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A Study to Assess the Effectiveness of Foot Massage on the Level of Pain among Post-Operative Patients at Dhanush Hospital Bagalkot

Sankappa Gulaganji
Assistant Professor
Dept Of Medical Surgical Nursing
Bldea Nursing College Bijapur

Dr Susheel Kumar Ronad
Professor
Dharawad Institute Of Mental Health And Neuro Sciences
Old Pb Road Dharawad

Dr Chetan S Patali
MSC (N) PhD (N) Psychiatric Nursing
Principal
Dhanush Institute Of Nursing Sciences
Behind Durga Vihar, Station Road
Bagalkot 587101.

Suvarna S Pinnapati
Vice Principal
Dhanush Institute Of Nursing Sciences
Behind Durga Vihar, Station Road
Bagalkot 587101.

Abstract:- Physiological reaction to torment makes unsafe impacts that drag out the body‟s recuperation after medical procedure. Patients routinely report mellow to direct torment despite the fact that torment prescriptions have been managed. Complimentary techniques dependent on sound research discoveries are expected to enhance post agent relief from discomfort utilizing pharmacological administration. Foot knead can possibly help relief from discomfort. Rubbing the foot invigorates the mechanoreceptors that initiate nerve filaments to discharge endorphins, which keeps torment transmission from achieving cognizance. The present study aims at asses the effectiveness of foot massage on the level of pain, among post operative patients with abdominal surgery.

Keywords:- *Effectiveness; foot massage; postoperative patients; level of pain.*

I. THE OBJECTIVES OF THE STUDY

- To determine the level of pain of post operative abdominal surgery patients before implementation of foot massage as measured by a numerical pain scale and observational check list.
- To find out the effectiveness of foot massage on the level of pain pressure in terms of reduction in pain.

II. METHOD

Pre-test one gathering pre test post test configuration was utilized for the present investigation. Test comprised of 30 post agent patients with stomach medical procedure, who met the consideration criteria. Instruments utilized were Observation agenda and numerical agony scale to survey torment power. Information was dissected utilizing spellbinding and inferential insights.

III. RESULTS

➢ *Organization of the study findings*

The data collected from the postoperative abdominal surgery patients are organised, analysed and presented under the following headings:

- Section I: Sample characteristics.
- Section II: Assessment of level of pain of postoperative abdominal surgery patients before implementation of foot massage.
- Section III: Description of pre- and post-foot massage pain level of postoperative abdominal surgery patients.
- Section IV: Significance of difference in the level pain before, immediately after, and 10 minutes after foot massage of postoperative abdominal surgery patients.
- Section V: Association between pre-foot massage pain score and the selected variables such as age and type of surgery.

- Section I: Sample characteristics This section deals with the analysis of the data collected from 30 abdominal surgery patients based on their specified inclusion criteria and is explained in frequency and percentage and represented table – .

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	Variable	Frequency	Percentage
1.	Age in years		
a.	21 – 30	13	43.3
b.	31 – 40	7	23.3
c.	41 – 50	7	23.3
d.	51 – 60	2	6.7
e.	> 60	1	3.3

Table 1: Frequency and Percentage of Sample Characteristics N=30

a.	Illiterate	2	6.7
b.	Primary education	10	33.3
c.	Secondary education	12	40.0
d.	Graduate	6	20.0
e.	Postgraduate	-	-
f.	Professional	-	-

Table 2:- Education

a.	Unemployed	18	60.0
b.	Employed	5	16.7
c.	Professional	-	-
d.	Self-employed	7	23.3

Table 3:- Occupation

a.	Apendectomy	11	36.7
b.	Herniectomy	19	63.3

Table 4:- Surgical procedure done

a.	Yes	41	33.3
b.	No	17	56.7

Table 5:- Previous surgery

a.	Yes	20	66.7
b.	No	10	33.3

Table 6:- Previous analgesia/anaesthesia

a.	Yes	11	36.7
b.	No	19	63.3

Table 7:- Pain relief method other than medications

a.	Acupuncture	-	-
b.	Traditional massage	7	63.6
c.	Aroma therapy	-	-
d.	Acupressure	-	-
e.	Yoga	4	36.4
f.	Music therapy	-	-

Table 8:- If yes, type of therapy

Variables Age group in years	Frequency	% Percentage
21-30	13	43.3%
31-40	07	23.3%
41-50	07	23.3%
51-60	2	6.7%
>60	1	3.3%

Table 9:- Frequency and percentage distribution of postoperative patients by their Age

The data present in the table 1 shoes that majority of responds where in the age group of 21-30 years(16 i.e.43.3%) followed by the respondents who were in the age group of 31-40 years (7,i.e23.3%),and the age group of 51-60 years(2,i.e.6.7%) and only 1(3.3%) were in >60 years or age group.

