A pre experimental study to assess effect of foot reflexology on the quality of sleep among postoperative women in St. Joseph Colony, Puducherry.

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ABSTRACT

A Pre experimental study was conducted on Effect of foot reflexology on the quality of sleep among postoperative women at selected hospital in St. Joseph Colony, Puducherry. The study objectives were to assess the quality of sleep among postoperative women. To evaluate the effectiveness of foot reflexology on the quality of sleep among postoperativewomen. To determine the association between qualities of sleep with selected demographic variables. This study was under taken to determine the effect of foot reflexology on the quality of sleep among postnatal mother. The population of the study was the postnatal mother at selected hospital Puducherry. 30 samples were selected by using convenient sampling method. A tool consist of 30 items were used to assess the effect of foot reflexology. Data were analyzed using descriptive and inferential statistics. In pre test mean was 13.73 with SD 3.23 and post test mean was 8.67 with SD 1.88 and mean difference was 5.06. It indicates that foot reflexology was improving sleep pattern among postnatal mother. The findings reveals that pretest mean 13.73 with SD 3.24 and posttest mean 8.64 with SD
1.88. The” t value was 7.39 respectively. This indicates the foot reflexology was effective in improving sleep pattern in postnatal mothers. The study result show that foot reflexology improved quality of sleep significantly among postnatal mother.

INTRODUCTION

“Sleep is the golden chain that ties health and our bodies together”.

Thomas Dekkar

Reflexology is an applied pressure therapy. This holistic healing therapy works on the principle, that each body part is represented on the feet and hands of an individual. Reflexologies by using specific massage and pressure techniques dissipate the problem. The science of reflexology helps to relieve ailments by encouraging the release of toxins, improve the working of circulatory and lymphatic systems, thereby helping the body to heal itself.

Although stress can cause sleep loss, the reverse is also possible. For instance, poor sleep quality can contribute to an increase in perceived stress. Lack of sleep can intensify the degree of stress, and shortened or disturbed sleep causes increases in levels of traditional stress markers and may exacerbate the effects of stress. Both mental and physical processes decline with inadequate sleep. Poor sleep quality is associated with anxiety, depression, and mood disorders. Conversely, adequate sleep improves attitudes, moods, and promotes feelings of self-esteem and competence. Indeed, it has been concluded that lack of sleep is a significant stressor, and chronic sleep problems can themselves become a source of stress. In addition, sufficient sleep improves mood, promote feelings of competence and self-worth, and supports optimal mental and emotional function.

NEED FOR STUDY

Sleep is a recurrent altered state of consciousness that occurs for sustained periods, restoring energy and wellbeing. Research has shown the specific techniques of reflexology to be effective and beneficial in many ways. A survey of 170 reflexology studies from twenty one countries shows that reflexology is effective, impacting a variety of physical and psychological concerns.

Through the personal experience of the researcher during her clinical practice she came across that most of the primipara caesarean mothers having stress due to incision pain, breast feeding and altered sleeping pattern. Thus the researcher strongly felt the need of performing the reflexology among primipara caesarean mothers to help them to cope up with stress effectively. Apart from the clinical experience,
she had undergone training for performing reflexology and obtained certificate for practicing the same among primipara caesarean mothers. Hence the researcher was motivated to conduct the study.

**STATEMENT OF THE PROBLEM**

A pre experimental study to assess effect of foot reflexology on the quality of sleep among postoperative women in St. Joseph Colony, Puducherry

**OBJECTIVES**

- To assess the quality of sleep among postoperative women
- To evaluate the effectiveness of foot reflexology on the quality of sleep among postoperative women
- To determine the association between quality of sleep with selected demographic variables

**METHODOLOGY**

**RESEARCH APPROACH:** Quantitative research approach was used

**RESEARCH DESIGN:** Research design selected for the present study was pre experimental research design [one group pretest / posttest design] selected.

Design adopted for the present study can be represented as

- \( O_1 \) - assess sleep level before administration of foot reflexology
- \( X_1 \) - foot reflexology on improved sleep
- \( O_2 \) - assess sleep level after administration of foot reflexology

**Independent Variable:** foot reflexology.

**Dependent variable:** Sleep score of the postoperative women before treatment

**Setting of Study:** This study was conducted at St. Joseph Cluny hospital, Puducherry.

**Population:** The population of the present study consists of patient with postnatal mother.

**Sampling Technique:** The convenient sampling technique was carried out.

**Sample size:** The sample size was 30 postoperative women

**Inclusion Criteria**

- Who undergone Lower segment cesarean section
- Who were present at the time of data collection.
- Who had Insomnia
- Who were willing to participate in the study
Exclusion Criteria
- Who were absent during data collection period
- Who were not having insomnia
- Who were not willing to participate in the study

Description of the tool: The tool consists of two parts

Part-I: Demographic variable Consist of 13 Items Seeking Information Such as name, age in year, Religion Monthly income, gravid, no of living child & indication for LSCS.

Part-II: Consist Of modified Pittsburg Sleep Quality Index (PSQI) questionnaires.

DATA COLLECTION PROCEDURE
The study was conducted for 4 weeks with 30 samples at St. Joseph Cluny hospital. The data collection was conducted after obtaining consent from the participant who fulfilled the criteria. The demographic data were collected and the knowledge of the participants were assessed by Structured interview questionnaire.

