74 - PHYSICAL ACTIVITY IN WOMEN DURING PREGNANCY: A REVIEW

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INTRODUCTION

During pregnancy the mother body goes through several changes, and, although it is frequent the association between health and physical activity, there are still doubts about the physical activity during pregnancy in relation to its type, intensity, time and duration (CAVALCANTE et al., 2005). Even if the recommendations for these practices during pregnancy are already established among health professionals, studies have been made aiming demonstrate that such activities are beneficial to the mother as to the fetus (AMORIM et al., 2007).

According to Prevedel et al (2003a), the growing number of pregnant practicing some sort of physical activity is linked to technological advances and doctors, allowing these women to have a safe childbirth and the fall in rates of maternal and fetal morbidity and mortality.

The benefits of the practice of physical activity during pregnancy are diverse and reach different areas of maternal body. The activity reduces and prevents pain due to the guidance of correct posture of pregnant front of hyperlordosis which commonly occurs during pregnancy after the expansion of the uterus in the abdominal cavity and the consequent deviation of gravitational center. In these cases, physical activity contributes to adaptation of a new position, resulting in greater ability to pregnant during the practice and daily work. The benefits of physical activity extends also to emotional aspects, contributing to the pregnant becomes more self-confident and satisfied with the appearance, raising self-esteem and providing greater satisfaction in that practice. It also decreases the pain of childbirth in such a way that physically active pregnant women tolerate better the labor, especially the longer, than those not trained, or than those that sporadically had exercises (BATISTA et al, 2003).

According to Goetlz and Harford (2006), a pregnant woman can exercise every day for 30 minutes without risks, decreasing stress, improving sleep, hormonal and emotional balance, increasing energy, fitness, and consequently, reducting indispositions proper of pregnancy. The pregnant women who exercise regularly have better posture, reducing or avoiding the back pain. They tend to have less swelling, thrombosis and less weight-gain during pregnancy.

For those pregnant women who have gestational diabetes, a condition that affects 5% of them, aerobic physical activity helps substantially in the control of weight and the maintenance of the large muscle groups, providing better use of glucose and simultaneously increasing the sensitivity to insulin (BATISTA et al, 2003).

Lima and Oliveira (2005) also stated that the maintenance of regular physical activity gives protection on mental and emotional health of pregnant women, and, thus, there are evidence that this practice acts benefiting women against puerperal depression.

The *American College of Obstetricians and Gynecologists* recommends that the physical activity developed during pregnancy have, for features, regularly and moderate-intensity exercises, as the program turned to the gestational period in which the woman is, with the activities centred on her health conditions, her experience in practicing the physical exercises and the demonstration of interest and need of it (BATISTA et al, 2003).

The main signs that physical activity must cease is loss of amniotic fluid, chest pain, vaginal bleeding, migraine, breathlessness, swelling, back pain, nausea, abdominal pain, uterine contractions, muscle weakness, dizziness and reduction of fetal movement (MONTEIRO and FARO, 2006).

Thus, in this study, the authors present a literature review about the more safe physical activities during pregnancy, highlighting some beneficial results on the discomfort and, consequently, good prognosis for pregnancy. Given these considerations, this study aimed to identify in literature, types of physical activities that can be taken by pregnant women without risk conditions.

METHODOLOGY

This is a literature review study, which methodological path was covered in exploratory and selective readings, and in an integrative review, contributing to the process of synthesis and analysis of the several studies results, creating an understandable reading.

We consider an integrative review as being a method that aims to synthesize results in research on a topic in question, in a systematic and orderly way. This type of research allows the researcher recognizing the professionals who more investigate a matter, their areas of expertise and their relevant contributions; allows separate the finding of scientific opinions and ideas; describes the knowledge in their current state and promotes the impact of research on professional practice; offers a methodological path to be followed; prevent errors or distortions and guides toward known directions; distinguishes the texts that are intended to disseminate ideas of the research, prioritizing them (ROMAN and FRIEDLANDER, 1998).

According to Kirkevold (1995), the integrative nursing research has the importance change the philosophical and theoretical context of the profession, since its goal is to criticize, refine and develop, with theoretical consistence, the results of a phenomenon or even a particular relationship.

For the information survey, was conducted a search of the LILACS database, using keywords such as: “physical activity” and “pregnancy”. Were also consulted with other database covering the last 10 years. After that review, we held the exploratory reading of the material, considering it being of interest to the study or not. Then, it has happened the selective reading, allowing determining if the literary material was of interest to this study. During the process of analysis and integrative synthesis, was of fundamental importance to establish open relationship with the text, enabling the integration of the text-context with the researcher.

