

**Short Communication**

# Physical activity: Utilizing guidelines to promote health among pregnant women

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In recent years, national health policy has changed dramatically in response to public pressure with the topic of physical activity and health promotion emerging as major goals. In order to improve maternal health, healthcare providers must advocate for childbearing women and understand the recommendations on physical activity to enhance women's health. Advanced practice nurses (APNs) must accurately assess a pregnant women's knowledge of health promoting behaviors and level of physical activity to ensure improved health and well-being throughout and following her pregnancy. Healthcare providers must develop strategies to incorporate preventative and health promotion services with pregnant women. Prenatal visits provide an optimal time for women to talk to their healthcare provider about physical activity during pregnancy. Healthcare providers are in a wonderful position to include client teaching, preventative, and health promotion services to patients. Pregnant women in partnership with their healthcare provider should be encouraged to take a more active role in their health, wellness, and lifestyle behaviors.

In recent years, national health policy has changed dramatically in response to public pressure with the topic of physical activity and health promotion emerging as major goals. The World Health Organization (WHO, 2017) defines "physical activity as any bodily movement produced by skeletal muscles that requires energy expenditure" and defines health promotion as "the process of enabling people to increase control over and to improve their health". Health promotion empowers people to engage in new and changing health related behaviors. In order to improve maternal health, healthcare providers must advocate for childbearing women and understand the recommendations on physical activity to enhance women's health. Advanced practice nurses (APNs) must accurately assess a pregnant women's knowledge of health promoting behaviors and level of physical activity to ensure improved health and well-being throughout and following her pregnancy.

Physical activity is considered both desirable and beneficial to improve and maintain health and general well-being. Physical activity is recommended for most pregnant women to help achieve physical health and wellness. It is important for women to understand that regular physical activity should continue when they are pregnant. Equally important is that women understand that even if they weren't physically active prior to pregnancy, it is not too late and they can start engaging in physical activity. Healthcare providers must be aware of strategies to promote health and develop effective interventions to help women adopt healthy lifestyles that address the importance of physical activity. Healthcare providers must address any obstacle and provide an initiative to remove barriers to behavior change. Regular physical activity must be encouraged so the patient will choose to adopt healthier behaviors that will improve and promote health outcomes for both mother and fetus. A healthy lifestyle that balances on-going,

regular physical activity will help women to lead productive, enhanced lives.

It is vital that every pregnant woman has access to and receives safe, quality care throughout pregnancy, childbirth and the postnatal period. During a prenatal visit a comprehensive clinical examination should be completed to ensure that the patient does not have a medical reason to avoid physical activity during pregnancy. In addition, an exercise assessment should be included as part of every initial health history during preconception and prenatal care. During the prenatal visits, it will be helpful for APNs to discuss the woman's pre-pregnancy frequency, duration, and intensity of physical activity and what activities she participates in. It is important for women to speak with their healthcare provider for appropriate education with regard to physical activity during pregnancy including; if it is safe for her to exercise, if so, what exercises are appropriate, what exercises or activities should be avoided, and warning signs that would warrant ceasing exercise. It is important for healthcare providers to encourage women to exercise during pregnancy for its many benefits and to ensure to educate that exercise is safe for most women during pregnancy. Prenatal visits provide an optimal time for women to talk to their healthcare provider about physical activity during pregnancy. It is important for women to recognize the importance of being physically active throughout her pregnancy.

Healthcare providers should consider using interventions designed to help pregnant women make safe and informed choices regarding exercise during pregnancy and must focus on encouraging positive health practices and specific health promoting activities (Olson, Sikka, Hayman, Novak & Stavry, 2009). Information that is obtained during preconception and prenatal care is beneficial for all women and should be viewed as part of a larger healthcare model that promotes improving general health (Moos, 2004). An essential component of improving general health and including the importance of physical activity identified by the CDC (2006) was to improve the knowledge, attitudes, and behaviors of women related to pregnancy. As APNs, we are dedicated to pursuing habits that can help our patients get to a healthier state.

