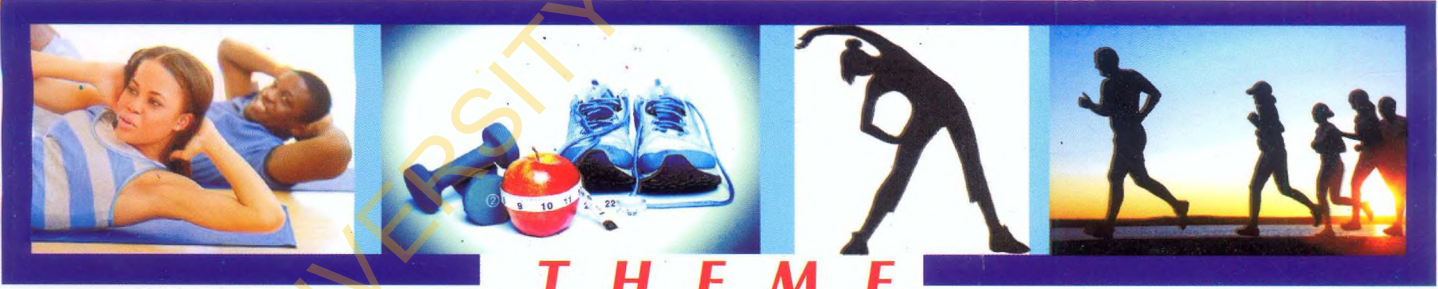


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T H E M E

EXERCISE IS MEDICINE

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CONDITIONING THE BODY FOR SAFE- DELIVERY: AN ASSESSMENT OF PREGNANT WOMEN'S KNOWLEDGE ON THE BENEFIT OF EXERCISE DURING PREGNANCY IN IBADAN, OYO STATE.

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Abstract

Pregnancy is one of the most awaited stages in a woman's life. It is also one of the most delicate phases of life, and that is why it is crucial to ensure fitness and wellbeing at this stage. It is very necessary for pregnant women to condition their bodies for safe delivery through light physical activities and exercises to provide a stress-less antenatal and healthy gestation phase. Therefore, this study was conducted to assess knowledge of pregnant women attending the ante-natal clinic at Adeoyo State Hospital on the benefit of exercise. The study adopted the descriptive survey research design. Purposive sampling technique was used to select two hundred (200) pregnant women attending ante-natal clinics at Adeoyo State Hospital, Ibadan. An interviewer-administered semi-structured questionnaire was used for data collection. Research questions one and two sought to know if respondents engaged in any form of exercise while three other research questions were raised to assess their knowledge on the benefit of exercise on physical fitness, sleep and depression during pregnancy. Data were presented in percentages. Overall, 77% of the respondents revealed that they did engage in exercises but 58% in the form of walking. The majority (71%) of the participants agreed that exercise has a positive effect on sleep. 70% viewed exercise as beneficial in reducing depression. Also, 56% agreed that exercise could prevent weight gain and improve physical fitness in pregnancy. This study shows that the respondents know the benefits of exercise during pregnancy and walking as a form of exercise. It was recommended that the Department of Human Kinetics and Health Education should focus on encouraging primary care physicians and other health care providers to include physical activity when designing treatment plans for pregnant women and referring their patients to credentialed Exercise and Health Fitness Professionals.

Keywords: benefit, conditioning, exercise, knowledge, safe-delivery, pregnancy

Introduction

Pregnancy is one of the most awaited and delicate stages in a woman's life. It is a period of carrying a developing embryo or foetus in the female body. There can be multiple gestations as in the case of twins or triplets. The term of pregnancy is usually associated with symptoms such as depression, back pain, morning sickness, fatigue, skin changes, swelling, gestational diabetes, constipation, sleep problem, joint and muscle complaints. These symptoms make pregnancy a delicate phase as studies have shown that worldwide

each year, the lives of eight million women are threatened, and more than two million are related to pregnancy and childbirth (WHO, 2001; Pennick & Young, 2007). During pregnancy, insufficient or excessive weight gain can compromise the health of the mother and the foetus. It is therefore vital to ensure fitness and wellbeing at this stage.