- Section II Assessment of level of pain postoperative abdominal surgery patients before implementation of foot massage

Assessment of pain level of 30 post operative abdominal surgery patients before implementation of foot massage using observational check list and numerical pain scale and were analyzed by descriptive and inferential statistics and presented as table.

N=30

	Range	Mean	Mean %	SD
Objective assessment of pain Using observation check list	8 – 13	10.67	71.13	1.322
Numerical pain scale	6 – 10	7.47	72.00	1.042

Table 10:- Mean and SD distribution of postoperative patients according to the Level of pain before foot massage

- Section III Description of pre- and post-foot massage pain level of postoperative abdominal surgery patients

Pre and post foot massage pain level of 30 post operative abdominal surgery patients were assessed by using observation check list and numerical pain scale analysed by descriptive and inferential statistics.

N=30

	Range	Mean	SD
Objective assessment of pain			
Using observation check list			
O_1 (Pre)	8 – 13	10.67	1.322
O_2 (0^{th} minute)	5 – 11	8.00	1.314
$^{0}3$ (10^{th} minute)	3 – 7	4.77	1.165
Numerical pain scale			
O_1 (Pre)	6 – 10	7.47	1.042
O_2 (0^{th} minute)	3 – 7	5.70	0.952
O_3 (10^{th} minute)	3 – 7	4.53	0.937

Table 11:- Range, mean and SD of level of pain intensity of postoperative patients before and after implementation of foot massage

Data in Table shows that range of mean pre test pain level (8-13 as per objective assessment and 6-10 as per numerical pain scale) were higher than that of meanpost test pain level (3-7 as per objective assessment and 3-7 as per numerical pain scale) respectively. It is evident for the table that the mean pre test pain level (X1=10.67±1.322,

7.47±1.042) was higher than the mean post test pain level (4.477±1.165, 4.53±0.9370)

- Section IV Significance of difference in the level of pain before, immediately after, and 10 minutes after foot massage of postoperative abdominal surgery patients

In order to find out the significance of difference in the level of postoperative abdominal surgery patients before, immediately after, and 10 minutes after foot massage, the following null hypothesis was formulated:

H01: The post foot massage pain score will not be significantly lower than the pre foot massage pain score.

	Mean	SD	„t" value	
Objective assessment of pain				
O_1 - O_2	2.667	1.213	12.041*	
O_1 - O_3	5.900	1.423	22.710	*
O 2 – O_3	3.233	1.406	12.590	*
Numerical pain scale				
O_1 - O_2	1.767	0.568	17.026	*
O_1 - O_3	2.933	0.691	23.230	*
O_2 – O_3	1.697	0.648	9.860	*

$t_{(29)}$ at 0.05 level = 2.045 *Significant

Table 12:- Paired „t" test showing significant difference between pre- and post- foot massage pain level

It is evident from Table that the calculated „t" values are greater than table value (t(29) = 2.045, P<0.05) showing that there was significant difference in the pre and post-foot massage pain score. Hence the null hypothesis rejected and research hypothesis accepted.

- Section V Association between pre-foot massage pain score and the selected variables such as age and type of surgery

To test the association between pre foot massage pain score and the selected variables the following hypothesis was formulated.

H03: There will be no significant association between pre foot massage pain level, age and type of surgery.

N=30

	Level of pre-experiment pain			
Variable	Moderate	Severe	Total	χ^2value
Age (years)				
21 – 30	3	10	13	0.109 NS
≥ 31	2	15	17	
Type of surgery				
Herniaectomy	1	13	14	0.670 NS
Appendectomy	4	12	16	

χ^2= 3.84, P<0.05 NS = Not significant

Table 13:- Association between pre-foot massage pain score and selected variables such as age and type of surgery

Table shows that there was no association between pre-foot massage pain score, age ($\chi2$ = 0.109, P = 0.0742), and type of surgery ($\chi2$ = 0.670, P = 0.336) at 0.05 level of significance. There fore null hypothesis was accepted and the research hypothesis rejected. The findings of the study showed a significant difference in level of pain between the pre and post foot massage sessions immediately and after 10 minutes of FM, (t 29= 12.041, t 29= 22.71 , t29= 12.59 , p<0.05) for the observation checklist, and (t29= 17.02, t29= 23.234 , t29=9.865, p<0.05) for the numerical pain scale. There was no significant association between pre foot massage pain and the selected variables such as age ($\chi2$= 0.109) and type of surgery ($\chi2$= 0.670 , p>0.05).

