

## Assessment of Knowledge and Attitude of Women Towards Postpartum Exercise

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**ABSTRACT:** the benefits of exercise in postpartum remain largely unexplored among Saudi women. This study assessed the knowledge and attitude of Saudi nursing mothers towards postpartum exercises. Study aim: to assess the knowledge and attitude of women towards postpartum exercise. Research question: what are the knowledge and attitude of women towards postpartum exercise? Design: quantitative descriptive cross-sectional design. Setting: well baby and obstetrics clinics in King Abdulaziz University Hospital. Sampling: convenience sample including 160 Saudi women who had given birth to a live full- term healthy newborn during the last 6 months. Data was collected over three months from end of July 2017 to the end of October 2017. Tool: a structured, interview questionnaire developed by the researcher consisted of three parts was used to collect data. Part I: women demographic and obstetrical data. Part II: women knowledge about postpartum exercise. Part III: women attitude towards postpartum exercise. Result: more than 70 percent of the women had adequate knowledge regarding postpartum exercise. Lack of support and lack of time in addition to the absence of healthcare advice regarding postpartum exercise were the main reason given by the women for not exercising. Social media and internet considered as the most postpartum exercise source of knowledge for women. More than half of the women had positive attitude towards postpartum exercise. Conclusion and recommendations: assessing women knowledge and attitude towards postpartum exercise helps healthcare professional to create educational programs that improve postpartum exercise knowledge and practice among childbearing women. Key words: postpartum exercise, knowledge, attitude.

المستخلص

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**المقدمة:** مازالت فوائد وانواع رياضة فترة النفاس مجهولة لدى لبعض من النساء في المملكة العربية السعودية وتعتبر النسب الاحصائية ايضا للممارسة النساء الرياضة في المملكة العربية السعودية منخفضة مما يستلزم اهتمام الفريق الصحي . **هدف الرسالة:** التعرف على مدى معرفة النساء السعوديات وسلوكهم تجاه الرياضة خلال فترة النفاس. **سؤال البحث:** مامدى معرفة النساء السعوديات وسلوكهم تجاه ممارسة الرياضة خلال فترة النفاس. **المنهج:** وصفي كمي قطعي. **المكان:** مستشفى جامعة الملك عبد العزيز بجدة. **العينة:** عينة ملائمة تشمل 160 سيدة انجبت طفل سليم خلال الستة اشهر الماضية . تم جمع العينة خلال ثلاثة أشهر من يوليو الى اكتوبر 2017. **الاداة:** مقابلة شخصية باستخدام استبيان معد يتكون من ثلاثة اقسام لجمع البيانات. القسم الاول: بيانات السيدات الشخصية ومعلومات عن الحمل والولادات السابقة. القسم الثاني : معرفة السيدات برياضة فترة النفاس. القسم الثالث: سلوكيات واتجاهات المهات تجاه رياضة فترة النفاس. **النتائج:** أكثر من سبعين في المائة من السيدات لديهم معلومات كافية عن رياضة فترة النفاس . عدم وجود وقت كافي وعدم وجود مساندة من المحيطين بالإضافة الى غياب النصائح الطبية من اسباب عدم ممارسة الرياضة لدى السيدات. أكثر من نصف السيدات كان لديهم سلوك ايجابي تجاه رياضة فترة النفاس. الانترنت ووسائل التواصل الاجتماعي من أوائل مصادر المعلومات عن رياضة فترة النفاس. **الخاتمة والتوصيات:** دراسة مدى معرفة وسلوك النساء تجاه ممارسة الرياضة خلال فترة النفاس يساعد العاملين في الفريق الصحي على بدء خطط تعليمية وبرامج توعوية تحت على ممارسة الرياضة خلال فترة النفاس .

### I. Introduction

#### Background:

Postpartum period is the six weeks interval between the birth of the newborn and the return of the reproductive organs to their normal prepregnant condition(8). Many physiological adaptations and psychological adjustments occur during this period in mother's body. These include dramatic physical changes in the reproductive system; uterus; vagina; perineum; and breasts begin to return to their nonpregnant state immediately after childbirth (5). Mothers during this time undergo a lot of concern about how they can get their health and shape back after childbirth. Therefore, women need to receive special health care and psychological support during this time to prevent such problems. Inadequate care might result in complications for the mother and her child(4).

