

Pregnancy and Exercise: Finding the Correct Balance

Abstract

The objective of this qualitative study was to research the attitudes and driving factors behind the motives of women in California regarding exercising and pregnancy. Four women of similar age and backgrounds were interviewed with a list of questions pertaining to exercise and pregnancy. The results of this study are limited to the four subjects interviewed, and cannot be used to signify an entire group of the population. The results showed that the women had no major negative concerns about exercising during pregnancy, and can see the positive effects of it. In conclusion, women should exercise during their pregnancy to promote optimal maternal and fetal health. The attitudes of women in California towards this attitude seem to be positive, and effected by the current interest in fitness and health in our country.

Introduction and Literature Review

Pregnancy is a vital time in a woman's life to be concerned with health and nutrition. Not only do her choices affect her own body and future, but that of the child that is growing within her. It is vital for a pregnant woman to be informed of how she can provide the brightest future for her child, and this often begins before her baby is even conceived. One of the most vital components of being healthy pre-conceptually and during pregnancy is performing the correct amounts and types of physical activity. Exercise helps to strengthen the mother's heart and body, as well as that of the growing baby. Many women are unsure or uninformed of how much exercise they should be doing during their pregnancy and at what intensity they should be exercising. Due to this confusion, many women exercise too much, or not at all, which can result in improper conceptual weight gain, either too much or too little. Women are also not readily informed of what exercise can do for the development of their child, and the effects it can have throughout the life of their child, along with their nutrition during and before their pregnancy.

In researching this topic, three pertaining articles were found and studied. In a qualitative article written for the *Journal of Women's Health*, a questionnaire was given to 425 postpartum women soon after the end of their pregnancy. The survey focused on questions pertaining to the intensity and frequency of exercise during pregnancy, as well as sexual activity. Subjects were instructed to describe exercise patterns during the third trimester of their pregnancy. Results of the questionnaires showed that roughly one third (38%) of women in the third trimester never exercised strenuously, while another third (34%) performed strenuous exercise more than one time a week. During the last two weeks of pregnancy, the number of non-exercisers increased to 50%. The women interviewed also answered that 40% spent 5-8 hours per day on their feet, from 24 weeks until two weeks prior to delivery. During the last two weeks, 38% still maintained those

same levels of standing time per day. The results of this questionnaire found that women in the urban population perform more exercise and activity than was previously recorded. Although this study was fairly limited, it did help to show that women are becoming more inclined to exercise during pregnancy, and focus more on the positive effects it is said to have on the birth and health of the baby. (Fox, 2008)

Another article, published by *Factiva*, researched the effects of walking on the outcome of pregnancy in 36 women in their 20th and then 32nd week of pregnancy. This was tested through indirect calorimetry and accelerometry. The results showed that the pace of the women tested on a treadmill greatly decreased from week 20 to week 32. This affected the oxygen intake required for the women to sustain their performed activity. Although the study was too small to be significant in making health recommendations, it suggests that walking 30 to 40 minutes at a comfortable pace may be an appropriate amount for women to promote optimal health for both the mother and the fetus. (DiNallo, 2008)

An article written in the *Australian and New Zealand Journal of Obstetrics and Gynaecology* studied the effects of vigorous exercise on the birth weight and gestational age of a child at birth. Using a prospective cohort study, a group of 148 pregnant women was followed over the course of their pregnancy, and completed questionnaires periodically, as well as filling out exercise diaries continuously. The study found that there was no significant difference in the outcome of the birth or age of the baby from those women who exercised vigorously and those who did not. Even the women who performed 5 vigorous sessions of exercise per week showed the same rate of birth weight and age as those who performed no aerobic exercise. This research, although limited, shows that further studies are needed to prove this information. It does appear, though, that exercise should be performed during pregnancy to promote the health of the mother, and promote a healthy amount of weight gain over the course of their pregnancy. (Duncombe, 2006)

Methods

There were four participants selected to participate in the questionnaire for this study. The same questions were asked to each participant, and included 6 questions pertaining to exercising and pregnancy. The questions asked were: How much exercise did you do per week? Cardio? Strength?, Did you consult your physician on how much you should be exercising and what types of exercising?, How did you feel during exercising, both physically and emotionally?, How quickly after pregnancy did you return to your original exercise routine?, Did exercising affect your breastfeeding at all? What concerns did you have about exercising during pregnancy? . The interview process took approximately 15 minutes for each subject.

