

Experience of progressive relaxation to reduce musculoskeletal discomfort among operating room nurses

J.H. WU¹, T.J. CHEN¹ and S.F. CHANG¹

1 Operating Room, Nursing Department, Taipei Medical University Hospital, Taipei ,Taiwan

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INTRODUCTION

Operating room nurses often experience musculoskeletal discomfort from maintaining the same posture for an extensive period, lifting heavy objects, and repeatedly delivering surgical instruments in an inappropriate posture. Also, long working hours and high work pressure often cause job burnout. Long-term musculoskeletal discomfort and job burnout easily impose burden on the physical, psychological, and social well-being of operating room nurses, which in turn affect their work performance as well as their physical and mental health.

The principle of progressive relaxation is to help eliminate tightness by relaxing the muscles of the body. After repeated practice, it is easier to relax the muscles at any time, which can improve musculoskeletal discomfort and achieve physical and mental relaxation.

AIM

This study empirically reviews the literature on the application of progressive muscle relaxation interventions to operating room nursing staff to evaluate whether they can reduce the musculoskeletal discomfort or pain of operating room nursing staff. Through this result and experience, we provide clinically effective measures to improve the musculoskeletal discomfort or pain of nursing staff in the operating room.

RESULTS

NMQ assessment results

1. Occurrence ratio: The lower back accounts for 100%, the neck, left shoulder and right shoulder each account for 75%, and the left knee, right knee and left hip/left thigh have an incidence rate of 25% each.
2. Frequency: The neck occurs once a week to once a month; the left and right shoulders occur almost every day; the lower back and waist occur once a week; the left and right knees, left hip/left thigh occur once a month.
3. Symptoms: soreness, tightness, numbness and tingling.
4. The impact of symptoms on the case: causing a slight or significant reduction in work ability, and even requiring leave to recuperate.
5. The way to seek treatment: massage accounts for 100% as the highest, rehabilitation and hot compress each account for 50%, analgesics and Chinese medicine patches each account for 25%.
6. Are the symptoms related to work? All cases were considered to be work-related (100%).

Cause

1. Poor working posture (for example: standing for a long time with three or seven steps, twisting the body to transfer equipment, etc.)
2. Stand for a long time
3. Wear lead clothing for a long time
4. Repeat the same action (pass equipment)
5. Move heavy objects
6. Insufficient exercise
7. Long working experience



physical and mental social impact

1. Physical effects: body aches, tightness, and numbness; reduced physical activity and reduced activity endurance; light sleep, easy awakening, and fatigue; reduced concentration and forgetfulness.
2. Psychological effects: Feeling of powerlessness; depression, tension, anxiety; high stress; negative thinking.
3. Social impact: daily life and social activities are reduced, and interaction with children is reduced; work performance is reduced; the need to take time off affects the economic situation.

The pain level in all cases dropped from moderate pain to very severe pain to slight pain to moderate pain. From the case consultation, it was found that the muscles were more relaxed, the quality of sleep was improved, and the muscles were well rested.

METHOD

The NMQ questionnaire pre-tested the cases and found that the incidence rate of musculoskeletal discomfort was 100%. The incidence rate of various parts of the body was the lower back, which accounted for 100%. The incidence rate of neck, left and right shoulders was 75% each, and the incidence rate of left and right knees, left hip and The incidence rate in the left thigh was 25% each.

Use MP3 to play voice commands for PMR exercises to relax 14 muscle groups (fingers, palms, forearms, upper arms, shoulders, forehead (chin, cheeks), neck, upper back, chest and abdomen, thighs, calves, ankles and insteps)), performed 3 to 4 times a week, 16 minutes each time, and the pain status of the cases was followed 4 weeks after the intervention.

CONCLUSIONS

Through a systematic literature review, it was confirmed that progressive relaxation intervention can improve musculoskeletal pain and discomfort. Apply progressive relaxation to nursing staff in the operating room to evaluate whether their musculoskeletal pain and discomfort can be improved. The implementation results can improve the musculoskeletal discomfort of nursing staff, which is consistent with the literature.

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CONTACT INFORMATION

Ju-Hsiang Wu

Operating Room Head nurse

E-mail:wu86259@gmail.com



臺北醫學大學附設醫院
TAIPEI MEDICAL UNIVERSITY HOSPITAL