

Pregnancy and Physical Activity: Dispelling the Myths that Disempower Women

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INTRODUCTION

Pregnant women and their unborn babies receive numerous health benefits from physical activity [1]. Though, in spite of the positive health benefits, few women meet physical activity recommendations during pregnancy [2,3]. Moreover, research suggests medical practitioners are key in encouraging women to be physically active and to exercise during their pregnancies [4]. Unfortunately, previous research also suggests medical practitioners may not be encouraging pregnant women in accordance with recommended guidelines [5], nor do medical professionals possess the confidence, ability or knowledge to provide exercise prescription counseling to expectant mothers [4].

In a qualitative study of women who participated in cross-fit while pregnant, participants noted that medical practitioners provided advice and recommendations such as to stop lifting anything heavier than a gallon of milk and to discontinue high intensity interval training as it might harm their baby [6]. Misinformed advice given to physically active pregnant women are not uncommon. Anecdotally, as the first author is currently pregnant, she inquired with her medical professional for recommendations of engaging in physical activity. Specifically, what her target heart rate (THR) and rated perceived exertion (RPE) should be during exercise throughout her third trimester. The practitioner's response was, "I do not know; I've never received this question." She had been practicing medicine for over 10 years.

Research reveals it is common for pregnant women to have some concern about the well-being and health of their babies and what exercise protocols are safe [1,7,8]. Further, current research suggests pregnant women believe leisure-time physical activity during pregnancy (LTPA) is somewhat safe and beneficial. "In contrast, it appears that fewer pregnant women believe in the safety and health benefit of vigorous LTPA, despite evidence that it is not detrimental and may be protective to mother and baby" [1].

Many medical professionals suggest that a proper intensity is one that allows for the woman to have a conversation while exercising (i.e., talk test) [9]; though, any woman who has been pregnant will attest that leisurely climbing 10 stairs might cause her to not pass a talk test. For a woman who has engaged in rigorous physical activity prior to and during pregnancy, the suggestion might seem unnecessarily low considering her physical fitness and experience. Moreover, medical professionals might advise pregnant women to avoid exercises with the use of weights or resistance [9]. Thus, women who have exercised with both their entire adult life might find the recommendation impractical.

Because exercise advice for pregnant women is generally limited and is often vague due to care provider's limited knowledge on the subject [10], women are left to their own devices when deciding whether or not to engage in exercise during pregnancy [11]. However, The American College of Obstetrics and Gynecology (ACOG) [12] states that if a person is healthy and the pregnancy is normal, it is safe to continue and begin most forms of exercise. Entin and Munhall [13] determined that 52% of obstetricians in the United States did not regularly discuss exercise with their pregnant patients. Myths about exercise and pregnancy spread like wildfire especially in the era of social media. The same myths often repeat themselves throughout online forums despite recent research demonstrating the benefits and safety of remaining physically active during pregnancy [11]. Modern research attempts to dispel these myths in order to create an awareness and increase physical activity

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among pregnant women [11].

MYTH 1: REFRAIN FROM EXERCISE IF PREVIOUSLY SEDENTARY

A common myth surrounding exercise and pregnancy states that pregnant women should refrain from exercise if they have lived a sedentary lifestyle prior to becoming pregnant [11]. The ACOG [12] published guidelines stating that sedentary pregnant women can and should exercise but should increase intensity gradually and progressively. The ACOG provides recommendations indicating that pregnant women should reach at least 150 min of moderate-intensity exercise each week. Additionally, according to the American College of Sports Medicine (ACSM), in order to ensure safety of the mother and baby, modifications should be taken when needed as it is important to listen to the body at any stage of pregnancy [14]. Unfortunately, even though pregnancy may be an ideal time to create healthy exercise habits, physicians are often hesitant to encourage sedentary women to exercise during pregnancy [13].

MYTH 2: DO NOT EXCEED A HEART RATE OVER 140 BPM

Another common myth that dissuades pregnant women from exercise states that pregnant women should not exceed a heart rate intensity of over 140 beats per minute (bpm). Furthermore, Entin and Munhall [13] reported 62% of women indicated that their physician advised them to stay below this intensity level during any stage of pregnancy. However, current research does not support the need for heart rate limitations during pregnancy [13].

Contrary to evidence based research, the ACSM only recommends that previously active women continue their exercise intensity if they were accustomed to these levels prior to becoming pregnant [14]. Conversely, the ACOG dispelled heart rate maximum intensity recommendations from their 1994 guidelines [15]. The ACOG recommends pregnant women, who have previously been sedentary to begin with moderate-intensity exercise, monitor their heart rate, listen to their body and make modifications as needed [12]. The general consensus in research [12] appears to overemphasize the recommendations to progress gradually and check in with one's body frequently in order to maximize the safety of both the mother and baby.