Three of the participants selected have been pregnant within the last two years, and the fourth is currently pregnant. The first participant is 26 years old, and had her first child one year ago. She was raised in Northern California, and went to college in central California. She was interviewed on April 9, 2009 in her home. She seemed the most uncertain in her answers of all the participants. Her attitude about exercising and

pregnancy appeared to be positive, but not extremely. She said during her pregnancy, exercising was a secondary thought, and did not occur on a regular basis. The second participant is 28 years old, and had her first child 6 months ago. She also was raised in Northern California, and has lived here her entire life. When interviewed on April 9, 2009, she stated that she exercised throughout most of her pregnancy. She was very verbal about the positive benefit exercising has for her, and the mental and physical reasons why she does exercise. The third participant is 31 years old, and had her second and third children (twins) one and a half years ago. She was raised in Ohio, and moved to Chico four years ago. She graduated from Ohio State and now stays at home with her three young children. The interview was conducted in her home on April 8, 2009. When answering the questions posed, she was very thoughtful and concise in her answers. She was very knowledgeable in exercise and its positive benefits, due to her degree in exercise physiology. The final participant is currently pregnant with her second child, and her due date is in late May. (Interview to come soon!)

Immediately following each interview, field notes were written up for each interview, to provide for analysis later on. Further analysis could then be used to discover themes between the interviewed subjects, as well as the research done in the articles.

Results and Analysis

The women interviewed stated their beliefs about exercising and pregnancy, and all of them had positive aspects which drove them to exercise. In comparing this to the studies done and researched regarding the possible concerns or negative beliefs about exercise, the women did not seem to have any of the posed concerns. They stated that they have been educated on what types of exercise are appropriate, and consulted a physician at the beginning of their pregnancy. All three of the women had similar answers and views on exercising, as well as performing the same types of exercise. This could be due to their close proximity, both in location and age.

Exercising to Promote Maternal Health

Of the three participants interviewed, all three expressed one of the primary reasons behind exercising during pregnancy as improving maternal health. They stated that they wanted to maintain an adequate amount of weight gain, as well as promote an adequate fitness level. All four subjects stated that the main type of exercises they performed were cardio. The second participant said that, "Running was the best way for me to stay fit and in shape during my pregnancy. I was disappointed when I had to start walking, but I knew it was to better my health in the long run." They also listed enhanced weight loss after the baby's birth as a reason to exercise during the pregnancy.

Exercising to Promote Fetus Health

Fetal health was also considered by all three participants. Two of the women seemed to have extensive knowledge of how maternal health affects fetal health, and the thirds stated that she had heard vaguely that this was true from those around her, and her physician. Subject 3 stated that, "I had heard from my physician, and reading articles, that exercising supports better health for the baby over their entire childhood. I wanted my child to have the best health possible."

Adjusting Exercise to Stage of Pregnancy

All three women also stated that they adjusted the amount of exercise they performed, as well as the intensity, depending on the way they felt during exercising. If they felt fatigued, they would slow down the rate of their exercising. In two of the women, this was also due to their physicians concern for their current exercising habits, and his desire for them to tone down or change the type of exercise they were performing.

Limitations

There were several prominent limitations in this study. The small sample size, being only four women interviewed, is a limitation. In the future, it would be more effective to gather qualitative data from a larger sample size. The demographics of the women tested was also a limitation, since they were all from roughly the same ethnicity and background. A more varied subject group would aid in data in future studies. There was also a limited amount of questions and interviewing that was done, and a more extensive survey would be beneficial in the future.

Conclusion

Overall, it appears that all three of the women realize the positive effects that exercising has on their general health, as well as the positive and lasting effects it has on the baby. Their beliefs were formed on their own and by observing women in their lives who have been pregnant. This study, although limited, suggests that many women may feel the same way, and further research is needed to assess how women of different locations, races, and age groups view exercising during pregnancy.

References

1. Duncombe, D. August 2006. Aust NZ Journal Obstet Gynaecol, Volume 46, Issue 4, Pages 288-292.
<http://www3.interscience.wiley.com/journal/118593769/abstract?CRETRY=1&SRETRY=0>
2. Fox, NS. Nov 2008. Journal of Women's Health, Volume 17, Issue 9, Pages 1431-1435.
<http://web.ebscohost.com/mantis.csuchico.edu/ehost/detail?vid=1&hid=9&sid=3082e392-1dcd-481c-8bbe-a0e6c14e5a7f%40sessionmgr3&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d>
3. Penney, D. March-April 2008. Journal of Midwifery & Women's Health, Volume 53, Issue 2, Pages 155-159.
http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6W6R-4S04VH5-H&_user=521371&_coverDate=04%2F30%2F2008&_rdoc=1&_fmt=full&_orig=search&_cdi=6605&_sort=d&_docanchor=&view=c&_acct=C000059555&_version=1&_urlVersion=0&_userid=521371&md5=a18092f9c466ca299b781b0cdf56e9ce#sec2.1