RESULTS

After selective and integrative reading, were identified in this survey that some types of physical activities already have been highlighting as a practice during pregnancy. Among these activities are the light exercises in the water, walking, stretching and yoga. For better understanding of the results obtained in this review, it focuses on the findings related to trimesters of pregnancy.

From the first through third month of pregnancy (first trimester), the most important physical changes in the first weeks of gestational period are the fatigue, the daily nauseas and hunger crisis. Due to large hormonal changes of pregnancy, it may occur a flurry of emotions in women. The irritation and fatigue can change the daily life of the pregnant regarding itself and the family (GOETZL and HARFORD, 2006).

To these authors, in the first trimester of pregnancy, a programme of light activities can help restore emotional balance and increase the energies of pregnant woman. In practice of moderate physical activity, the pregnant should be able to speak without losing her breath, especially if she was out of shape before becoming pregnant. It is recommended for this period the walking, adjusted to the level of energy spent every day, in a calm place, without agitation. The stretching, which has the ability to reduce muscle tension, actives blood fhush, releasing the movements and increases body awareness, and prevent injuries by relaxing the muscles, combats irritation, thereby enhancing the welfare of pregnant women. The hydrogymnastics is relaxing, facilitates the movements as well as acts as a cushion to the impact on joints. The maintenance of body temperature during hydrogymnastics is another desirable effect, an exclusive feature of such activity. The soft and gentle movements of yoga can help pregnant women to breathe more deeply, strengthens the muscles, giving more flexibility to them.

From fourth to sixth month of pregnancy (second trimester), the pregnant share good times with the family, there is the return of appetite, increase of energy for pleasure of living with friends and family. The physical activities recommended for this period are those that offer less risk of injury, as the vigorous walking, which improves the cardiovascular conditioning, reloading the batteries. Hydrogymnastics is also recommended, or the modified abdominal, with woman lying down or in the position of cat or of yoga. A gymnastics ball (Bobath ball) allows you to perform intense, but safe abdominal activities during pregnancy. At this trimester, avoid activities that require balance, which may be at risk of injury (GOETZL and HARFORD, 2006).

From seventh through ninth month of pregnancy (third trimester) happened back pain, poor digestion, legs swelling, trouble with sleeping and willingness to go to the bathroom constantly. To deal with these physical discomforts, organize the day so that pregnant women have fewer tasks to be undertaken and a programme of physical activities recommended by the prenatal assistance team. In this period, the body of woman is overloaded; the weight and the limited movements restricts the variety of physical activity. Hydrogymnastics and swimming are the most appropriate activities, in view that water sustains the body's weight and improves blood circulation. The pregnant should take steps to ensure the fetus and her physical integrity. Choose activities safer, as the low impact movements (GOETZL and HARFORD, 2006).

It was observed in the third semester that swimming is the most recommended for pregnant by the body properties inherent in the water, that is, the buoyancy. The feeling of increased weight is reduced, there is greater scope for safe movement, reducing the impact of joint stress and an increase in venous return by hydrostatic pressure. With practice, the woman can get better respiratory and cardiovascular capacity, improving posture and balance by sustaining water increased self-esteem and feel pleasant (BOMBASSARO et al., 2008).

Physical activity in the water is also beneficial for the knees and is generally more relaxing than other types of exercises. The swim also reduces the frequency of swelling, common fact during pregnancy. The effect of cold water in the body of pregnant women acts on the thermoregulatory system, causing in the fetus the possibility of greater stability on raising body temperature and the subsequent fall in blood support. It is recommended that the water temperature for the activities of pregnant women must be between 28 to 30 ° C (GOETZL and HARFORD, 2006).

According Prevedel (2003b), the specific effects of the practice of immersion physical activity contributes to the growing adherence to the technique, both on the part of pregnant women and on the professionals who accompany them in prenatal service. In addition to providing comfort and welfare, increases the mother body's ability to eliminate warmth. The maintenance of body temperature during hydrogymnastics is another desirable effect, exclusive of this kind of exercise.

Another very important activity for the last trimester, according Goetzl and Harford (2006), is the tai-chi, considered soft movements that help pregnant relax and save energy for the childbirth.