Maintaining an optimal level of wellness is crucial to the health of the pregnant woman; and this will guarantee safe delivery. Wellness has been described as a mindset, a predisposition to adopt a series of key

principles in varied life areas that lead to high levels of wellbeing and life satisfaction (Adio-Moses, 2013). Indeed, everything a pregnant woman does and every emotion she feels, relates to her well-being. The precise contributions of a sedentary lifestyle and caloric intake to obesity in pregnancy are not clearly understood. What is clear is that an increased level of daily physical activity can impact significantly in ensuring a stress-less and healthy gestation phase. Pregnant women are therefore advised to carry on with light physical activities in the form of daily household works and light walking (Morris and Johnson, 2005).

Modern cultures have embraced the concept of fitness in pregnancy as demonstrated by researchers (Yeo and Steele 2000; Gleeson, 2007; Buman and King, 2010). Scientific literature supports the contention that regular exercise during pregnancy incurs little risk and is beneficial regarding both mental and physical health. Exercise during pregnancy helps to alleviate many problems associated with pregnancy by keeping the heart and lungs working well and also strengthens the muscles and joints to make supporting the baby easier and comfortable (Leiferman and Evenson, 2003; Morris and Johnson, 2005; Royal College of Obstetricians and Gynecologists, 2006).

They also stated that exercise improves circulation which prevents constipation, prevents back pain by strengthening the muscles that support the back. Other researchers (Praag, Kempermann and Gage, 1999; Clapp and James 2002) reported that exercise allows for better sleep, improves mood, reduces depression, reduces ankle swell, leg cramps and helps to prepare for childbirth. According to Devos, Singh, Ross and Stavrinou (2005), the benefits of exercise to the mother include improved attitude and mood, relaxed and less complication during labour, quick recovery and improve fitness. They explained that besides these advantages to the mother, the placenta which brings nutrients and oxygen through the umbilical cord to the foetus is larger and more extensively developed in women that exercise during pregnancy. Research by Boscaglia, Skouteris and Wertheim (2003)

showed that pregnant women who exercise on a regular basis demonstrate a significantly higher level of body image satisfaction because they may respond in a favourable manner to changes in their body in comparison to women who remain sedentary.

The Royal College of Obstetrics and Gynaecology (2006) also states that women should be encouraged to exercise at a moderate level to derive the associated health benefits including cardiovascular fitness, maintenance of healthy weight range and improvement in body posture. The study by Makinde, Adeyemo and Ogundele (2014) revealed that there were significant relationships between perceptions of pregnant mothers and the various usefulness of prenatal exercise. The variables used as value or benefits of exercise are faster labour, preparation for labour endurance, reduction in weight gain, relief of fatigue, swelling and back pain, increased blood circulation and prevention of gestational diabetes, decreased use of labour medication, reduced preterm labour and promotion of sleep.

Moderate exercise is known to be beneficial for health and the benefits of regular exercise far outweigh the risks during pregnancy. The American College of Obstetrics and Gynaecology (2002) recommends 30 minutes or more of moderate exercise a day for most, if not all, days of the week for pregnant women. It helps in the maintenance of cardiovascular fitness, healthy weight range, and increase in both endurance and stamina. It also helps in better glucose utilisation by increasing insulin sensitivity (Hartman and Bung, 1999; Goodwin, Astbury and Meekan, 2000; Bungum, 2000; Marquez, Sterling, Penny, Halberstein and Signonle, 2000; Dempsey, 2005).

The benefits of exercise far outweigh the disadvantages. Indeed it is clear that exercise during the childbearing year is not harmful to either the mother or the foetus if the pregnancy is normal and the mother healthy (Brown, 2002). Therefore, it is imperative for pregnant women to carry on with moderate physical activities and exercises to ensure a stress-less and healthy gestation phase. Maintenance of good posture assists in decreasing common discomforts such as

backaches and fatigue. Pregnant women are however warned not to undertake new vigorous activity or exercise which can make them too warm, tired or breathless.

