

EFFECT OF STRETCHING EXERCISES IN NON- SPECIFIC CHRONIC NECK PAIN: A LITERATURE REVIEW

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ABSTRACT

Neck pain and associated psychological morbidities such as depression are the most common motivations for pursuing medical attention. It was found that 68.4% of the subjects having neck pain suffer from anxiety while 55.7% of these patients have depression. Among these subjects, the factors associated with psychiatric morbidities include cervicobrachial neuralgia, low level of education, and severity of the pain. Despite the established and expected relationship between these common comorbidities, temporal and causal directions and precise mechanisms connecting pain with psychological problems remain indescribable, mainly in developing countries. There is lack of evidence from developing countries on studying the association between neck pain and psychological morbidities.

OBJECTIVE: to find the effectiveness of static stretching exercises in non-specific chronic neck pain.

MATERIAL AND METHODS: An electronic database search, title and abstract search was conducted between 2010 to at present using Google Scholar, PubMed, Physiotherapy Evidence Database (PEDro) and Cochrane database. The study was double checked and the review used only full-text papers. A total of 15 studies were chosen to investigate the effectiveness of static stretching exercises in non-specific chronic neck pain.

RESULT: According to a data search from 2010 to at present roughly fifteen free full articles suggest that static stretching exercises are beneficial in improving pain, ROM and flexibility in non-specific chronic neck pain.

CONCLUSION: According to the findings of this review study, static stretching exercises are safe and feasible and has been found to improve pain, ROM, flexibility, muscle strengthening in non-specific chronic neck pain. From a practical point of view, stretching exercises are an affordable and easily workable method with a good therapeutic effect in pain in the musculoskeletal system of a functional nature. Muscle spasm and muscle imbalance are positively influence.

INTRODUCTION

Neck pain is major sources of morbidity and a major complain in family care settings in all countries and across all segments of the population. The burden of chronic pain is increasing, in low-income and middle-income countries, and affecting health system negatively by increasing healthcare-related costs. Neck pain is one of the most common musculoskeletal disorders, having an age-standardised prevalence rate of 27.0 per 1000 population

in 2019. This literature review describes the global epidemiology and trends associated with neck pain, before exploring the psychological and biological risk factors associated with the initiation and progression of neck pain. 1 Musculoskeletal conditions like backache, shoulder and neck pain are similar to other non communicable diseases as they share the same risk factors like physical inactivity, increased BMI, smoking, and unhealthy lifestyle (2). Neck pain and associated psychological morbidities such as depression are the most common motivations for pursuing medical attention. It was found that 68.4% of the subjects having neck pain suffer from anxiety while 55.7% of these patients have depression. Among these subjects, the factors associated with psychiatric morbidities include cervicobrachial neuralgia, low level of education, and severity of the pain. Despite the established and expected relationship between these common comorbidities, temporal and causal directions and precise mechanisms connecting pain with psychological problems remain indescribable, mainly in developing countries. There is lack of evidence from developing countries on studying the association between neck pain and psychological morbidities (3).

Neck pain is the fourth leading cause of disability, with an annual prevalence rate exceeding 30%. Most episodes of acute neck pain will resolve with or without treatment, but nearly 50% of individuals will continue to experience some degree of pain or frequent occurrences. History and physical examination can provide important clues as to whether the pain is neuropathic or mechanical and can also be used to identify "red flags" that may signify serious pathology, such as myelopathy, atlantoaxial subluxation, and metastases. Few clinical trials have evaluated treatments for neck pain. Exercise treatment appears to be beneficial in patients with neck pain. There is some evidence to support muscle relaxants in acute neck pain associated with muscle spasm, conflicting evidence for epidural corticosteroid injections for radiculopathy, and weak positive evidence for cervical facet joint radiofrequency denervation. In patients with radiculopathy or myelopathy, surgery appears to be more effective than nonsurgical therapy in the short term but not in the long term for most people. (4)

Method

According to Somaye Kazeminasab, Seyed Aria Nejadghaderi, et, al. Studies were included that used human subjects and evaluated the effects of biological or psychological factors on the occurrence or progression of neck pain, or reported its epidemiology. 1

