Effectiveness of Bowen therapy vs Manual Trigger point therapy for Non-Specific Neck pain in Home makers – A Comparative study

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Abstract

Background: Neck pain is a common global issue, ranking as the sixth major cause of disability. Non-specific neck pain (NSNP) affects many, particularly housewives in India, due to factors like sedentary lifestyles and repetitive movements. NSNP prevalence varies widely, ranging from 16.7% to 75.1% globally. Housewives' tasks, like continuous leaning forward and lifting heavy items, contribute to their vulnerability. Understanding NSNP's prevalence and risks among housewives is crucial for effective intervention and improved quality of life.

Method: In a 4-week study, 30 middle-aged participants with acute non-specific neck pain were selected based on specific criteria. They were divided into two groups: Group A received Bowen therapy, while Group B received manual trigger point therapy. Both groups underwent treatment sessions for 5 days a week over the 4-week period.

Result: The data was analyzed using SPSS Version 29. Statistical analysis revealed that both groups exhibited significant improvement, with Group A (Bowen therapy) showing greater improvement compared to Group B (Manual trigger point therapy).

Conclusion: The study compared Bowen therapy and manual trigger point therapy for non-specific neck pain in housewives. Bowen therapy showed greater improvement in pain relief and function compared to manual trigger point therapy.

Keywords: Non- specific neck pain, Housewives, Bowen therapy, Manual trigger point therapy, acute pain.

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Date of Submission: 12 April 2024
Date of Revision: 28 June 2024
Date of Acceptance: 20 August 2024

Introduction

Any pain or discomfort that radiates into upper limbs and last for at least a day is classified as neck pain. It is influenced by various factors, such as the fact that it is a significant issue in today's society. Its importance is underscored by its widespread impact.[1,2] A lot of people experience neck pain, and it's the sixth major reason for disability globally, causing significant economic challenges. [3] Neck pain is commonly categorized as mechanical neck pain or nonspecific neck pain because the cause of the condition is frequently unknown. Mechanical neck pain is

characterized by cervical spine discomfort triggered by specific movements. Non-specific neck pain (NSNP) refers to discomfort in the neck area, whether it radiates or not, with no identifiable systemic disease as its root cause. This manifests as discomfort in the lateral and posterior regions of the neck, lacking specific diagnostic indicators or symptoms.[4-7]

Acute neck pain typically lasts for under 4 weeks, while sub-acute neck pain persists for duration of 1 to 4 months.[8] Around 50% of people, more commonly women, will experience neck pain at some point in their lives, usually in middle age and being influenced by physical, psychological, and environmental factors.[9,10] The high prevalence of neck pain (61.18%) was among the housewives in India.[11] Housewives often experience neck pain due to continuous leaning forward of the body, repetitive upper body movements, lifting heavy items in awkward positions, maintaining static postures, and bearing heavy workloads.[11] The neck disability index is a 10-item questionnaire for assessing neck pain-related disability. Scores range from 0 to 5 per question, totaling 100, with higher scores indicating a greater perceived handicap from neck pain.[12] The numeric pain rating scale measures pain severity on an 11-point scale from 0 to 10. Patients rate their current, best, and worst pain levels in the past 24 hours. It's reliable, valid, and responsive for neck pain.[13]

In Australia, Thomas Bowen (1916–1982) introduced Bowen therapy as a non-invasive technique for myofascial release. This approach involves specific sequences of gentle cross-fiber movements over muscles, tendons, ligaments, and fascia, applying a few grams of force. These deliberate movements target the restricted fascia layer with slow and continuous pressure, either directly or indirectly.[14]

In a Bowen therapy session, the therapist uses a sequence of careful and gentle pressure techniques, known as Bowen moves, applying them with their thumbs and fingers to specific areas of muscles, tendons, ligaments, and myofascial tissue. These moves are followed by breaks of 2–5 minutes to permit the body to react. Feedback from sessions has shown positive changes in pain levels, a reduction in swelling, and enhanced functional recovery.[15,16]

Manual trigger point therapy involves employing various manual techniques like compression, stretching, or transverse friction massage. In this process, the therapist gradually intensified pressure during the trigger point manual therapy until a clear rise in tissue resistance (barrier) was noticed.[17]

Manual trigger point therapy was used gradually and without causing discomfort. In every session, this procedure was carried out three times. Myofascial pain syndrome patients with shoulders or necks can benefit from trigger point manual therapy procedures for reduced pain and improved function. Every compression was applied for the full 60 seconds, or until the therapist noticed a softening of the trigger point nodule or a loss of referred pain. There was a 10-second break in between compressions. The intervention lasted about six minutes in total.[17-19]

Need of study: The need for this comparative study arises from the high prevalence of non-specific neck pain among home-makers, due to a lack of conclusive evidence on the efficacy of Bowen therapy versus manual trigger point therapy for this specific demographic. The study aims to provide valuable insights into which interventions yield superior outcomes, thereby guiding healthcare professionals in selecting the most suitable treatment option

for alleviating non-specific neck pain in home-makers.