Statement of the problem

In 2015, University of Warwick researchers identified a link between depression in pregnancy and extended periods of sitting down. The study found that those suffering from symptoms of depression during pregnancy are more likely to sit down for extended periods of time in the second trimester. The academics also found this puts them at risk of greater weight gain and contracting gestational diabetes. Gestational diabetes can increase the possibility of birth complications for the mother and baby and so it is important to minimise this risk by reducing the time that pregnant women spend sitting down. Other documented risks involved in sedentary pregnant women may include back pain, sleeping problems, constant nausea, fatigue and constipation.

Records from the Adeoyo State Hospital, Ibadan showed an increase in reported cases of depression, sleeping problems, weight gain and some other complications in pregnancy. Also reported are general body weakness, an increase in caesarean birth and a host of other pregnancy-related health problems. Research has also shown that some of these health problems could be reduced and prevented by adopting a healthy lifestyle that includes exercise. Knowledge of the benefits derivable from exercise is a key factor in accepting exercise as medicine, and pregnant women may not appreciate these benefits in their present condition. This study was conducted to assess the knowledge of pregnant women attending the ante-natal clinic at Adeoyo State Hospital on the risk of a sedentary lifestyle and the benefits of exercise in conditioning their body for safe delivery.

Research Questions

The following research questions were answered:

1. Do pregnant women engage themselves in exercise?

2. What type of exercise do pregnant women attending the ante-natal clinic at Adeoyo State Hospital engage in?
3. Do pregnant women attending the ante-natal clinic at Adeoyo State Hospital know the benefit of exercise on sleep during pregnancy?
4. Do pregnant women attending the ante-natal clinic at Adeoyo State Hospital know the benefits of exercise on depression during pregnancy?
5. Do pregnant women attending the ante-natal clinic at Adeoyo State Hospital know the benefit of exercise on physical fitness and prevention of weight gain during pregnancy?