Other riskless physical activities to pregnant women may also be cited, such as low-impact aerobics and ergometric cycling. According to Lima and Oliveira (2005), aerobic physical activity helps substantially in the weight control and in maintenance of physical conditioning. Therefore, according to the literature on the benefits brought by physical activity during pregnancy, all women who do not have counter-indications should be encouraged to undertake aerobic, muscle-strength and stretching activities. They should choose activities that have little risk of loss of balance and traumas (DAVIES et al, 2003)

CONCLUSIONS

In pregnancy, having an exercises program is relevant during prenatal, based on common sense, flexibility and individuality of each pregnant, with trends to the body changes in a positive way, the basic element for a healthy pregnancy, a well-succeeded delivery and a successful healthy newborn.

It was observed in this literature review that pregnant women can have a well-coordinated programming for each trimester of her gestation, bringing benefits for both her health as for the fetus. Results indicated, therefore, the importance of physical activity during pregnancy, and their peculiarities, with benefits for the mother/child binomial, and, when indicated, the practice of regular, moderate, controlled and coordinated physical activity, produces beneficial effects on the health of pregnant and the fetus.

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PHYSICAL ACTIVITY IN WOMEN DURING PREGNANCY: A REVIEW

ABSTRACT

Nowadays, pregnant women are being encouraged to offset sedentarism with some type of physical activity, with the adoption of a healthy lifestyle. It should be observed during the prenatal an indicator of life quality on the physical and emotional aspects of women who participate in any program that encourages development of physical activities. Therefore, it is important that during pregnancy a woman involved in programs of physical activity in a viw of each trimester with its peculiarities, for the proper development of these activities, targeting the welfare of pregnant and the fetus. These programmes must be based on common sense, flexibility and individuality of each pregnant, with trends to the body changes in a positive way, the basic element for a healthy pregnancy, a well-succeeded delivery and a successful healthy newborn. This is a study of integrative literature review, taking up the LILACS database to the findings of the last 10 years, using keywords such as: “physical activity” and “pregnancy”. The objective was to identify the literature types of physical activities that can be taken by pregnant women without risk conditions. As a result, the findings showed that light activities such as swimming, hydrogymnastics, stretching, yoga and ergometric walking are the most recommended during pregnancy for the benefits as relaxation, better vascular conditioning, decrease muscle tension and movement activation, liberation movements and body awareness increase. Help in deep breathing and saves energy at the time of birth. It was concluded that pregnant women can have a well-coordinated programming for each trimester during pregnancy, bringing benefits for both their health and for the fetus, indicating, therefore, the importance of physical activity during pregnancy, in a view that it performed on a moderate, controlled and coordinated way produces health beneficial effects to the mother/fetus binomial

Keywords: Physical activities, Pregnancy, Women's health.

ACTIVITÉS PHYSIQUES DES FEMMES PENDANT LA GROSSESSE: UNE RÉVISION

RÉSUMÉ

Dans l'actualité les femmes enceintes sont encouragées a compenser le sédentarisme avec quelqu'activité physique, avec l'adoption d'un style de vie sain. Il doit être observé pendant la période prénatale l'indicateur de qualité de vie dans les aspects physiques et émotionnels des femmes enceintes qui participent de quelque programe que stimulent le développement des activités physiques. Ainsi, il est rélevant que pendant la grossesse, la femme participe de programmes d'activités physiques dans cette période, tenant en compte chaque trimestre avec ses particularités, pour un bon développement de ces activités, envisageant le bien-être de la femme enceinte et celui du fœtus. Ces programmes doivent être basés dans le bon sens, dans la flexibilité e dans l'individualité de chaque femme enceinte, avec tendences aux tranformations corporéaux d'une façon positive, élément basique pour une grossesse saine, un accouchement bien succédé et un nouveau-né sain. C'est un étude de révision de la littérature, intégrative, ayant comme Banque de Données le LILACS pour les trouvés des derniers 10 ans, en utiliseant les mots-clés : activité physique et grossesse. L'objective a été identifier dans la littérature types d'activités physiques que puissent être développées pour des femmes enceintes sans conditions de risque. Les résultats trouvés démontrent qu'activités légères dans l'eau, comme la natation et la gymnastique dans l'eau, étirement, yoga et marche à pied ergométrique sont les plus recommandés pendant la grossesse pour les bénéfices comme relâchement, meilleur conditionnement vasculaire, diminution de la tension musculaire et activation de la circulation du sang, libération des mouvements et augmentation de la conscience corporel qu'aident dans la respiration profonde et épargne énergie dans l'heur de la naissance. On conclut que la femme enceinte peut avoir une programmation bien coordonné chaque trimestre de la grossesse, prenant bénéfices tant pour sa santé, comme pour celle du fœtus, indiquant, donc, l'importance de l'activité physique dans la période de la grossesse, tenant en compte qu'elle, donnée de manière modérée, controlée et orientée produise des effets bénéfiques pour la santé de la femme enceinte et celle du fœtus.