Aim and Objectives

The aim of the study is to determine which technique is more beneficial by comparing Bowen therapy and Manual trigger point therapy for non-specific neck pain among home-makers.

Objectives were to find out which technique is more effective; Bowen therapy and Manual trigger point therapy among the home-makers;

1. Reduce pain and tenderness with non-specific neck pain in home-makers.
2. Improving neck mobility and functional activities related to neck pain in home-makers.

Methodology

An interventional comparative study was planned for home makers with acute nonspecific neck pain visiting Community Physiotherapy Department of the institute. 30 individuals with frequent or continuous neck pain from 4 weeks, in the age range of 25-50 years were selected and allocated into Group A and Group (15 each). Bowen therapy was administered for Group A and Group B received Manual trigger point therapy for 4 weeks (5 sessions per week) History of recently surgical procedure, fracture /Dislocation to upper limb-upper thoracic, painkillers or steroids intake, cervical pathologies like radiculopathy, myelopathy, fibromyalgia, trauma to the cervical region and conditions like spondylosis, spondylolisthesis, torticollis, scoliosis were excluded from the study.
The participants underwent pre-evaluation before the intervention and neck pain was assessed by noting their Numeric Pain Rating Scale (NPRS) and Neck Disability Index (NDI). This was followed by the intervention by Bowen therapy for Group A and Manual trigger point therapy for Group B for 4 weeks. At the end of the last session, participants underwent a post-evaluation.

Results

This study involved 30 individuals, and statistical analysis was performed using SPSS version 29.0 with a significance level of 0.05. For age comparison, an independent sample t-test revealed no significant difference between the groups. Within-group comparisons of pain intensity (NPRS and NDI) were conducted using paired t-tests. Group A showed significant improvements in NPRS and NDI at 4 weeks ($p<0.05$).

When comparing Group A with Group B, independent sample t-tests showed that Group A had significant improvements in both NPRS and NDI at 4 weeks ($p<0.05$). However, Group B exhibited less significant improvement in pain intensity and neck disability compared to Group A. Pain intensity within groups decreased significantly in Group A at 4 weeks ($p<0.05$), while Group B showed less improvement. Independent sample t-tests between groups demonstrated significant improvement in Group A at 4 weeks ($p<0.05$), with Group B showing less significant improvement in pain intensity.

NDI significantly improved in Group A at 4 weeks ($p<0.05$), according to paired t-tests. Additionally, Group A showed significant improvement compared to Group B based on independent sample t-tests. In summary, Group A (Bowen therapy) exhibited more significant improvements in pain intensity and neck disability compared to Group B (manual trigger point therapy) at 4 weeks.

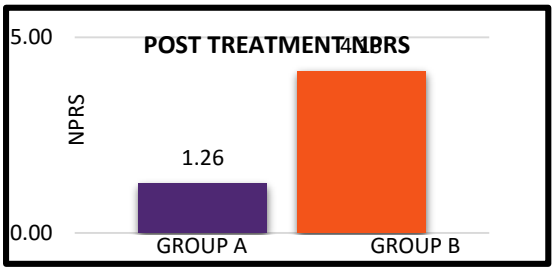
Discussion

This research aimed to compare manual trigger point treatment and Bowen therapy

for non-specific neck pain in housewives aged 25-50. Conducted at Nootan College of Physiotherapy's Orthopaedic Department, the study included 30 volunteers. Bowen therapy demonstrated better results than manual trigger point therapy in reducing pain and functional impairment. While previous studies showed mixed results for manual trigger point therapy, Bowen therapy consistently showed efficacy in reducing neck pain. The study suggests Bowen therapy as a potential alternative for treating neck discomfort in various demographics, emphasizing its effectiveness in housewives.

Table 1: Inter-group comparison - Post-Treatment

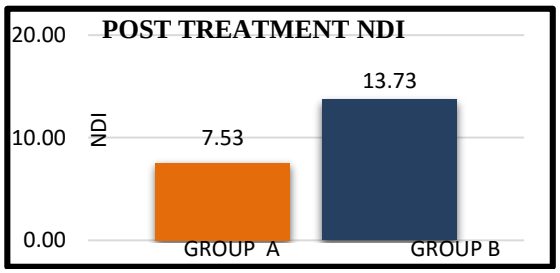
N=30	Group A (Mean±SD)	Group B (Mean±SD)	F-value	p-Value
NPRS	1.26±0.96	4.14±0.74	4.74	0.001



Graph 1: Inter-group comparison after 4 weeks

Table 2: Inter-group comparison - Post-Treatment

N=30	Group A (Mean±SD)	Group B (Mean±SD)	F-value	p-Value
NDI	7.53±2.35	13.73±4.00	5.51	0.001



Graph 2: Inter-group comparison after 4 weeks

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How to cite the article:

Patel HA, Thakrar SJ, Chokshi C, Vedawala N. Effectiveness of Bowen therapy vs Manual Trigger point therapy for Non-Specific Neck pain in Home-makers – A Comparative study. JIHR 2024;1(2):17-21.