significantly have influence on health status of pregnant women antenatal session in Ilorin Metropolis in Kwara state.

Descriptive research design of survey type was employed and a study population comprised of the entire aggregation of cases that a researcher is interested in (Bell, Audrey, Gunnell, Cooper & Campbell 2019). The population for this study consisted of 350 pregnant women that were randomly selected from the total of 3,000 pregnant women attending antenatal sessions at University of Ilorin Teaching Hospital and General Hospital Ilorin, Kwara state. Purposive sampling technique was used to select 250 and 100 respondents respectively from the two Hospitals selected; University of Ilorin Teaching Hospital (UITH) and General Hospital Ilorin. Records from the hospitals indicated that at least 30 pregnant women registered for antenatal weekly but lesser than that at the general hospital. The total number of registered pregnant women was 3,000 out of which 350 respondents was selected for the purpose of this study.

Researchers - developed Questionnaire was adopted and Psychometric properties are those qualities or characteristics that are used to standardize psychological instruments such as tests, questionnaire, and inventories among others. The instrument was validated and subjected to pilot study using test re-test to examine the reliability of the instrument. Coefficient of .78 was obtained. The instrument was administered on the three hundred and fifty respondent attendants at UITH and General Hospital, Ilorin as randomly selected. The data collected was subjected to appropriate statistical analysis. Descriptive statistics of frequency, percentage and chi square (x^2) were employed to analyze the formulated hypotheses at 0.05 level of significance.

RESULTS AND DISCUSSION OF FINDINGS

The chapter discussed the data analysis, interpretation of the data collected, results and discussion of findings on recreational exercise indices on health status of pregnant women ante - natal sessions in Ilorin metropolis, Kwara state. The descriptive statistics of frequency and percentage was used to answer the research questions. The hypotheses formulated for the study were tested using inferential statistics of Chi-square at 0.05 level of significance.

Results

Testing of Hypotheses

Hypothesis 1: Knowledge of recreational exercise will not significantly influence on health status of pregnant women antenatal session in Ilorin metropolis.

Table 1: Chi-square analysis on Knowledge of recreational exercise will not significantly influence on health status of pregnant women antenatal session in Ilorin metropolis.

S/N	ITEMS	SA	A	D	SD	ROW TOTAL	df	CAL. VAL	CRI. VAL	REMARK
1	Recreational exercise enhances muscular strength	85	225	30	6	346 (100%)				
2	Recreational exercise increases risk of urinary incontinence during pregnancy	47	253	44	2	346 (100%)	9	**67.288**	16.92	Ho Rejected
3	Recreational exercise improves ability to cope with labor and delivery	123	191	25	7	346 (100%)				
4	Recreational exercise improves posture and balance during pregnancy	58	257	29	2	346 (100%)				
	Column Total	313 (22.6%)	926 (66.9%)	128 (9.2%)	17 (1.3%)	1384 (100%)				

P > 0.05

Table One revealed that 22.6% of the respondents strongly agreed that knowledge of recreational exercise will not significantly influence health status of pregnant women antenatal session in Ilorin Metropolis, 66.9% agreed, 9.2% disagreed while 1.3% strongly disagreed. Also, the calculated chi-square value was 67.288 is greater than the critical table value of 16.92 with 9 degree of freedom at 0.05 level of significant. Therefore, the stated hypothesis one is not accepted which means recreational knowledge of exercise will significantly influence the health status of pregnant women antenatal session in Ilorin Metropolis in Kwara State.

Hypothesis 2: Effectiveness of recreational exercises will not significantly influence on health status of pregnant women antenatal session in Ilorin Metropolis in Kwara state.

Table 2: Chi-square analysis on Effectiveness of recreational exercises will not significantly influence on health status of pregnant women antenatal session in Ilorin Metropolis in Kwara state.

S/N	ITEMS	SA	A	D	SD	ROW TOTAL	df	CAL. VAL	CRI. VAL	REMARK
1	Recreational exercise during pregnancy reduced back pain	119	166	55	6	346 (100%)				
2	Recreational exercise during pregnancy improved sleep	54	226	62	4	346 (100%)	9	**62.537**	16.92	Ho Rejected
3	Recreational exercise during pregnancy improved health	118	195	27	6	346 (100%)				
4	Recreational exercise prevent excess weight gain during pregnancy	90	220	30	6	346 (100%)				
	Column Total	381 (27.5%)	807 (58.3%)	174 (12.6%)	22 (1.6%)	1384 (100%)				

Table two revealed that 27.5% of the respondents strongly agreed that recreational exercise will not significantly influence the health status of pregnant women antenatal session in Ilorin metropolis, 58.3% agreed, 12.6% disagreed while 1.6% strongly disagreed. Also, the calculated chi-square value was 62.537 is greater than the critical table value of 16.92 with 9 degree of freedom at 0.05 level of significant. Therefore, the stated hypothesis two unacceptable which means effectiveness of recreational exercise will significantly influence the health status of pregnant women antenatal session in Ilorin metropolis.

Hypothesis 3: Consistency of recreational exercise will not significantly influence on health status of pregnant women antenatal session in Ilorin Metropolis.