DATA ANALYSIS AND INTERPRETATION
Frequency and Percentage Distribution According to Demographic Data
The result shows that out of 30 mothers, majority of them were 76.7% (23) belong to 22-25 years and 0% were in 18 & above 25 years. In religion, 70%(21) were in Hindu, 16.7%(5) were in Muslim, 13.3%(4) were in Christian. The most of people 70%(21) were in residence ship in urban area. Majority of people 66.7%(20) belong to age at menarche 13-15 years. Out of 30 people 80%(24) were in regular menstrual cycle. Majority of people 70% (21) were in nuclear family. Most of people 60%(18) were in not previous LSCS done. Majority of people 46.7%(14) were in prim gravid and 43.3%(13) were in second gravid and 10%(3) third gravid.

Table 1: Frequency and percentage distribution of level of sleep among postnatal mother. (n=30)

<table>
<thead>
<tr>
<th>Level of sleep</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>percentage</td>
</tr>
<tr>
<td>Poor</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Adequate</td>
<td>9</td>
<td>30</td>
</tr>
</tbody>
</table>
Table 1: Shows that in pretest out of 30 sample, 50% (15) were had poor sleep, 30% (9) were had adequate sleep and 20% (6) were had good sleep. In post test 7% (2) were had poor sleep, 27% (8) were had adequate sleep, 66% (20) were had good sleep.

Table 2: Area Wise Distribution of Mean, SD and Mean percentage

<table>
<thead>
<tr>
<th></th>
<th>Pre test</th>
<th></th>
<th>Post test</th>
<th></th>
<th>Difference in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>Mean</td>
<td>SD</td>
<td>Range</td>
<td>Mean</td>
</tr>
<tr>
<td>Overall</td>
<td>7-19</td>
<td>13.73</td>
<td>3.23</td>
<td>5-12</td>
<td>8.67</td>
</tr>
</tbody>
</table>

Table 2: shows that, In pretest mean was 13.73 with SD 3.23 and posttest mean was 8.67 with SD 1.88 and mean difference was 5.06 It indicates that foot reflexology was improving sleep pattern among post natal mother.

Table 3: Paired ‘t’-test to assess the effect of foot reflexology on the quality of sleep
p<0.05 –significant ,** p<0.01 , *** p<0.001 highly significant
Table 3 findings reveals that pre test mean 13.73 with SD 3.24 and post test mean 8.64 with SD 1.88. The “t” value was 7.39 respectively. This indicates the foot reflexology is effective in improving sleep pattern in post natal mothers.

**Association between pretest level of quality of sleep and selected demographic data.**

The result shows that demographic variables such as Age in years, Religion, Education of mother, Occupation, Monthly income, Residence of family, Age at menarche, Menstrual cycle, Type of family, Previous LSCS, Gravid, Number of living children, Indication of LSCS not associated in the pre level of quality of sleep.

**SUMMARY AND CONCLUSION**

The study was undertaken to determine the effects of foot reflexology on the quality of sleep among the postoperative women.

**MAJOR FINDING OF THE STUDY:**

Maximum participants (80%) were belongs to the age group below 22-25yrs. Maximum participants (80%) were belongs to Hindu religion. Maximum participants (53.3%) were belongs to higher secondary. Maximum participants (66.7%) were belongs to occupation of home maker. Maximum participants (33.3%) had monthly income of above 15000. Maximum participants (73.3%) were belongs to urban area. Maximum participants (60%) were belongs to age at menarche 13-15yrs. Maximum participants (86.7%) were belongs to menstrual cycle regular. Maximum participants (73.3%) were belongs to nuclear family. Majority of participants (53.3%) were belongs to previous LSCS. Maximum participants (60%) were belongs to one gravid. Maximum participants (66.7%) were belongs to one number of living children. Maximum participants (60%) were belongs to indication of LSCS card prolepses. Result indicate that there is improve sleep pattern in post level as compare to pre test.

**DISCUSSION.**

A pre experimental study to assess the effect of foot reflexology on the quality of sleep among postoperative women. A randomized controlled study was conducted to evaluate the effects of reflex therapy (foot massage) on acute postoperative pain and anxiety among patient with digestive cancer in Taiwan over a 10 month period in 2005. Subjects were sixty-two Taiwan patient who had received surgery for gastric cancer or hepatic cellular carcinoma. Subjects were randomly allocated to an intervention (n=30) or control (n=31)
Patient in the intervention group received the usual pain management plus 20 minutes of foot reflex therapy during postoperative days 2,3,4 patients in control group received the usual pain management. Result indicated that less pain (p<0.05) and anxiety (p<0.05) over time were reported by the intervention group compared with the control group. The study concluded that foot massage is an affective intervention in reducing postoperative pain and anxiety among patient with digestive cancer.

**CONCLUSION:** From the findings of the current study it can be concluded that foot reflexology was effective to improve sleep pattern among postnatal mother. ‘t’ value was 7.39 .The result indicate that the foot reflexology was effective to improve the sleep pattern among post operative women.

**NURSING IMPLICATION**

**Nursing Education:** Nursing curriculum should include foot reflexology in order to improve the knowledge.

**Nursing Practice:** Nurses are encouraged to practice the foot reflexology for all postnatal mothers.

**Nursing research:** Generalization of the study result can be made by further replication on large samples

**Nursing administration:** Nursing adminstrates must plan and demonstrate the foot reflexology procedure to all nurses and develop their skills

**RECOMMENDATION**

- A simple study can be replicated on large sample for generalization of the findings.
- An experimental study can be conducted by pre and post test.
- A comparative study can do of foot reflexology with other procedure in future.
- A descriptive study can be conducted.

**BIBLIOGRAPHY**

**BOOK PICTURE:**


**JOURNALS**

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