

Conference Paper

The Effectiveness of the Finger Grip Relaxation Technique to Reduce Pain Intensity in Post-Appendectomy Patients: A Literature Review

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Abstract

Appendicitis is an inflammation of the appendix. Post-appendectomy patients often experience pain from the surgical wound incisions. Pain will have an impact on daily activities. Therefore, independent nursing action is needed by performing simple and easy pain management; one methods is finger grip relaxation. To measure the effect of finger relaxation techniques on pain reduction in post-appendectomy patients, this study used a literature review method. The data was collected by searching on Google Scholar website with the following keywords: Finger Grip Relaxation Techniques, Pain, and Appendicitis. It was found that in post-appendectomy surgery patients before being given a finger grip relaxation technique, the patients experienced moderate pain, then after being given a finger grip relaxation technique, the pain intensity decreased and effectively. Data were analysed by Paired T-Test with a significant value $\alpha=0.005$. The results showed the average result before intervention was 4.80 and the average result after intervention was 3.87. The bivariate results obtained p-value 0,000. It shows that there are differences in pain intensity before and after finger grip relaxation techniques are performed in post-appendectomy patients [3]. It can be concluded that finger grip relaxation techniques can be used as an intervention in the hospital or at home to reduce pain in post-appendectomy patients.

Keywords: Finger Grip Relaxation Techniques, Pain, Appendicitis.

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1. Introduction

Appendicitis is inflammation due to infection of the appendix. These infections can cause acute inflammation that requires immediate surgery to prevent generally dangerous complications. Management of appendicitis patients is appendectomy. The impact of problems that arise after surgery is discomfort. To overcome the discomfort it is necessary to treat pain pharmacologically and non-pharmacologically [1, 2]. In this paper,

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finger grip relaxation techniques are used to reduce pain intensity and are effective for post-appendectomy.

2. Methods and Equipment

2.1. Methods

2.1.1. Diagrammatic Representation

The method used to compile this literature review is an electronic database. The google scholar website is used to collect journal sources. The keywords used were Finger Grip Relaxation Techniques, Pain, and Appendicitis. The result obtained 95 journals, but the authors only used 3 journals that match the inclusion criteria to reduce pain intensity. The journals used were published from 2016-2019. A summary from the search results is shown in Figure 1. The journals used in the literature review were obtained from various research journal publishers, including the Endurance Journal, the Midwifery Journal and the Nursing Journal.

The methods used from these 3 journals are 1 quasi-experimental journal with non-equivalent control group [2] and 2 quasi-experimental journals with one pre-test-post-test group [3, 4].

3. Results

A total of 3 journals that discuss finger grip relaxation techniques can reduced pain post-appendectomy. Study by Norma, et al., about finger grip relaxation techniques on the reduction pain of post-appendectomy reported that the mean pain scale of the patients was 30,6 mild, 27,8 moderate, and 25,0 severe [2]. The mean of pain scale before given the finger grip relaxation technique was 58,3. Study by Sulung, et al. stated that there were differences in pain after being given finger grip relaxation techniques [3]. Study that conducted by Hasaini reported that there was an effect of finger grip relaxation techniques on reducing pain levels in post appendectomy patients [4].

4. Discussion

Appendicitis is an inflammation due to an infection of the appendix. Management of appendicitis patients is appendectomy [6]. One of the problems that arise after surgery is