The importance of physical activity during pregnancy is not new. In 1985, a set of guidelines for safe exercise during pregnancy was issued by the American College of Obstetrics and Gynecologists. The American

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College of Obstetricians and Gynecologists (ACOG) continue to recognize the importance of physical activity and the relationship between a woman's physical activity level and improved pregnancy outcomes. ACOG (2015) recommended strategies to promote physical activity among pregnant women. An essential component that the Office of Disease Prevention and Health Promotion identified in the 2008 Physical Activity Guidelines is that any amount of physical activity is beneficial, even if it is 10 minutes of moderate intensity aerobic physical activity (USDHHS, 2008). The physical activity goal of Healthy People (2020) is to improve health, fitness, and quality of life. Although the guidelines do not specifically address pregnant women, the scientific evidence supports participation in moderate- and vigorous-intensity physical activities and muscle-strengthening activities (USDHHS, 2008). The Centers for Disease Control and Prevention (CDC, 2015) recognize the importance of physical activity and the relationship between a woman's preconception health and pregnancy outcomes.

### Implications for physical activity in pregnancy

Despite numerous technological and lifesaving advances in medicine, healthcare providers are still seeing an increasing number of individuals who lead sedentary lifestyles (Gaston & Prapavessis, 2014). Childbearing women may be unaware of the risks involved from lack of or not participating in the recommended physical activity guidelines. The World Health Organization (2017) identified a lack of physical activity as a leading risk factor for death estimating 3.2 million deaths worldwide. Although that statistic is alarming, evidence supports that regular, moderate intensity physical activity has an abundance of health benefits and prevention of diseases including; decreased risk of cardiovascular disease, diabetes, certain cancers, depression, and hip or vertebral fractures (ACOG 2015, CDC 2015, WHO, 2017). ACOG (2015) stated the women who exercise in pregnancy may have a decreased risk of developing gestational diabetes, preeclampsia, and cesarean delivery.

Patients require factual information about the components of a healthy lifestyle and how incorporating regular physical activity in turn will improve the quality and quantity of their lives. Healthcare providers must be knowledgeable and have experience in strategies that promote physical activity, disease, prevention, and health promotion. APNs and other healthcare providers are perfectly positioned to provide ongoing education and counseling to assist women in making fully informed choices and strategies for optimizing their health and well-being (Mattson, 2010). Healthcare providers can enhance the quality of life for millions of women if we can motivate them to exercise regularly, participate in prenatal care, and achieve a sense of fulfillment in their improved health pursuits.

Health promotion and prevention have been and continue to be a major goal in our national health policy. For decades we thought by educating people to understand health risks in terms of lack of physical activity, and the health benefits of exercise that this knowledge would transform their lives. Education is just one of the components in health promotion. Healthcare providers must articulate the most effective health promotion strategies. It is of utmost importance to figure out how to motivate people to want to practice a healthy lifestyle. Another element is to provide the necessary skills for patient's to perform new behaviors necessary and the problem solving skills required to build new habits, overcome obstacles and work through setbacks. As healthcare providers, we can educate patients to create an environment that make healthy choices the quickest and easiest choices. Social cognitive

theory offers both predictors and principles on how to inform, enable, guide, and motivate people to adapt habits that promote health and reduce those that impair it (Bandura, 2004). Pender's (1987) Health Promotion Model also offers an "organizing schema for variables thought to affect the occurrences of positive health practices. APNs can make valuable contributions to the national health promotion effort through continued research, education, and practice to provide and promote positive health practices.

There are guidelines for women to follow with regard to physical activity during pregnancy. The ACOG (2015) recommends most pregnant women achieve 30 minutes of moderate intensity physical activity 5 or more days of the week. The *2008 Physical Activity Guidelines for Americans* provided scientific evidence regarding the health benefits of a physically active lifestyle. The *Guidelines* were the first federal policy from the USDHHS (2008) for physical activity that clearly addressed physical activity as a way for adults and children to improve their health. An Advisory Committee is currently reviewing data with regard to physical activity and health outcomes. In 2018, a second edition of the Physical Activity Guidelines is anticipated to be released. The guidelines specifically address how pregnant women can be physically active and safe. The USDHHS (2008) in collaboration with the Centers for Disease Control and Prevention, the National Institutes of Health and the President's Council on Fitness, Sports and Nutrition recognize the importance of physical activity for adults continue to evaluate scientific evidence and have identified set guidelines for adults. Women must uphold their commitment to incorporating the physical activity guidelines into their day, even if it is 10 minutes at a time.