Most of the complications after birth can be prevented during postpartum period by providing enough care and education, plus the adherence to proper diet and starting in postpartum exercises. Regular postpartum

exercise is likely to have many health benefits which may include improvement in physical, physiological, psychological and social well-being after pregnancy and during postpartum (11). Specifically, postpartum exercise has been linked with improvement in cardiovascular fitness (5), reconditioning of abdominal muscle tone which are stretched during pregnancy and labor (1), as well as reduction of risk of becoming overweight or obese(9). In addition to enhance lactation and breastfeeding(3). It also, found that postpartum exercise help in prevention of potential postpartum complications and minor discomfort relivinglike musculoskeletal impairments, constipation, urinary and fecal incontinence (11).

Exercise in postpartum period is shown to produce a more relaxed mother, prevent depression and prevent psychological disorder (4). On other hand the effect of non-exercising postpartum mother result in fatigue which decreases a mother's capability to undertake physical and mental tasks; it also decreases her ability to care her infant's and her responsibilities to other family members also her duties (7). Additionally, reduced maternal energy impairs the immune, nervous and mental systems of both the mother and her infant(12).Other undesirable and potentially serious outcomes include early discontinuation of lactation(10). In addition to development of stress and mood disorders(12) and increased incidence of postpartum depression (4), also increase the probability of impairment of the sexual relationship between spouses (1).

The best time to start an exercise according to Canadian guidelines depending on the mode of delivery, most types of exercise can be continued or resumed in the postpartum period. With the added fatigue of delivery and newborn care, some women may require to reduce the intensity or length of their exercise sessions. Postpartum exercise can be started soon after birth, although the women should be encouraged to start with simple exercises and gradually progress to more strenuous ones (5). Kegals and breathing exercises begin immediately after birth. Kegals exercises which strength pelvic floor muscles and vaginal. While breathing exercise is thought to benefit overall health in a number of ways such as; improve circulating oxygen levels, reduce fatigue as well as decrease blood pressure in addition to reduce stress and anxiety. Finally it is improving core deep abdominal and pelvic floor muscle function. Women who have had Caesarean delivery may slowly increase their aerobic exercise and strength training or delay starting certain types of exercise as abdominal exercise depending on their level of discomfort and other complicating factors such as anemia or wound infection (3).

## **II. Statement Of The Problem:**

The Post-partum period is a very stressful period for women worldwide due to the changes that occur during this time, such as life, physical, and emotional changes as well as some of the common problems encountered during this period. The postpartum mother requires energy to make the psychological adjustments more smoothly when she get adequate rest. Women with newborn babies list many barrier to physical activity. The most common and most likely to impair ability to participate in a regular exercise program are lack of assistance with childcare and insufficient time (12). On the other hand there are many indication for clearance for exercise in postpartum period include preeclampsia or toxemia of pregnancy ; extensive vaginal or rectal repair in addition to heart or liver disease or any existing health problem that restrict exercise capacity or ability (12).

Maternity nurses and midwives are important resource persons within the reproductive health team. They are qualified to provide women with the necessary knowledge and guidance that help them to accept the postpartum period with its physical and psychological changes as normal and non-pathologic process and realize that measures are available to ease the transition (4). Emotions are an important part of the postpartum assessment. Postpartum women typically exhibit symptoms of the "postpartum blues," demonstrated by tearfulness, irritability, and sometimes insomnia so maternity nurse encourage the mother to practice gentle exercise to relive stress and improve wellbeing as breathing exercise and yoga. Beside that Postpartum mothers should be taught and encouraged by the nurse for early ambulation shortly after delivery to improve circulation and relief minor discomfort during this period such as after pain & constipation. Exercise also prevents the development of postpartum complication as formation of deep vein thrombosis and chest infection.

### **The aim of this study is:**

To assess the knowledge and attitude of women toward postpartum exercise's

### **Objectives of the study:**

- 1- To assess the women knowledge toward postpartum exercise.
- 2- To assess the women attitude toward postpartum exercise.
- 3- To find out the association between knowledge and attitude of women on postpartum exercises with selected socio-demographics characteristics (age, education and parity).

### **Research methodology:**

#### **Research design:**

It is Quantitative, cross sectional non experimental descriptive design.

#### **Research setting:**

King Abdul Aziz University Hospital particularly well baby clinic and postpartum clinic selected to collect data during the normal clinic day.

**Sampling:**

In this current study the researcher used a convenience sample of 160 women with the following criteria:

**Study Participants Inclusion Criteria:**

- 1- Saudi women up to six months postpartum from delivery.
- 2- Free from any postpartum complication.
- 3- Willing to participate in the study.