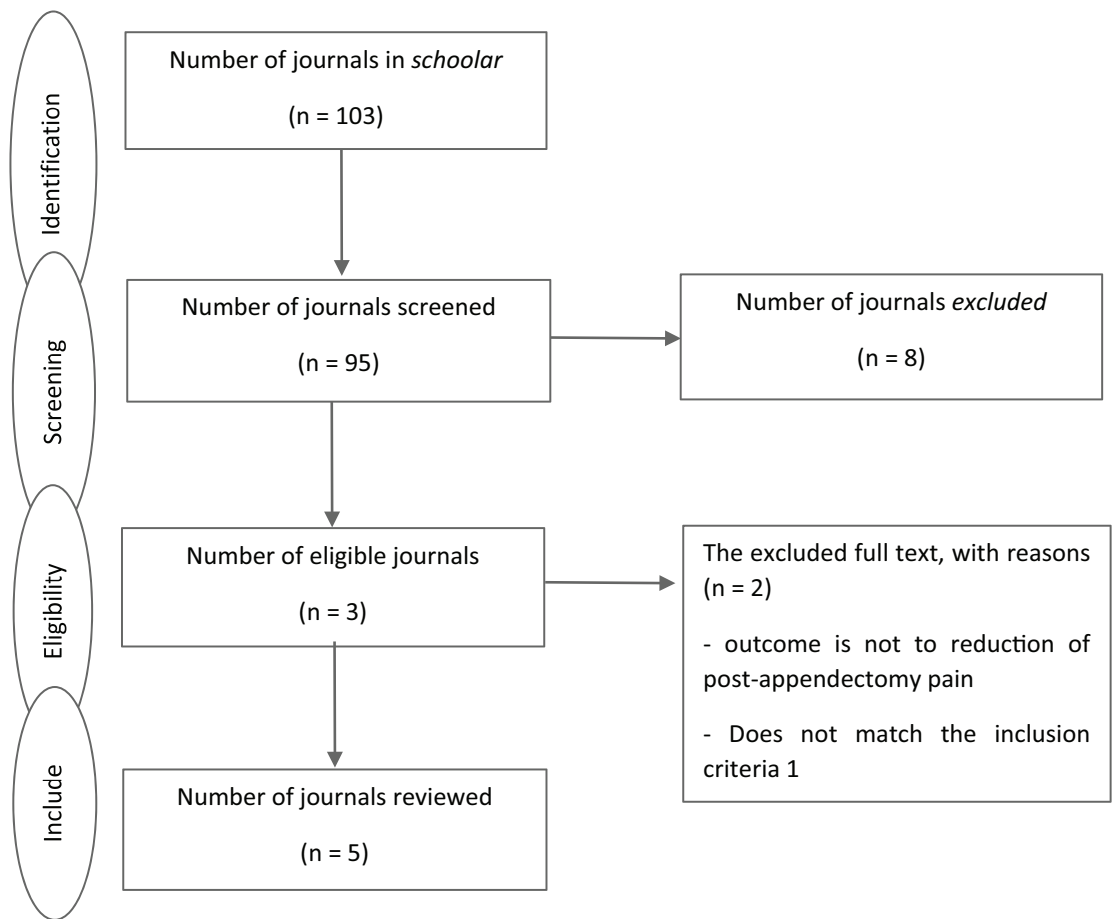


Figure 1: Diagrammatic Representation

a pain, discomfort sensation that common complained by patients [2]. The onset of pain in post-appendectomy patients can get worse without pain management adequately [7]. One of the non-pharmacological pain management is finger grip relaxation technique. Muscle relaxation is believed to reduce pain by released tension that aggravates the pain sensation [5]. Finger grip relaxation technique also effective in reducing pain in post-appendectomy patients by change the perception of pain. The results of this study are the same as 3 previous studies [2–4]. Effectiveness intervention of finger grip relaxation technique is easier to implemented by using a Numeric Rating Scale (NRS). From these 3 studies, one of them uses the Numeric Rating Scale (NRS). Numeric Rating Scale (NRS) is used as a tool to ease measuring the pain scale of the respondent who will provide relaxation in the handheld technique finger. The findings of this study are proven by a systematic review of studies [3]. Finger grip relaxation technique can be applied as a non-pharmacological therapy, because this technique is easy to do, the tools are easy to find, and the therapy does not cause side effects. In practice, this finger relaxation technique only done in 3-5 minutes. The difficulty of implementing finger relaxation

TABLE 1: Summary of Search Results

Author	Research Site	Sample	Methods	Intervention	Results
Sulung N, Sarah Dian	Achmad Mochtar Bukittinggi Regional General Hospital	10	Quasi-experimental with one group pre-test – post-test design	Finger-held relaxation techniques 3-5 minutes with NRS	Mean score Before: 4,80 After: 3,87 p-value 0,000
Norma, et al.	Sorong District General Hospital and Sele Be Solu General Hospital Sorong City	36	Non-equivalent control group design	Finger-held relaxation techniques for 15 minutes with VAS	Mean score Before: 58,3 After: 30,6 mild, 27,8 moderate, 25,0 severe p value $0,000 \leq \alpha 0,05$ There is an effect of finger grip relaxation techniques
Asni	Ratu Zalecha Martapura District General Hospital	15	Experimental with one-group pre-post test design	Finger-held relaxation techniques for 30-40 minutes with observation sheets and bivariate analysis with Wilcoxon	There is an significant effect from the finger grip relaxation on reducing pain intensity in post-appendectomy patients p value 0,000 ($p < 0,05$)

techniques are when respondents experience a severe pain, this intervention is less effective to implement.

5. Conclusion

Based on the journals that have been reviewed, it can be concluded that finger grip relaxation techniques have a positive effect on reducing pain intensity in post-appendicitis surgery patients. The finger grasping relaxation technique can reduce physical and emotional tension and the reflection points on the hand will give the body a relaxed response.

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