Although there is evidence regarding the positive aspects of regular physical activity during pregnancy, the discussion of physical activity may only be briefly mentioned during this initial visit since an abundance of information is incorporated at this time. It is vital for healthcare providers to educate pregnant women about the importance of physical activity in pregnancy. Current scientific knowledge supports that routine exercise during pregnancy is not only acceptable but should be encouraged (WHO 2017, ACOG 2015, CDC 2015). When performed regularly by pregnant women, exercise can yield many benefits; reduce backaches, constipation, bloating, and swelling, increase energy, promotes muscle tone, strength, and endurance, improve mood, sleep, and ability to cope with labor (ACOG, 2015).

Available research continues to suggest that childbearing women should be encouraged to include exercise on most days as stated in the guidelines. Considering the known benefits of physical activity, exercise programs should be recommended and initiated for all healthy pregnant women, whether or not they had exercised regularly prior to conceiving. Women need direction and guidance regarding positive health practices during pregnancy. APNs and other healthcare providers should be well informed regarding the physical activity guidelines, since they are in a position to provide this information to clients. During prenatal visits, women should receive general guidelines for physical activity during pregnancy in pursuit of health promotion and well-being. Pregnant women in partnership with their healthcare provider should be encouraged to take a more active role in their health, wellness, and lifestyle behaviors. The importance of physical activity is a major goal that should be included in this changing health system with a focus on health promotion.

### References

1. American College of Obstetricians and Gynecologists. Technical bulletin: Exercise during pregnancy and the postnatal period. Washington DC: ACOG; 1985.

2. American College of Obstetricians and Gynecologists (2015). Physical activity and exercise during pregnancy and the postpartum period. Committee Opinion No. 650. Retrieved from <http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Physical-Activity-and-Exercise-During-Pregnancy-and-the-Postpartum-Period>
3. Bandura A (2004). Health Promotion by Social Cognitive Means. *Health Education and Behavior*, 143-164.
4. Bandura A (1986). Social foundations of thought and action: A Social Cognitive Theory. Englewood Cliffs, NJ: Prentice hall.
5. Centers for Disease Control. (2006). Recommendations to improve preconception health and healthcare. *MMWR*, RR-6.
6. Centers for Disease Control (2015). Healthy pregnant or postpartum women. Retrieved from <https://www.cdc.gov/physicalactivity/basics/pregnancy/>
7. Centers for Disease Control (2015). Physical activity builds a healthy strong America. Retrieved from <https://www.cdc.gov/physicalactivity/downloads/healthy-strong-america.pdf>
8. Evenson KR and Wen F (2010) National trends in self-reported physical activity and sedentary behaviors among pregnant women: NHANES 1999–2006. *Prev Med*. 50: 123-128. [\[Crossref\]](#)
9. Gaston A and Prapavessis H (2014) Using a combined protection motivation theory and health action process approach intervention to promote exercise during pregnancy. *J Behav Med* 37: 173-184. [\[Crossref\]](#)
10. Mattson S (2010) Millennium Development Goals and Global Women's and Infant's Health. *J Obstet Gynecol Neonatal Nurs* 39: 573-579. [\[Crossref\]](#)
11. Moos MK (2004) Preconception health promotion: Progress in changing a prevention paradigm. *J Perinat Neonatal Nurs*, 18: 2-13. [\[Crossref\]](#)
12. Olson D, Sikka RS, Hayman J, Novak M and Stavry C (2009) Exercise in Pregnancy. *Curr Sports Med Rep* 8: 147-153 [\[Crossref\]](#)
13. Pender NJ (1987). Health Promotion in Nursing Practice. Appleton and Lange.
14. U.S. Department of Health and Human Services, & Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report, 2008. Washington, DC: 2008. Retrieved from: <http://www.health.gov/PAGuidelines/Report/>
15. U.S. Department of Health and Human Services (HHS) (2008). Office of Disease Prevention and Health Promotion. 2008 Physical activity guidelines for Americans. Washington, DC. Retrieved from <http://www.health.gov/PAGuidelines>
16. The World Health Organization (2017). Health Promotion. Retrieved from [http://www.who.int/topics/health\\_promotion/en/](http://www.who.int/topics/health_promotion/en/)
17. The World Health Organization (2017) Physical Activity. Retrieved from [http://www.who.int/topics/physical\\_activity/en/](http://www.who.int/topics/physical_activity/en/)