Physical Therapy Department for Obstetrics and Gynaecology and Its Surgery

Doctoral Degree

2016

Author	:	**Doaa Ahmed Mohamed Osman**
Title	:	**Effect of Moderate Exercise on Immunological Properties of Breast Milk**
Dept.	:	**Physical Therapy Department for Obstetrics and Gynaecology and its Surgery.**
Supervisors	**1.**	**Salwa Mostafa El-Badry**
	2.	**Amel Mohamed Yousef**
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	4.	**Amal Ali El-Taweel**
Degree	:	**Doctoral.**
Year	:	**2016.**
Abstract	:	

The purpose of this study was to determine the effect of supervised and standardized moderate exercise on the immunological properties of breast milk in exclusively breast-feeding mothers. This study was carried out on forty-seven exclusively breast-feeding mothers at 1st to 5th months postpartum. They had had a single, healthy and full-term infant. Their ages ranged from 20 to 35 years old and their body mass index (BMI) were > 20 Kg/m^2 and < 35 Kg/m^2. They were randomly distributed into two groups: Group A received breast-feeding and nutritional counseling and engaged in a supervised exercise program in a form of moderate aerobic exercise at a level of 60 to 70% of the maximum heart rate (HR_{max}), 3 days/week for 30 minutes/day for 4 weeks and Group B received only breast-feeding and nutritional counseling for 4 weeks. Evaluation of all mothers were done pre and post-intervention through assessing maternal anthropometric parameters (weight and BMI); infant's weight; breast milk cortisol and immunological properties of breast milk (IgA, total leukocytes count, macrophages count, neutrophils count and lymphocytes count). Results revealed that within group A, the maternal anthropometric parameters and breast milk cortisol showed a statistically highly significant decrease (P < 0.001) while the infant's weight and all variables of immunological properties of breast milk showed a statistically highly significant increase (P < 0.001) between pre and post-intervention. Within group B, the maternal anthropometric parameters and total leukocytes, macrophages, neutrophils and lymphocytes counts showed statistically non-significant differences (P > 0.05) while, the breast milk cortisol and IgA showed a statistically highly significant decrease (P < 0.001) however, the infant's weight showed a statistically highly significant increase (P < 0.001) between pre and post-intervention. When comparing both groups post-intervention, there were statistically non-significant differences in the maternal anthropometric parameters, infant's weight and breast milk cortisol (P > 0.05) while there was statistically highly significant increase in all variables of immunological properties of breast milk (P < 0.001) in favor of group A. Consequently, it can be concluded that the postnatal moderate aerobic exercise has favorable effects not only on the exclusively breast-feeding mothers but also on their infants through improving the immunological properties of breast milk.

Key words	**1.**	**Moderate exercise**
	2.	**exclusive breast-feeding**
	3.	**breast milk**
	4.	**immune**
	5.	**cortisol**
	6.	**IgA**
	7.	**leukocytes**
Classification number	:	**000.000.**
Pagination	:	**244 p.**
Arabic Title Page	:	**تأثير التمرينات المتوسطة الشدة علي الخواص المناعية للبن الثدي.**
Library register number	:	**4853-4854.**

Author	**:**	**Heba El Shawadfy Mahmoud Ghaly**
Title	**:**	**Preventive strategies for work related low back pain in pregnant physical therapists.**
Dept.	**:**	**Physical Therapy Department for Obstetrics and Gynaecology and its Surgery.**
Supervisors	**1.**	**Salwa Mostafa El-Badry**
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Degree	**:**	**Doctoral.**
Year	**:**	**2016.**
Abstract	**:**	