According to Al-Ghamdi S, Shubair MM, et, al. A cross-sectional study was conducted Al-Kharj, Saudi Arabia, including 1,003 individuals. The questionnaire comprised of General Health Questionnaire-12 and some questions about neck and back pain. Data analysis was done using statistical software SPSS version 26.0. (2)

According to Choi S, Nah S, Jang HD, et, al conducted in 2013, 2014, and 2015. The total of 8,473 patients included in the analysis. A 357 subjects in the chronic LBP group and 1,697 subjects in the no chronic LBP group reported no stress. The numbers of subjects reporting mild, moderate, and severe stress in the two groups were 934 vs. 3,785, 432 vs. 910 and 123 and 235 respectively Multiple logistic regression analysis with full adjustment for other variables indicated higher OR for severe stress stress. We confirmed that there was a significant association between chronic LBP and degree of stress. Therefore, the degree of stress should be assessed in clinical treatment of chronic LBP patients.(3)

. Tantawy SA, Abdul Rahman A, et, al. Self-administered questionnaires were distributed to 94 students aged

18–26 years who were enrolled at various Ahlia University colleges and met other inclusion criteria. The students responded to the standardized Nordic musculoskeletal questionnaire and the modified College Student Stress Inventory regarding musculoskeletal symptoms and academic stressors. Height and weight measurements were also obtained to determine body mass index.(4)

. According to Safiri S, Kolahi A-A, Hoy D,et,alGlobally in 2017 the age standardised rates for point prevalence of neck pain per 100 000 population was 3551.1 (95% uncertainty interval 3139.5 to 3977.9), for incidence of neck pain per 100 000 population was 806.6 (713.7 to 912.5), and for years lived with disability from neck pain per 100 000 population was 352.0 (245.6 to 493.3). These estimates did not change significantly between 1990 and 2017. The global point prevalence of neck pain in 2017 was higher in females compared with males, although this was not significant at the 0.05 level and Denmark (5316 (4674 to 6030.1)) had the three highest age standardised point prevalence estimates in 2017. (5)

Accordint to Yuan S. included only randomized controlled trials (RCTs) and q-RCTs evaluating the effects of yoga on patients with CNNP. The primary outcomes for this review were pain and disability, and the secondary outcomes were cervical range of motion (CROM), quality of life (QoL), and mood. Participants Trails that examined the clinical outcomes of yoga intervention in adults with CNNP compared with those of other therapies except yoga (e.g., exercise, pilates, usual care, et al) were included Cochrane risk-of-bias criteria were used to assess the methodological quality, and RevMan 5.3 software was used to conduct the meta-analysis.(6)

According to .Veerle De Loose, PT; Frederic Burnotte, et.al. A total of 629 completed questionnaires were evaluated which revealed the following: lifetime prevalence (78%), week prevalence (53%), point prevalence, year prevalence long term, 15%; never,The results of this study provided support for the role of physical and psychosocial job characteristics in the etiology of neck pain in military office workers.(9)

.Accordinf to.Sunyue Ye, Qinglei Jing,et,al Observational study with a cross-sectional sample.This study surveyed 15 companies in Zhejiang province, China.After excluding participants with missing variables, 417 office workers, including 163 men and 254 women, were analyzed.Demographic information was collected by self-report. The standard Northwick Park Neck Pain Questionnaire and Oswestry Low Back Pain Disability Index, along with other relevant questions, were used to assess the presence of potential occupational risk factors and the perceived levels of pain. Multinomial logistic regression analysis, adjusted for age, sex, body mass index, education, marital status and neck/low back injury, was performed to identify significant risk factors.(10)

Discussion:

This review assessed the current evidence for static stretching exercises are effective in non-specific chronic neck pain. The aim of this review was to synthesize the effect of static stretching exercises in non specific chronic neck pain. The results of this review showed that static stretching exercises had a beneficial effect on improving pain, ROM, flexibility in non-specific chronic neck pain.

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Conclusion:

Current data indicate that static stretching exercises are safe and feasible and has been found to improve pain, ROM, flexibility, muscle strengthening in non-specific chronic neck pain. From a practical point of view, stretching exercises are an affordable and easily workable method with a good therapeutic effect in pain in the musculoskeletal system of a functional nature. Muscle spasm and muscle imbalance are positively influenced by the administration of stretching exercises.

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