A STUDY TO EVALUATE THE EFFECTIVENESS OF MUSCLE STRENGTHENING EXERCISES ON REDUCING LOW BACK PAIN AMONG POST-MENOPAUSAL WOMEN IN SELECTED URBAN AREAS OF DHARAPURAM

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ABSTRACT

Back pain is described by the duration of the symptoms. Acute low back pain lasts less than6 weeks and sub-acute low back pain lasts 6 to 12 weeks. An evaluative approach was adopted for this study. The research design was a pre-experimental group pre-test post-test design. The target population was post-menopausal women. This study was conducted in Nanchhiyampalayam, Dharapuram. Nanchiyampalyam is an urban area which is 3 kms away from Dharapuram. Samples were Post Menopausal Women between age group of 44-55 years. The purposive sampling technique was used to select the samples forthe study. In post-test 210(70%) had minimal low back pain, 90 (30 %) had moderate low back pain, none of them had severe low back pain, crippled low back pain, and none of them had bedbound. Muscle strengthening exercises can be effective in reducing low back pain among post-menopausal women. Research has shown that regular exercise, including exercises that target the muscles in the back and core, can help improve strength, flexibility, and posture, which in turn can alleviate low back pain.

Key Words: *Back pain, Muscle, low back pain, menopausal.*

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INTRODUCTION

Low back pain lasting at least a whole day in the past 3 months was reported by 26.4% of respondents and neck pain was reported by 13.8%. Among racial groups, American Indians and Alaska natives had the highest prevalence of low back pain and Asian Americans had the lowest. NAMCS (National Ambulatory Medical Care Survey) data suggested that the proportion of all physician visits attributable to low back pain (2.3%) has changed little since the early 1990's. **Deyo et al.,(2002)**

Possible side effects of medication can vary from person to person.

Some side effects of common pain relievers include: liver damage, indigestion, heartburn, abdominal pain, nausea, headache, dizziness, fluid retention, tinnitus, drowsiness, restlessness or balance problems, constipation, dry mouth, blurred vision, urinary retention, itching, decreased interest in sex, and occasional confusion.

In a study among garment workers in **Madurai**, it was found that about 34% of workers had back pain along with other Musculo skeletal problems such as neck pain and stiffness of neck. Among the common complaints of the workers it was found that 83% of workers had complaints of shoulder pain and back pain. **Paramasivam P et al, (2007)**

REVIEW OF LITERATURE

Rackwitz B et al (2006) conducted a study on the effectiveness of segmental stabilizing exercises for acute, sub-acute and chronic low back pain at Germany. The study design was a systematic review of randomized controlled trials. Segmentalstabilizing exercises were compared with other methods such as treatment by general practitioner and physiotherapy treatment among 78 participants. Segmental stabilizingexercises comprised of 7 sessions (1 single and 6 group) interventions over 8 weeks.The duration of each session was 45 minutes. 7 trials were included. The results of the study were that the mean score of 2.4 ± 1.5 before the prone test decreased to 0.8 ± 1.4at P<0.001.the findings of the study indicate that segmental stabilizing exercises are, in the short and long-term, more effective than General Practitioner treatment and may beas effective as other physiotherapy treatments in reducing disability and pain.

Hannu Luomajoki et al (2010) conducted a study on the effectiveness of specific exercise interventions in the improvement of low back movement control, decreased pain and disability at Switzerland. A prospective study was carried out in two outpatient physiotherapy practices. 38 patients suffering from non-specific low back pain and movement control impairment were treated. Treatment was aimed at improving movement control of the lumbar spine, pain and disability. Treatment effects were evaluated using a set of six movement control tests (MCT), patient-specific functional pain scores (PSFS) and a Roland and Morris disability questionnaire (RMQ). The results of the study indicated that movement control showed a 59% improvement from 3.2 to 1.3 positive tests (d=1.3,P<0.001), complaints decreased 41% from 5.9 points to 3.5 (d=1.3,P<0.001) and disability decreased 43% from 8.9 to 5.1 points (d=1.0,P<0.001),. These results showed that movement control improved along with reduction in patient specific functional complaints and disability following specific individual exercise programs.

RESEARCH METHODOLOGY

Back pain is described by the duration of the symptoms. Acute low back pain lasts less than6 weeks and sub-acute low back pain lasts 6 to 12 weeks. An evaluative approach was adopted for this study. The research design was a pre-experimental group pre-test post-test design. The target population was post-menopausal women. This study was conducted in Nanchhiyampalayam, Dharapuram. Nanchiyampalyam is an urban area which is 3 km away from Dharapuram. Samples were Post Menopausal Women between the age group of 44-55 years. The purposive sampling technique was used to select the samples forthe study. Sample size of the study was 300 Post Menopausal Women

DATA ANALYSIS AND INTERPRETATION

RESULTS:

ASSESS THE PRETEST AND POSTTEST LEVELS OF LOW BACK PAINAMONG POST-MENOPAUSAL WOMEN

Frequency and percentage distribution of Pre and post-test levels of low back painamong Postmenopausal women.

S. No	Variables	Levels of low back pain	PRE-TEST		POST-TEST	
			F	%	F	%
1	Level of low back pain	Minimal	85	28.3	210	70
		Moderate	145	48.4	90	30
		Severe	70	23.3	0	0
		Crippled	-	-	-	-
		Bedbound	-	-	-	-

During pretest, 85 (28.3 %) of post-menopausal women had minimal low back pain, 145(48.4 %) had moderate low back pain, 70(23.3%) had severe low back pain, and none of them had crippled low back pain and bed bound.. In post-test 210(70%) had minimal low back pain, 90 (30 %) had moderate low back pain, none of them had severe low back pain, crippled low back pain, and none of them had bedbound.

CONCLUSION

Muscle strengthening exercises can be effective in reducing low back pain among post-menopausal women. Research has shown that regular exercise, including exercises that target the muscles in the back and core, can help improve strength, flexibility, and posture, which in turn can alleviate low back pain. However, it's important to approach these exercises with caution and consult with healthcare professionals, such as a physical therapist or a doctor, to ensure that performing the exercises correctly and safely. They can provide guidance on specific exercises that would be most beneficial for individual needs. Always start slowly and gradually increase the intensity and duration of exercise routine. These findings will serve as a baseline for Evaluating the Effectiveness of Muscle Strengthening Exercises on reducing low back pain among post-menopausal women in selected urban areas of Dharapuram.

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