Mots-clés: Activités physiques, Grossesse, Santé de la femme.

ACTIVIDADES FÍSICAS DE MUJERES EN EL PERÍODO GESTACIONAL : UNA REVISIÓN

RESUMEN

En la actualidad las embarazadas están siendo encorajadas a compensar el sedentarismo con algún tipo de actividad física, con la adopción de estilo de vida saludable. Debe ser observado durante el pré-natal indicador de calidad de vida cuanto a los aspectos físicos y emocionales de las gestantes que participan de algún programa que estimule el desarrollo de actividades físicas. Por tanto: es relevante que durante la gestación la mujer participe de programas de actividades físicas en el período de gestación, teniendo en cuenta cada trimestre sus peculiaridades, para un buen desarrollo de esas actividades,.buscando el bienestar de la gestante y del feto. Estos programas deben estar sustentados en el buen censo, en la flexibilidad y en la individualidad de cada embarazada con tendencias a las transformaciones corporales de forma positiva, elemento básico para un embarazo sano, un parto bien sucedido y un recién nacido saludable. Trátase de un estudio de revisión de literatura integrada, teniéndose como Banco de datos el LILACS, para los hallados en los últimos 10 años, utilizándose como

palabras claves, Actividad Física y Gestación. Se buscó identificar en la literatura tipos de actividades físicas que pueden ser desenvueltas por embarazadas sin condiciones de riesgo. Como resultados, los hallados mostraron que actividades leves em el agua, como natación, hidrogimnasia, alargamiento y caminada ergométrica, son las más recomendadas en la gestación, por los beneficios como relajamiento, mejor acondicionamiento vascular, disminución de la tensión muscular y activación de la circulación, liberación de los movimientos y aumento de la conciencia corporal. Ayuda em la respiración profunda y ahorra energía en la hora del nacimiento. Se concluye: que la gestante puede tener una programación bien coordinada en cada trimestre de la gestación, trayendo beneficios tanto para su salud como para el feto, indicando, por tanto, la importancia de la actividad física en el período de gestión, teniendo en cuenta que la misma actividad realizada de forma moderada, controlada y orientada produce efectos benéficos para la salud de la madre y del feto.

Palabras claves: Actividades físicas; Gestación; Salud de la mujer

ATIVIDADES FÍSICAS DE MULHERES NO PERÍODO GESTACIONAL: UMA REVISÃO

RESUMO

Na atualidade as grávidas estão sendo encorajadas a compensar o sedentarismo com algum tipo de atividade física, com a adoção de estilo de vida saudável. Deve ser observado durante o pré-natal indicador de qualidade de vida quanto aos aspectos físicos e emocionais das gestantes que participam de algum programa que estimule o desenvolvimento de atividades físicas. Portanto, é relevante que durante a gestação a mulher participe de programas de atividades físicas no período gestacional, tendo em vista cada trimestre com suas peculiaridades, para um bom desenvolvimento dessas atividades, visando o bem-estar da gestante e do feto. Estes programas devem estar baseados no bom senso, na flexibilidade e na individualidade de cada grávida, com tendências as transformações corporais de forma positiva, elemento básico para uma gravidez sadia, um parto bem sucedido e um recém-nascido saudável. Trata-se de um estudo de revisão de literatura, integrativa, tendo-se como Banco de Dados o LILACS para os achados dos últimos 10 anos, utilizando-se como palavras-chave: atividade física e gestação. Objetivou-se identificar na literatura tipos de atividades físicas que podem ser desenvolvidas por gestantes sem condições de risco. Como resultados, os achados mostraram que atividades leves na água como natação, hidroginástica, alongamento, ioga e caminhada ergométrica, são as mais recomendadas na gestação pelos benefícios como relaxamento, melhor condicionamento vascular, diminuição da tensão muscular e ativação da circulação, liberação dos movimentos e aumento da consciência corporal. Ajuda na respiração profunda e poupa energia na hora do nascimento. Conclui-se que a gestante pode ter uma programação bem coordenada a cada trimestre na gestação, trazendo benefícios tanto para sua saúde quanto para o feto, indicando, portanto, a importância da atividade física no período gestacional, tendo em vista que a mesma realizada de forma moderada, controlada e orientada produz efeitos benéficos para a saúde da gestante e do feto.

Palavras-chave: Atividades físicas, Gestação, Saúde da mulher.