This study was conducted to investigate the effect of preventive strategies for work related low back pain in pregnant physical therapists. Fifty one pregnant physical therapists participated in this study from Kafr Elshikh Governorate. Pregnant physical therapists divided randomly into two groups: control group 25 pregnant physical therapists who received only antenatal advices and study group 26 pregnant physical therapists who received antenatal advices plus preventive strategies for WRLBP and home routine consist of exercises training for LBP prevention for pregnant PTs for 10 min daily. All pregnant physical therapists were evaluated at 20, 24 and 32 weeks gestation by measuring pain intensity through numeric pain rating scale, functional disability through Oswestry low back pain disability questionnaire, pelvic girdle pain through pelvic girdle questionnaire, pain distribution through physical examination, lumbar curvature angle and symphyseal width. The results of this study showed that there were significant increase in pain intensity, pelvic girdle pain, lumbar curvature angle and symphyseal width at 20, 24 and 32 weeks gestation in both groups while there was non-significant difference in functional disability in study group. However, there were no statistical significant difference between study and control groups in pain intensity, functional disability, pelvic girdle pain, lumbar curvature angle and symphyseal width. It can be concluded that preventive strategies for work related low back pain have no effect in work related low back pain during pregnancy among pregnant physical therapists.

Key words	**1.**	**musculoskeletal disorders**
	2.	**low back pain**
	3.	**Pregnancy, pregnancy**
	4.	**physical therapists**
	5.	**ergonomics.**
Classification number	**:**	**000.000.**
Pagination	**:**	**148 p.**
Arabic Title Page	**:**	**الإستراتيجيات الوقائية لآلام أسفل الظهر المرتبطة بالعمل لأخصائيات العلاج الطبيعي الحوامل.**
Library register number	**:**	**5181-5182.**

Author	**:**	**Hoda Mohammed Fathey Mohammed**
Title	**:**	**Comparison of thoracic kyphosis and postural stiffness in pre and post-menopausal women**
Dept.	**:**	**Physical Therapy Department for Obstetrics and Gynaecology and its Surgery.**
Supervisors	**1.**	**Hala Mohamed Hanafy Omara,**
	2.	**Abd El Hamid Abd El Aziz Atta Allah**
	3.	**Mohamed Ahmed Mohamed Awad**
Degree	**:**	**Doctoral.**
Year	**:**	**2016.**
Abstract	**:**	

This study was conducted to compare between the degree of kyphosis and postural stiffness in the thoracic spine between pre- and post-menopausal women. Also, to examine the concept of age-related postural stiffness by measuring changes in the size of the thoracic curve of pre and post-menopausal women when standing in their usual relaxed posture versus their maximally erect posture and the ability to correct posture. Sixty pre-and sixty post-menopausal women participated in this study. They were selected randomly from physical therapy department in El Sahel Teaching Hospital. Pre-menopausal women's ages were ranged from 35 to 45 years old, post-menopausal women's ages were ranged from 55 to 65 years old with at least 5 years post menopause. A surveyor's flexicurve was used to measure the size of the thoracic curve (thoracic kyphosis) and estimate postural stiffness. The results of this study found that there was a statistical significant increase in the mean value of index of kyphosis relaxed and erect in post-menopausal group (17.07 ± 4.22) and (14.56 ± 4.36) respectively, when compared with its corresponding value in pre-menopausal group (12.95 ± 3.21) and (9.47 ± 3.34) respectively. There was a statistical significant decrease in value of index of kyphosis difference, percent and ratio in post-menopausal group (2.51 ± 1.37), (15.36 ± 9.27) and (1.16 ± 0.16) respectively, when compared with its corresponding value in pre-menopausal group (3.48 ± 1.78), (27.31 ±14.27) and (1.40 ± 0.35) respectively. So, it can be concluded that the post-menopausal women demonstrated more thoracic kyphosis and postural stiffness in their thoracic spine than pre-menopausal women.

Key words	**1.**	**Thoracic kyphosis**
	2.	**Menopause**
	3.	**Postural stiffness**
	4.	**women**
Classification number	**:**	**000.000.**
Pagination	**:**	**122 p.**
Arabic Title Page	**:**	**مقارنة إنحناء العمود الفقرى والتصلب الوضعى في النساء قبل وبعد إنقطاع الطمث.**
Library register number	**:**	**4773-4774.**