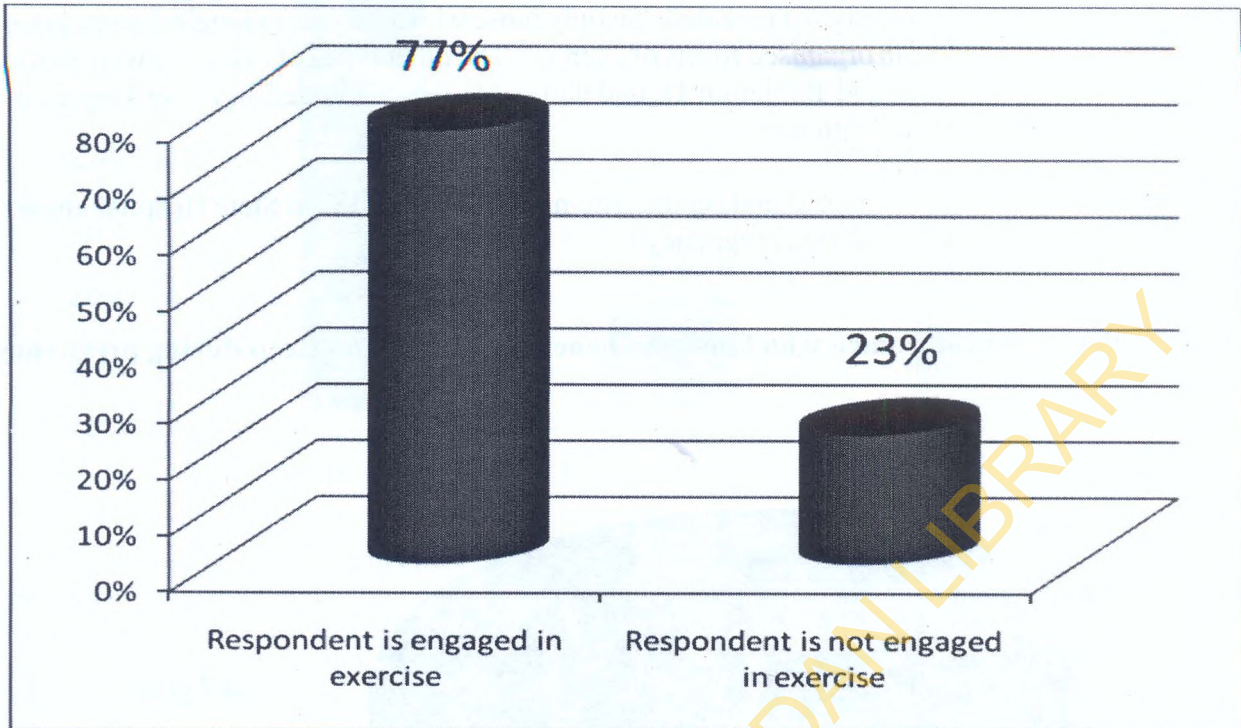
Methodology

The study adopted the descriptive survey research design. The population of the study consists of all pregnant women attending the antenatal clinic in Adeoyo State Hospital in Ibadan. 200 pregnant women were sampled using purposive and convenient sampling techniques. The instrument for data collection was a self-developed questionnaire with sections A and B. Section A collected the demographic data of the respondents, while part B collected information on the variables of the study. The instrument was administered to twenty (20) pregnant women in a private Hospital in Ibadan. It was repeated two (2) weeks after. The data collected was used to estimate the reliability coefficient of the instrument using Pearson product moment correlation which yielded a reliability coefficient of 0.84. The questionnaire was self-administered with the help of three research assistants. A total of 220 copies were administered to the respondents. However, only 200 of the questionnaires were valid for analysis; 5 copies were not returned and the other 15 copies were wrongly filled. The data collected were analysed using descriptive statistics of frequency counts and percentages at 0.05 level of significance.

Results

Research Question 1: Do pregnant women engage themselves in exercise?

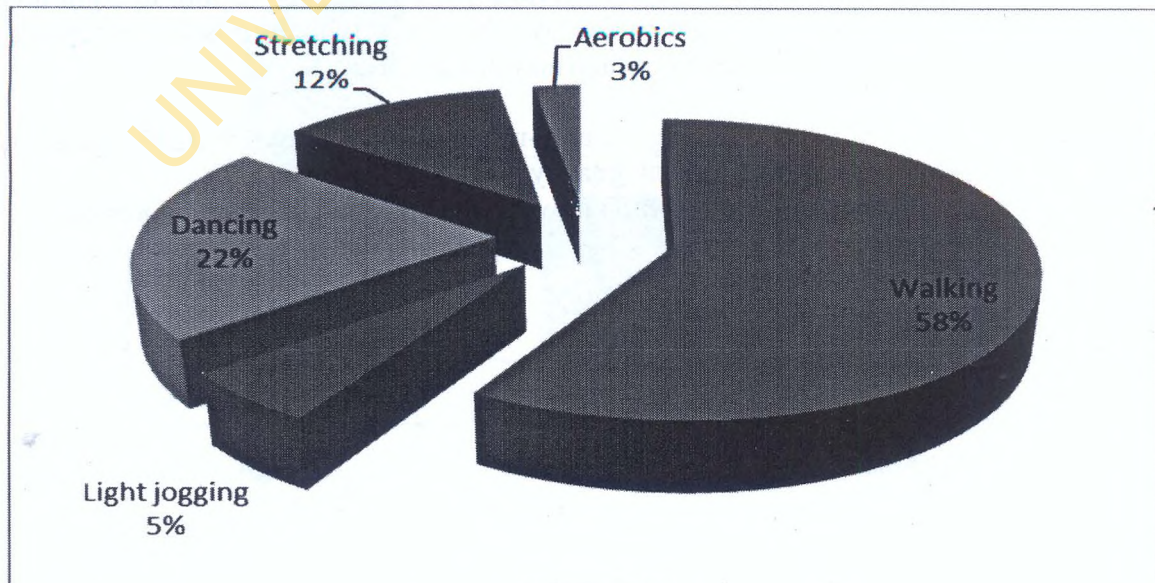
Figure 1: Percentage of respondents' involvement in exercise.