IV. INTERPRETATION

The results showed that foot massage is an effective non pharmacological method for reducing post operative pain.

V. CONCLUSION

Foot massage is a simple non invasive cost effective method that can be used effectively for the management of post operative pain.

REFERENCES

[1]. Royal College of Psychiatrists, Child and Adolescent Psychiatry Section. Mental health and growing up facts sheets for parents, teachers and young people. 1996; 17-19. 4.
[2]. Rückert EM; Plattner A; Schulte-Körne G, Prevention of dyslexia--effects of a home-based training to promote early literacy. A pilot study Klinik und Poliklinik für Kinder- und Jugendpsychiatrie, Psychosomatik und Psychotherapie der Universität München, München. ellen.rueckert@med.uni-muenchen.de
[3]. Salgado CA; Capellini SA, Phonological remediation program in students with developmentaldyslexia,Programa de Pós-Graduação, Faculdade de Ciências Médicas, Universidade Estadual de Campinas, SP, Brazil. cintialv@fcm.unicamp.br
[4]. Saviour.P., NB Ramachandra, Modes of genetic transmission of dyslexia in south Indian families,Department of Studies in Zoology, University of Mysore,

Manasagangothri,Mysore5700India.http://www.ijhg.com/article.asp?issn=09716866;year=2005;volume=11;issue=3;spage=135;epage=139;aulast=Saviour
[5]. Sheila Saravanabhavan, Rc. Saravanabhavan Virginia State University, Howard University, http://www.internationaljournalofspecialeducation.com/articles.cfm.
[6]. Shenoy, Jyothi, Malavika Kapur, Kaliaperumal VG. Prevalence and patterns of psychological disturbance among five to eight years old school going children: preliminary findings. NIMHANS Journal 1996; 1: 37-47.9.
[7]. Snowling MJ; Muter V; Carroll J, Children at family risk of dyslexia: a follow-up in early adolescence,Department of Psycholologgy, University of York, UK. mjs19@york.ac.uk.
[8]. Srinivasan P, et al "developmental dyslexia in children with specific language impairment" university school of public health, center to prevent dyslexia problems among young people, Bangalore. 02118; Rev. Public. Health. 2005.26:259-279. http://rguhs.ac.in/ .
[9]. Sukanta Saha; Adrian G. Barnett; Claire Foldi; Thomas H. Burne; Darryl W. Eyles; Stephen L. Buka; John J. McGrath, Advanced Paternal Age Is Associated with Impaired Neurocognitive Outcomes During Infancy and Childhood. http://www.medscape.com/viewarticle/704730.
[10]. Törmänen MR;Takala M, auditory processing in developmental dyslexia: an exploratory study of an auditory and visual matching training program with Swedish children with developmental dyslexia., Department of Applied Sciences of Education, Special Education, University of Helsinki, Finland. minna.tormanen@helsinki.
[11]. Van Alphen P, de Bree E, et al "early language development in children with a genetic risk of dyslexia in Netherland University" Utrecht Institute of Linguistics OTS, Utrecht University, Netherlands. 2004 Nov; 10(4):265-8.http://www.ncbi.nlm.nih.gov/sites/entrez
[12]. Vanaja Chittinahalli Shankarnarayan and Sandeep Maruthy, Mismatch negativity in children with dyslexia speaking Indian languages.Department of Audiology, All India Institute of Speech and Hearing, Mysore, India.
[13]. W.Ali Khatib Jamal. M., International journal of special education.28889, http://www.internationaljournalofspecialeducation.com
[14]. Washburn EK, Joshi RM, Binks Cantrell E. Are preservice teachers prepared to teach struggling readers? Texas A&M University, 4232 TAMU-TLAC, College Station, TX, 77843-4232, USA, ewashburn02@gmail.com.
[15]. Xu GF, Jing J. Major achievements in relation to dyslexia in Chinese characters. Department of Public Health, Sun Yat-sen University, Guangzhou, Guangdong 510080, China. 2008 Sep 5; 121(17):1736-40. http://educanet2.ch/pec.