THE EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION (PMR) TO REDUCE PAIN

Supriliyah Praningsiih*, Shanti Rosmaharani*
Lecturer, Bachelor Nursing Programme
STIKes Pemkab Jombang
Email : lia.praningsih@gmail.com

ABSTRACT

Introduction: Pain is common problem in many person with acute and chronic diseases. Specifically pain control is common obstacle limiting physiotheraphy treatment. The progressive muscle relaxation (PMR) is a technique that involves the sequential tensing and relaxation of major skeletal muscle groups with the aim of inducing relaxation. The purpose of this study was to determine evidence for the effectiveness of PMR for decreasing the pain both acute and chronic pain.

Methods: This was literature review study from journal database PubMed, Proquest, EBSCO restricted from 2004 until 2013.

Result: There was 10 article included by searching through the appropriate keyword topic, after read the abstract only 4 journals will be included in this paper.

Discussion: The conclusion from this study were reviewed that most of the research indicate reduction in perceive levels of pain with Progressive Muscle relaxation intervention, including in combined Progressive Muscle relaxation. This intervention can be recommended for nursing to decrease the pain.

Keywords: progressive muscle relaxation, pain

INTRODUCTION

Chronic illnesses are increasing in recent days. The main problems of chronic illness are pain. Pain sensation is the experience of pain as reported by patient, whereas pain behavior is the set of observable behaviors that indicate a patient is experiencing pain. Many scholars have shown interest in reduce pain and pain management. One of complementary treatment in pain management that involved psychologically of patient is Progressive Muscle Relaxation (PMR).

Progressive Muscle Relaxation (PMR) is a technique that involves the sequential tensing and relaxation of major skeletal muscle groups with the aim of inducing relaxation. In Progressive Muscle Relaxation (PMR), patients start to deliberately contract muscles and hold the tension; secondly they release all tension and focus on the sensation of relaxation. Regular practice will then help patients to recognize tension and to voluntarily relax affected muscles.

Therefore, study to investigated Progressive Muscle Relaxation (PMR) as complementary treatment in pain management is needed. This paper was examining critically the effectiveness of Progressive Muscle Relaxation (PMR) in reducing pain.

METHODS

Systematic searches were undertaken using EBSCO database, ProQuest, and PubMed. It restricted from 2004 to 2013. Through the appropriate keyword topic and found 10 journals, after read the abstract only 4 journals will be included in this paper.

RESULTS

Based on the articles above Progressive Muscle Relaxation (PMR) were effective in reducing pain as complementary treatment. Many other complementary treatment were provided to reduce pain. This study were reviewed that most of the research indicate reduction in perceive levels of pain with Progressive Muscle Relaxation (PMR) intervention, including in combined Progressive Muscle Relaxation (PMR). This intervention can be recommended for nursing to decrease the pain. Progressive Muscle Relaxation (PMR) is the easiest treatment that can be done by family members and patient itself.

This treatment is the cheapest among others. No need to pay higher to do this treatment. Yet the only way to do these treatments only focus on using muscle exercise.

DISCUSSION

The Progressive Muscle Relaxation (PMR) is treatment that can be used to reduce
pain. This intervention can be recommended for nursing to decrease the pain and it’s easiest to use for everyone. The future researches are needed to study the effectiveness combining the PMR with another complementary treatment.

REFERENCES


Table 1. Literature Review

<table>
<thead>
<tr>
<th>No.</th>
<th>Name, Year</th>
<th>Intervention</th>
<th>Control</th>
<th>Sample (n)</th>
<th>Methode</th>
<th>Random</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tejas et al., 2013</td>
<td>PMR (progressive muscle relaxation with visual imagery for 30 min, daily for 1 week.)</td>
<td>Yes</td>
<td>10 subject with burn were randomly assigned to two groups</td>
<td>Randomized control trial</td>
<td>Yes</td>
<td>visual analogue scale, hospital anxiety and depression scale (HADS)</td>
</tr>
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<td>2.</td>
<td>Engel, Jensen and Schwartz, 2004</td>
<td>PMR (progressive muscle relaxation in 7 sesion, each session is about 1 hours.)</td>
<td>No</td>
<td>3 partisipan with various cerebral palsy pain</td>
<td>Longitudinal studies</td>
<td>No</td>
<td>EMG (electromyographic)</td>
</tr>
<tr>
<td>3.</td>
<td>Lauche et al, 2013</td>
<td>Compared between PMR (progressive muscle relaxation) and Cupping Massage</td>
<td>No</td>
<td>31 patient allocated to PMR, 30 Patient allocated to Cupping Massage</td>
<td>Randomized controlled clinical trial with two parallel groups</td>
<td>Yes</td>
<td>Primary outcome measure was the current neck pain intensity(0-100mm visual analog scale;VAS). Secondary outcome measures included pain on motion, affective pain perception, functional disability,</td>
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psychological distress, wellbeing, health-related quality of life, pressure pain thresholds and adverse events. significantly differences between two treatment

<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Participants</th>
<th>Interventions</th>
<th>Outcomes</th>
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<tr>
<td>Jensen et al, 2009</td>
<td>Pre treatment assessed 7 days before treatment for both PMR and HYP</td>
<td>1. 8 respondents with Hypnosis, 14 respondents randomly assigned to both HYP and PMR : 7 responden with Hypnosis and 7 responded with PMR.</td>
<td></td>
<td>1. BPI pain interverence scale: a. Hypnosis : 1) Decrease of pain intensity from pre treatment to post-treatment. 2) Decrease of pain intensity from pre treatment to 3 month follow up. 3) Increase of pain intensity from post-treatment to 3 month follow up. b. PMR : 1) Increase of pain intensity from pre-treatment to post-treatment. 2) Decrease of pain intensity from pre treatment to 3 month follow up. 3) Decrease of pain intensity from post-treatment to 3 month follow up.</td>
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<td>2. Treatment outcome expectancy: a. Hypnosis : 1) Decrease of pain intensity from pre treatment to post-treatment. 2) Decrease of pain intensity from pre treatment to 3 month follow up. 3) Increase of pain intensity from post-treatment to 3 month follow up. b. PMR : 1) Increase of pain intensity from pre-treatment to post-treatment. 2) Decrease of pain intensity from pre treatment to 3 month follow up. 3) Decrease of pain intensity from post-treatment to 3 month follow up.</td>
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