Involvement of the respondents in exercise as shown in figure 1 indicates that 77% of the participants involved themselves in at least one form of exercise while 23% did not. The American College of Obstetricians and Gynecologists (2000) recommends that women with low-risk pregnancies participate in moderate-intensity exercise during their pregnancy. The 23% of pregnant women who did not engage in exercise is of course lower than 77% but significantly important regarding what could go wrong during pregnancy; especially with high reports of maternal mortality during this period. However, one potential reason they gave for not exercising is that exercise during pregnancy is perceived as risky.

Research Question 2: What type of exercise do pregnant women attending the ante-natal clinic at Adeoyo State Hospital engage in the most?

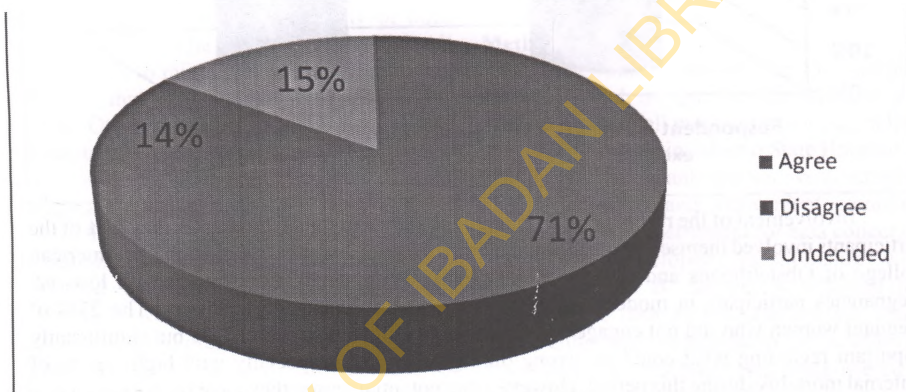
Figure 2: Percentage of type of exercise pregnant women engages in the most?



The result in Figure two indicates that most of the women walked as a form of exercise and further probing revealed that they walked between 30 minutes to 2 hours almost every day or at least four times a week; others revealed 22% dance, 12% stretching, 5% light jogging and 3% aerobics. Other information gathered revealed that only those who took part in jogging, stretching and aerobics were involved in organised forms of exercise. The other types of exercises were work related. Makinde, Adeyemo and Benjamin Ogundele (2014) recommended light walking as a form of daily exercise during pregnancy.

Research Question 3: Do women attending the ante-natal clinic at Adeoyo State Hospital know the benefit of exercise on sleep during pregnancy?

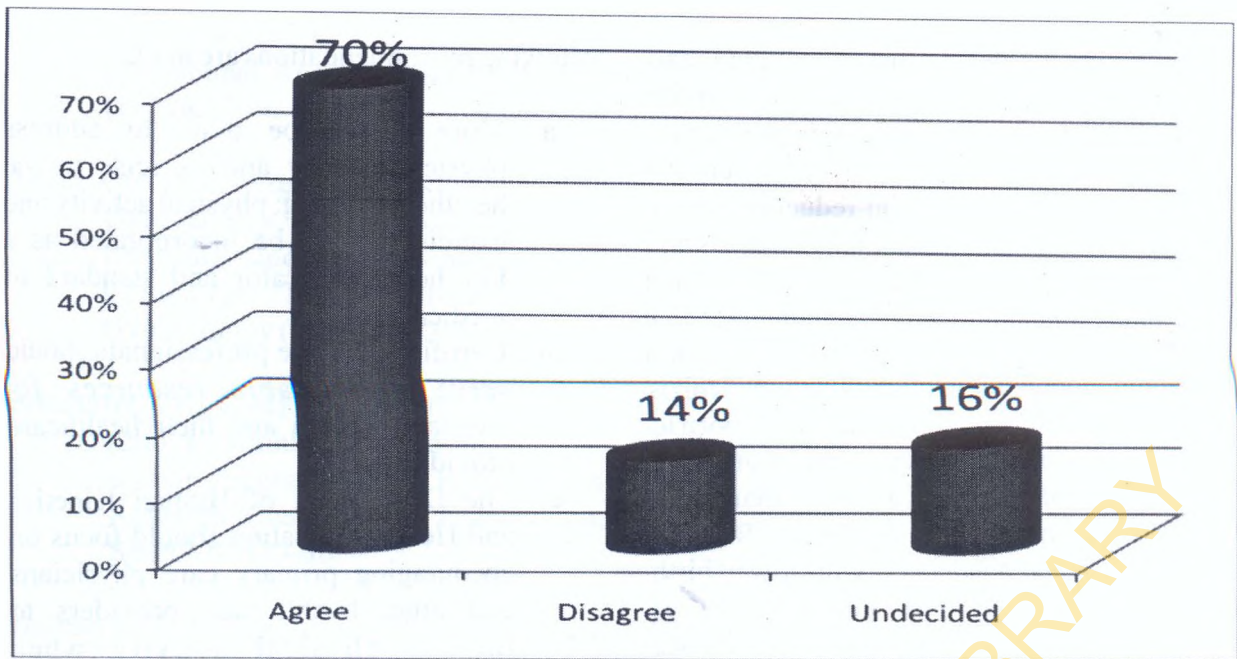
Figure 3: Percentage of women who know the benefit of exercise on sleep during pregnancy