**Ethical approval:**

Multi official approval was obtained prior to the study as below:

- 1- Official approval was obtained from ethical committee in Faculty of Nursing, King Abdulaziz University.
- 2- Official approval was obtained from King Abdulaziz University Hospital (unit of biomedical ethics for research committee). A copy of research protocol had been submitted to both committees.
- 3- Director of Nursing Department at the hospital was contacted to explain the purpose of the study and reached mutually agreement on date and time for conducting study.
- 4- Nursing director sent a memo through e-mail to all head nurses at selected units to facilitate the researcher work.
- 5- The researcher explained the aim of study to the study participants. A guarantee of confidentiality and anonymity was ensured throughout the study. Study participant sign a written informed consent before involving in the study.

**Procedures and data collection:**

After obtaining the ethical approval, data were obtained through out interviewing the women about knowledge & attitude toward postpartum exercise using the study tools. In addition filling the first part of sociodemographic data and history took 5-7minute, while the knowledge scale took 10 minutes. The attitudinal scale took about 5 minutes. The researcher was the one interviewing the participant to clarify any misunderstood question for study participant. Collection of the data done during the day time in the waiting area of outpatient clinics. Researcher approached participant to join in the study while they are in the waiting area.

### **III. Data Analysis:**

All data were entered into the (Statistical Software Package SPSS) version 22. The frequencies and percentage were used for categorical variables while descriptive statistics (rang, mean and stander deviation) were performed for continuous data. Analysis of variance (Pearson correlation and T- test) was conducted to examine the relationship between sociodemographic data and dependent variables (knowledge & attitude) with test of significant. The Pearson correlational analysis was used to test the correlation between women knowledge and attitude.

**Study period:**

Data collection of the study was carried out during end of July 2017 to the end of October 2017. Data collection was performed by the researcher.

**Tools of data collection:**

To address the research purpose, the researcher used two tools to assess the knowledge and attitude of women toward postpartum exercises. A structured interview schedule was administered in Arabic language to the participant because it is the primary language in Saudi Arabia. Structured interview schedule was developed by the researcher after reviewing the recent updated literature to collect the necessary data.

### **IV. Result And Discussion:**

socio-demographics and maternal characteristics of one hundred and sixty postpartum women participated in this study yielding a response rate of 100%. The age range of this study group was 15-41years with a mean age of 28.6 +\_ 2.53 years and most of them between 21 to 31 years old 53%. A majority of the participants had tertiary education (61.8%) while only 31% had high education and only 5% are having intermediate education. The monthly family income for more than half of participants 67% ranges from 6000 to 10000 Saudi riyals per month. Only 16% had family monthly income of less than 5,000 SR. The majority of the participants are not working (80%) while 20% only are having job. Information about reproductive history. A majority of the participants were having from 2 to 4 children (55%). While 29.3% had only one child and almost one fifth (18.8%) have more than four children. The majority of participants having no abortion (89%). In response to the question of following up during pregnancy the range of responses was high (86%) during the first three months. 95% they had no complication during pregnancy as well as 98% during delivery free from complication. More than half of participants (61.31%) delivered via spontaneous vaginal delivery while 34%

had cesarean. 86.8 % from the participants are healthy, and they had no genetic or family disorders. Approximately 70% they had no operation before.

From the result of this study in response to participant's general information about postpartum exercises, the majority of participants were had adequate knowledge about postpartum exercises (72.5%) while 27.5% they don't have adequate knowledge. The principal sources of information on postpartum exercises mentioned by participants were social media (38%), television (26%), magazine & books (6.9%), while doctors & nurses having 0%, only 0.6 % reported they got information from family & friends. when the participants were asked about the suitable time to established postpartum exercises, the majority commented that after two weeks (28%), only 10 % answered that can be started immediately after delivery, 24% reported they don't know the proper time to engage in postpartum exercise. While 14% mentioned that they can start in one month following delivery. Of the 160 participants only 11 women are practicing exercises during postpartum, and the majority (93%) they did not practice exercise in postpartum period. Also the knowledge of participant on benefits of postpartum exercises. Most of the participant agreed that exercises reduce overweight ( 96.3%), maintain body activity (95.6%), reduce high blood pressure ( 78.8%), prevent urine incontinence (61.9), while the least known as benefits is helping of exercises in milk production (41%). In the other hand 87% of participants reported that mother should breastfeed the child before starting exercises in the question about the preparation before exercise. 71% agreed that exercises help in reducing postpartum depression. While only 69.4 agreed that exercises fasten lochia drainages. About 44.4% of the participants did not know the different types of postpartum exercises. Only 40% of the participants had knowledge of aerobic. Swimming 42% and kegal exercise are known by 65%, abdominal muscles exercises (88.7%) . running (5.6%) and cycling (11.3%) were the least known types of postpartum exercises. The majority of participants reported walking as the main type of postpartum exercises (98.8%) respectively were other known postpartum exercises among the participants. Spinal cord diseases (98%) and cardiac pain (99%), dizziness (93%) and uncontrolled blood sugar (93%) were mostly agreed as contraindication to