Table 3: Chi-square analysis on Consistency of recreational exercise will not significantly influence on health status of pregnant women antenatal session in Ilorin Metropolis.

S/N	ITEMS	SA	A	D	SD	ROW TOTAL	df	CAL. VAL	CRI. VAL	REMARK
1	Recreational exercise enhances muscular strength	85	225	30	6	346 (100%)				
2	Recreational exercise increases risk of urinary incontinence during pregnancy	47	253	44	2	346 (100%)	9	**67.288**	16.92	Ho Rejected
3	Recreational exercise improves ability to cope with labor and delivery	123	191	25	7	346 (100%)				
4	Recreational exercise improves posture and balance during pregnancy	58	257	29	2	346 (100%)				
	Column Total	313 (22.6%)	926 (66.9%)	128 (9.2%)	17 (1.3%)	1384 (100%)				

Table three revealed that 22.6% of the respondents strongly agreed that consistency of recreational exercise will not significantly influence the health status of pregnant women antenatal session in Ilorin Metropolis 66.9% agreed, 9.2% disagreed while 1.3% strongly disagreed. Also, the calculated chi-square value was 67.288 is greater than the critical table value of 16.92 with 9 degree of freedom at 0.05 level of significant. Therefore, the stated hypothesis three is not accepted which means knowledge of benefits of exercise will significantly influence the consistency of recreational exercise will not significantly influence the health status of pregnant women antenatal session in Ilorin Metropolis

Discussion of Findings

This research investigated the recreational exercise indices on health status of pregnant women ante - natal sessions in Ilorin metropolis, Kwara state.

Ho_1 stated that knowledge of recreational exercise will not significantly influence the knowledge of recreational exercise on health status of pregnant women antenatal session in Ilorin metropolis. Based on data gathered, it was indicated that calculated value of 62.537 is greater than table value of 16.92 with 9 degree of freedom and 0.05 level of significance. Therefore, the hypothesis is not accepted. This result affirms the findings of Mbada, Adebayo, Adeyemi, Arije, Dada,

Akinwande, Awotidebe & Alonge, (2014) that found a significant association between attitude and knowledge about benefits and contraindications to physical exercise, majority of Nigerian pregnant women demonstrated inadequate knowledge but had positive attitude towards antenatal. Knowledge about benefits and contraindications to physical exercise significantly influenced the attitude towards exercise in pregnancy.

Ho_2 stated that effectiveness of recreational of exercise will not significantly influence the health status of pregnant women antenatal session in Ilorin Metropolis.. Based on data gathered, it was disclosed that calculated value of 67.288 is greater than table value of 16.9 with 9 degree of freedom and 0.05 level of significance. Therefore, the hypothesis is hereby unacceptable. This implies that effectiveness of recreational exercise significantly influence the health status of pregnant women antenatal session in Ilorin Metropolis.. This connotes that effectiveness of recreational exercise will significantly influence the health status of pregnant women antenatal session in Ilorin metropolis. This result is in line with the assertion of Okafor and Goon (2020) that physical exercise will be used interchangeably to mean the same thing, as the pregnant woman engages in both for the improvement of maternal outcomes. The purpose of this study was to conduct a narrative literature review on the level of physical exercise participation during pregnancy in Africa.

Ho_3 stated that consistency of recreational exercise will not significantly influence the health status of pregnant women antenatal session in Ilorin Metropolis. Based on data gathered, it was clear that calculated value of 53.408 is greater than table value of 16.92 with 9 degree of freedom and 0.05 level of significance. Therefore, the hypothesis is not accepted. This implies that some personal factor during pregnancy will significantly influence the attitude of pregnant women towards recreational exercise. Thus this finding collaborate with that of Okafor and Goon (2020) that opined that various factors have been shown to influence physical exercise participation among pregnant women, including low maternal education, unemployment, pregnancy symptoms/discomforts, multiparity, lack of strength or fatigue, lack of time, lack of motivation, and safety concerns or fear. Some studies have reported cultural and religious beliefs, lack of social support and other responsibilities. In addition, studies reporting environmental barriers to physical exercise during pregnancy cited lack of access to facilities/resources, and bad weather conditions.

Conclusion

Based on the findings of this study these conclusions were reached;

1. Knowledge of recreational exercise greatly influence the health status of pregnant women antenatal session in Ilorin metropolis Kwara State based on educational level.

2. Effectiveness of recreational exercise enhances immensely health status of pregnant women antenatal session in Ilorin metropolis Kwara State based on exposure.
3. Consistency of recreational promotes the health status of pregnant women antenatal session in Ilorin metropolis Kwara State based on background orientation.

Recommendations

The following recommendations were made based on the findings of this study;

1. Efforts should be intensify in creation of awareness by regular organization of workshop, clinic, seminars on recreational exercises for pregnant women at this axis as majority of them are less informed and those informed should be updated.
2. In order to reduce health problems during childbirth or after birth, recreational exercise should be done during antenatal checkups and also physical and health practitioners should be available to encourage pregnant women to take part in making it a daily routine.
3. Keeping regular records of engagement of recreational exercises always prevent excess weight gain during pregnancy for safe delivery of healthier babies.

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