The chart above shows that the majority (71%) of the respondents agreed that exercise would have a positive effect on their sleeping habit during pregnancy, while 14% disagreed and 15% were undecided with this statement. A 2010 review of published scientific research suggested that exercise improves sleep for most people and helps to reduce sleep disorder such as insomnia. Buman and King (2010) advised that the optimum time to exercise may be four to eight hours before bedtime; though exercise at any time of the day is beneficial with the possible exception of heavy exercise taken shortly before bedtime, which may disturb sleep.

Research Question 4: Do women attending the ante-natal clinic at Adeoyo State Hospital know the benefit of exercise on depression during pregnancy?

Figure 3: Percentage of pregnant women who know the benefit of exercise on depression in pregnancy



70% of the respondents perceived exercise to have a positive effect on depression during pregnancy, while 14% disagreed with this and 16% were undecided with this statement. Some factors may contribute to depression during pregnancy. They include a sudden gain in weight, stress and anxiety (Gleeson, 2007). Research has shown that endorphins act as a natural pain reliever and antidepressant in the body. Endorphins have long been regarded as responsible for what is known as "runner's high" (a euphoric feeling a person receives from some form of physical exertion). When a person exercises, levels of both circulating serotonin and endorphins are increased and they are known to stay elevated even several days after exercise is discontinued; possibly contributing to improvement in mood, increased self-esteem and weight management (Praag, Kempermann and Gage, 1999; Clapp and James, 2002). Indeed, exercise alone is a potential prevention method and treatment of mild forms of depression.

Research Question 5: Do women attending the ante-natal clinic at Adeoyo State Hospital know the benefit of exercise on physical fitness and prevention of weight gain during pregnancy?

Figure 4: Percentage of women who know the benefit of exercise in preventing weight gain in pregnancy