postpartum exercises. When the participants asked about the safety of postpartum exercises for both normal delivery and cesarean the majority agreed with the safety of exercises for both (94%) .The attitude of the participants toward postpartum exercise was classified as necessary, not necessary. in response to this question 52% reported that postpartum exercises is necessary during postpartum which is consider as positive attitude while 48% have negative attitude toward exercise in postpartum and there answer was not necessary. The principle barriers to exercises were reported by participants about 44% strongly agree that lack of information about postpartum exercises is considering reason for not exercising. While 96% strongly agree that absence of healthcare advises regarding exercises in postpartum. About (70, 6%) strongly agreed that increase responsibility and child care as reason for not exercise. About 75% strongly agree that lack of time to exercise during postpartum. 83% from participants strongly agree that fatigue and tiredness during postpartum is the reason for not exercising. About 88% strongly disagree that exercises in postpartum is costly. The need for support from others 73% strongly agree. Over half of the participants strongly agree that fear to injury uterus or apply stress on c/s wound or episiotomy preventing exercise in postpartum (53, 8%).

The relationship of the knowledge score and selected characteristic of the participants. There is a significant relation between the participant's knowledge and some of their socio-demographic characteristics, including age, level of education, income and number of children. The women aged between 21 to 30 years old had significantly higher knowledge score than other age groups. Higher level of education shows no significant with the knowledge score. On other hand, participants family income between 6000<10000 SR are associated with highest knowledge level compared to other income levels and having two or four children is associated with highest knowledge level among the others.

## **V. Conclusion:**

The research questions of the current study were answered through its findings that were related to the three main aspects of the study including women knowledge towards postpartum exercise, women attitude towards postpartum exercise and the factors that significantly affects both knowledge and attitude. In the light of the study findings, it's concluded that: most of the women had adequate knowledge about postpartum exercise. Women knowledge was significantly related to their age, income and parity. In addition, women obtain their information about postpartum exercises from different sources such as social media and internet as primary source of knowledge, books, family and friends, while not mentioned the healthcare as source of information. Around half of the women in this study had positive attitude toward postpartum exercise, while it was found that there is no a significant relation between the women attitude and some of their demographics characteristics, including age, level of education and parity excepted income. In respects to the women perceived factors that negatively influenced their practice of postpartum exercise: lack of knowledge and guidance. Lack of support and motivation from significant, busy schedule and fear from injuries.

### Perspective:

- Improve the antenatal and postnatal health education provided to the women through: conducting structured postpartum exercise promoting sessions in the obstetric clinic and in patient units. A program of clear explanation of postpartum exercise types, benefits, best time to start and contraindication to exercise during postpartum. Moreover, providing a hotline for postpartum women inquiries and creating and developing postpartum consultant position or educator to supervise, coach and support the program of postpartum exercise promotion in hospitals and primary health care centers.
  - Increase public awareness by developing orientation and educational programs in order to prepare women in early child bearing age for postpartum exercise engagements.
  - Explore the effect of women intention to exercise in postpartum during their pregnancy.
  - Assess the different healthcare professional knowledge and attitude as well as barriers towards exercise.
  - Communicating empirical findings on exercise in pregnancy and postpartum to health care workers who in turn educate their clients.
  - Explore the strategies of hospitals regarding the care during postpartum period and enforce about the importance of postpartum exercise program.
  - Conduct continuous nurses' educational programs and workshops related to postpartum exercise and nurses role in hospitals and primary health care centers setting.
  - Initiate postpartum exercise educational materials for students at different levels of nursing education.
  - Motivate nurses to join professional organizations that promote postpartum exercise education to continually enhance their knowledge.
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- Public libraries in the school and college should have resources materials on postpartum exercise.
  - College teachers, parents, leaders and health professionals should be oriented and sensitized the topic.

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