MYTH 3: AVOID ABDOMINAL EXERCISES

Finally, pregnant women often believe that abdominal exercises are off limits during any stage of pregnancy [15]. The ACOG [12] does not provide explicit recommendations stating that abdominal exercise should be avoided during pregnancy. However, pregnant women should avoid lying flat on their back due to uterine pressure on a large vein that may decrease venous return or blood flow to the heart [15]. Exercises to strengthen the abdominal core during pregnancy, such as pelvic tilts and Kegel exercises may

assist in the prevention of low back pain [15]. Depken and Zelasko [16] determined that muscular strength training could reduce the risk of abdominal muscle separation that commonly results from weakened abdominal muscles during pregnancy. Additionally, it was determined that abdominal strength training did not have any harmful effects on the mother or baby [16].

Among their guidelines, the ACOG [12] includes warning signs and exercises that should be avoided during pregnancy, the benefits of exercising while pregnant and encourages mothers to continue exercise after the birth of their child. It should be noted that while further research is needed to determine exercise recommendations while pregnant, the ACOG [12] explicitly states that it is indeed safe to exercise during pregnancy. Not only could proper knowledge and recommendations from health care providers encourage pregnant women to exercise, it would also dispel harmful myths that often encourage sedentary pregnancies. Lastly, the general public's misconceptions about the myths have led to online bullying and making false accusations of pregnant women who choose to exercise.

SOCIAL MEDIA AND PREGNANCY

Exercising while pregnant is not a new phenomenon, however, publicly posting about it on social media is a recent trend. In fact, it has even prompted popular hashtags such as, #moveyourbump, #fitpregnancy and #runningpregnant among many others. As the popularity of publicly sharing pictures and videos of exercising while pregnant has increased, so too has the bullying and shaming of these women through unsolicited and hurtful comments. Such comments and harassment are considered cyberbullying. Cyberbullying is defined as an act of aggression over an electronic medium in which the perpetrator's goal is to pursue pleasure through the mistreatment of the victim [17]. Online bullying has the potential to be more harmful than traditional bullying [17] due to the publicness and accessibility by an infinite number of individuals.

Through a brief online, social media-based analysis, the authors were able to find numerous examples of online bullying of pregnant women who chose to be physically active. Comments towards the women included personal opinions against being physically active during pregnancy, that the women were trying to kill their baby, they were being selfish, and even went as far as wishing harm upon the mother and baby. One pregnant woman on Instagram, Emily Breeze, received comments on her post of working out, such as, "this is an easy way for an abortion or miscarriage" and "you know, if you didn't want a child you shouldn't have had sex in the first place" [18]. Additionally, Duncan received hurtful comments and direct messages to her posts including someone wishing her baby was stillborn and another that her child would be born disabled [19].

Often, such sentiments prompted the women to create posts in an attempt to defend themselves, their decisions, and ultimately hoped to quiet their bullies. Duncan [20] wrote a post stating,

It's hard to believe how cruel some of these comments can be...I may not read every comment, every article, every message but for the ones I have briefly read it just blows my mind that someone whom I do not know, whom I've never had any form of connection with could have so much anger and hate towards me as I carry my first child. I am so confident in the team that supports my journey and so in tune with my body that it does not discourage me. It's safe to say there are people out there that underestimate the female body.

Sarah Stage [21] posted, #8monthspregnant and I am just doing the best that I can and what I believe is the healthiest for baby and myself. There STILL seems to be some confusion and harsh ignorant opinions about exercising while pregnant and some of you believe it's putting baby in danger. Do your research and you will see that working out while pregnant (with your doctor's consent) has many benefits for mom and baby! I feel fortunate that I'm still able to exercise in my third trimester (even though it's far less often and weigh less intense than my non Prego workouts). So for all of the women out there who are doing the best they can, I am proud of you!!! Creating life inside of us is a huge responsibility and we need to support each other instead of judging!! #positivevibes #stopmomshaming

In a positive light, it would be remiss not to mention that social media has also become a place for physically active pregnant women to build community, social support, and inspiration for current and future mothers who are thinking about and/or currently exercising. Throughout the analysis, numerous encouraging comments were discovered such as this one written on Emily Breeze's [22] post by B'n'Wm Clothiers [23], "You go girl. So proud of what you are doing. You inspire me daily."

Despite available research, obstetricians and gynecologists remain reluctant to advise exercise protocols to pregnant women, especially those who have been previously sedentary, though the benefits are apparent. According to Entin and Munhall [13], "this represents a missed opportunity to promote a positive, potentially long-term behavioral change" (p. 453). Undoubtedly, in this light, further research, education and consideration of pregnant women's previous fitness levels and experiences is necessary when delivering physical activity recommendations and safety precautions for pregnant women and their unborn babies. The prevention of health risks due to exercise and physical activity while pregnant are complex and difficult to assess. As such, medical practitioners can be the first ones to provide informed, educated and competent counsel to pregnant women and in

doing so potentially dismantle many of the myths surrounding being physically active during pregnancy.

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