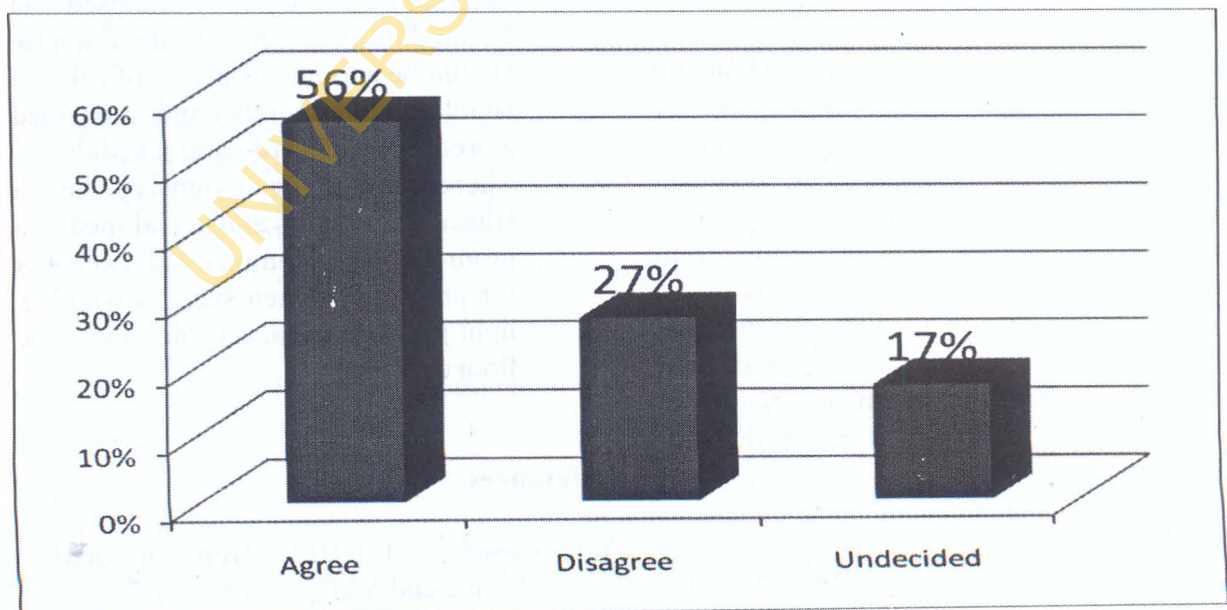


Figure 4 shows that more than half (56%) of the respondents opined that exercise could prevent weight gain in pregnancy. However, 27% did not see any association between exercise and weight reduction, while 17% were undecided. Boscaglia, Skouteris and Werthim (2003) showed that pregnant women who exercised regularly demonstrated a significant decrease in body weight and a higher level of body image satisfaction. Morris and Johnson (2005) revealed that babies born to mothers who exercised while pregnant have been found to have a healthier heart than other infants a full month after delivery. Regular exercise was also associated with lower birth weight and reduced cord concentration of growth related peptide, suggesting an influence of exercise on endocrine regulation of foetal growth (Marquez, Sterling, Penny, Halberstein and Signonle, 2000).

Conclusion

The substantial health benefits (e.g. fewer common side effects of pregnancy such as insomnia, anxiety, and depression) of exercise during pregnancy cannot be over emphasised. This study showed that the knowledge of the benefit of exercise during pregnancy among women attending Adeoyo ante-natal clinic is surprisingly high. Their reported involvement in at least one form of exercise during pregnancy is also relatively high. The result showed an encouraging indication that women in this study are positively disposed to engage in exercise during pregnancy. Health practitioners should therefore encourage exercise among healthy pregnant women by addressing the unique barriers to exercise experienced by pregnant women (e.g. nausea, fatigue, outdated advice that pregnant women should refrain from exercise). For many women, pregnancy is a time for making safe and healthy changes that will improve both their health and that of their unborn child. Therefore, pregnancy may serve as a "teachable moment" for safe delivery among pregnant women.

Recommendation

Based on the findings of this study the

following recommendations are made:

- a. More should be done to address physical activity and exercise in the healthcare setting; physical activity and exercise should be incorporated as a key health indicator and standard of medical care.
- b. Certified exercise professionals should serve as valuable resources for pregnant women and their healthcare providers.
- c. The Department of Human Kinetics and Health Education should focus on encouraging primary care physicians and other health care providers to include physical activity when designing treatment plans for pregnant women and referring their patients to credentialed Exercise and Health Fitness Professionals.
- d. Physical and Health Educators should develop a safe, simple but effective, fun-filled exercise routine application that can be downloaded on a mobile device by gynaecologists and pregnant women to encourage exercise on a regular.
- e. All maternity centres and hospitals should have educational materials that will educate and encourage the belief that physical activity is integral in the prevention and treatments of diseases and should be regularly assessed and "treated" as part of healthcare. Exercise should be adopted as a way of life and should be incorporated and intensified as a core part of a pre-natal schedule.
- f. There should be extensive health education on mass and social media to promote the recommended exercises for pregnant women such as walking, light jogging, yoga, aerobics and some floor exercise.

References

- Adio-Moses R. O. (2013). Trends in Quality Living and Adolescent Safety

- Challenges in Nigerian: Nigerian Journal of Educational Research and Evaluation (12) 185-199.
- American College of Obstetrics and Gynaecology. (2002). Exercise during Pregnancy and the Post- natal period: Committee Opinion Obstetrics and Gynaecology (99)171-173.
- Boscaglia S.L., Feetz D.L. & Pivarmik J.M. (2001). Training Pattern of Athletes during Pregnancy and Post Partum: Research Quarterly for Exercise and Sport 17(1)39-46.
- Buman M.P. & King, A.C., (2010). Exercise as a Treatment to enhance Sleep. American Journal of lifestyle Medicine. 4, (6) 500-514.
- Bungun, T., (2000). Exercise during Pregnancy and Birth. Journal of Obstetric Gynaecology and Neonatal Nursing. 29(3):258-264.
- Clapp J. P. & James M.D., (2002). Exercise through your pregnancy. Addicus Books, Omaha, Nebraska.
- Dempsey J. C. (2005). No need for a Pregnant Pause: Physical activity may reduce the Occurrence of Gestational Diabetes Mellitus and Preeclampsia. Exercise and Sport Science Reviews 33(3) 141-149.
- Devos N., Singh N., Ross D., & Stavrinis T., (2005). Optimal Load for increasing Muscle Power during Explosive Resistance Training in Older Adults. The Journal of Gerontology 60(5) 638-647.
- Gleeson M., (2007). Immune Function in Sport and Exercise. Journal of Applied Physiology 103(2) 693-699.
- Goodwin A., Astbury I. & Meekan M. C., (2000). Body Image in Pregnancy. A comparison of exercise and non exerciser. Australian and New Zealand Journal of Obstetrics and Gynaecology. 40(4)442-447.
- Hartman S. & Bung P. (1999). Physical Exercise during Pregnancy. Physiological consideration and recommendations. Journal of Perinatal Medicine. 27(3)204-215.
- Leiferman J.A. & Everson K.R. (2003). The Effect of regular Leisure Physical activity on Birth outcomes. Maternal and Child Health Journal 7(1) 59-64.
- Makinde O. Adeyemo F. & Ogundele B . (2014).** Perception of Pregnant Mothers Attending Antenatal Clinic On Usefulness Of Prenatal Exercise In Osogbo, Osun State, Nigeria
- Marquez, S., Penny A.C., Halberstion R.A. & Signole B.A. (2000). Physical and psychological changes with vigorous exercise in sedentary lifestyle. Medical Science and Sports (32)58-62.
- Morris S. N. & Johnson N.R., (2005). Exercise during Pregnancy: a critical appraisal of the literature. Journal of Reproductive Medicine. 50(3)181-188.
- Pennick V. E. & Young G. (2007). Intervention for prevention and treating pelvic and back pain in pregnancy (Cochrane review). The Cochrane Database of Systematic Review issue 2.
- Praag H., Kempermann G. & Gage F. H. (1999). Ontogeny running increase cell proliferation and Neuro genesis in the adult mouse dentate gyms. Nature Neuroscience 2(3)266-270.
- Royal College of Obstetrics and Gynaecology (2006). Setting Standards to improve Women's Health. Standard (4) 57-66.
- World Health Organisation, (2001).

Definitions and Indicators in Family Planning, Maternal and Child Health and Reproductive Health. European regional office.

Sedentary lifestyle while pregnant may harm unborn baby: New study (2015). <http://www.dnaindia.com/health/report-sedentary-lifestyle-while-pregnant-may-harm-unborn-baby-new-study-2145768>

Yeo S. & Steel N.M. (2000). Effect of exercise on Blood Pressure in Pregnant Women with a High Risk of Gestational Hypertensive Disorder. *Journal of Reproductive Medicine*. 45(4)293-298.

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