Research Article

A Study To Assess The Effectiveness Of Foot Reflexology On The Level Of Depression Among Elderly Persons In Selected Old Age Homes, Dharmapuri

Deepa. M.[1], Dr.Rohina Rabecca Francis[2]

[1]Ph.D(N), Research Scholar, Deshbhagat university, Mandi gobindgarh, Punjab.
[2]Professor, Desh Bhagat University, Mandi gobindgarh, Punjab.

Abstract

Aging is a biological process and experienced by the mankind in all times. It refers to a sequence of changes across a life span of individual Though aging is a multidimensional process, it is the closing period of the life of an individual. It is a period when people move away from their more desirable period or times of "usefulness."

Reflexology is an alternative medicine involving the physical act of applying pressure to the feet, hands, or ears with specific thumb, finger, and hand techniques without the use of oil or lotion. It is based on what reflexologists claim to be a system of zones and reflex areas that they say reflect an image of the body on the feet and hands, with the premise that such work effects a physical change to the body. Reflexologists divide the body into ten equal vertical zones, five on the right and five on the left. It is based on the principle that the foot, divided in reflex zones, is a mirror image of the body. Each reflex zone corresponds to a part of the body. Specific manipulation and pressure of these zones reduce and eliminate blockages in corresponding glands, organs, and other parts of the body.

Introduction

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of foot reflexology on depression among elderly persons at selected old age homes, Dharmapuri.

OBJECTIVES

1. To assess the level of depression among the elderly persons.
2. To assess the effectiveness of foot reflexology on depression among the elderly persons.
3. To associate the level of depression among the elderly persons with the selected demographic variables.

HYPOTHESES

H1: There is a significant difference between the pretest and post test score on the level of depression among the elderly persons at $p<0.05$ level.

H2: There is a significant association between the pretest level of depression among the elderly persons and their selected demographic variables at $p<0.05$ level.

OPERATIONAL DEFINITION

Effectiveness

It refers to the significant reduction in the level of depression among elderly persons after implementation of foot reflexology as determined by the difference in the pre and post test scores.

Foot Reflexology

It is a technique where pressure is applied to certain points on the feet that correspond with other zones in the body for releasing any blocked energy for 30 minutes duration per day for 15 days.

Depression

In this study, depression refers to the expressed feelings of sadness, loss of interest in activities, changes in appetite and sleep disturbances.

Elderly

In this study, elderly refers to a person whose age is 65 years and above

ASSUMPTION

1. Most of elderly persons residing in old age homes may have depression.
2. Elderly individuals those who are residing at old age homes may experience loneliness.

DELIMITATIONS

The setting of the study is limited to elderly residents of selected old age homes in Dharmapuri.
> The study period is limited to 6 weeks.

PROJECTED OUTCOME

- The study would help to identify the level of depression among elderly
- persons residing in old age homes.
- Reflexology therapy would reduce depression among elderly persons.
- The findings of the study would help health professionals gain knowledge for further research.

CONCEPTUAL FRAMEWORK

- A conceptual model frame work deals with the concepts of the research problems assembled together that will provide a certain frame of reference. The frame work helps and guides the researcher to gain insight into the problem, by explaining the relationship with facts.
- Conceptual framework for this study was derived from the General System Theory designed by Ludwig Von Bert Landry (1986) who had defined "a system as a whole with interrelated parts in which the parts have their own functions. All living systems are open systems, they cannot survive without continuously exchanging matter with their environment. The peculiarity of open system is that they interact with other systems outside of themselves."
- The systems interaction has three components: -Input, Throughput and Output.

Review Of Literature

Review of literature is an essential step in the development of a research project. It helps the researcher to design the proposed study in a scientific manner so as to achieve the desired result. It helps determine the gaps, consistencies, and inconsistencies in the available literature about the particular subject under study. Review of literature for the present study is classified under the following headings:

1. Literature related to depression among elderly.
2. Literature related to the effectiveness of Foot Reflexology on depression among elderly.

Research Methodology

Research Design:

Research design is a master plan specifying the methods and procedures for collecting and analyzing the needed information. Pre-experimental one group pre-test and post-test design was used to asses the effectiveness of Foot Reflexology on depression among elderly at selected old age homes, Dharmapuri.

Key:

Oj= Pre-test.
X= Intervention on Foot Reflexology
Oz = Post-test

O1 X O2

Variable

Variables are qualities, properties or characteristics of person, things,
situations that change or vary. Variables are classified based on their nature, actions, and effects on the variables.
Independent variable: Intervention on Foot reflexology
Dependent variable: Depression among elderly patients

Population

Population is defined aD.F. & Beck Tatiana, Cheryl (2018) or objects having some common characteristics. (Polite. D.F & Beck Tatiana Cheryl, 2018)

The study population comprised of all elderly persons with depression residing at old age homes, Dharmapuri.

Sample
SampD.F. & Beck Tatiana, Cheryl (2018)pThe sample of the study comprised elderly persons who were residing in selected old age homes with depression and who met the inclusion criteria.

Sample Size
The sample size of this study was 50.

Sampling Technique:
The sampling technique adopted for this study is purposive sampling.

Setting
Setting is the physical location and conditions in which data collection takes place in a study. (Polite. D.F & Beck Tatiana Cheryl, 2008)
The study was conducted in Mercy old age home, Dharmapuri. Total no. of inmates in the old age home was 60. Old age home run by private organisation. These old age home situated within 5 kilometres from Om Sakthi college of Nursing, Dharmapuri.

Criteria for Sample Selection:

Inclusion criteria:
Elderly persons who
• are male / female.
• are aged between 65-80 years.
• have mild and moderate cognitive impairment.
• are willing to participate in the study.

Exclusion Criteria:
Elderly persons who
• have severe cognitive impairment.
• are on antidepressant drugs.
• are in severe depression
• have problem in foot like cellulites, foot ulcer and peripheral neuropathy

Description of the Tool:
The tool consists of three sections.

Section-A:
This section deals with the demographic information of the elderly such as Re sex. religion, educational status, marital status, no. of children. source of income expenditure, reason for joining old age home, duration of stay, frequency of visit by family members, presence of medical illness, performance of basic activities, and participation in recreation activities.

Section-B:
Section B deals with,
I. Mini Mental Status Examination Scale (MMSE), in which samples who scored above 18 were selected for the study.

Scores	Description
0-4	Normal
5-8	Mild depression
9-11	Moderate depression
12-y15	Severe depression

The mini mental status examination is used to measure cognitive impairment in older adults. It assess different subset of cognitive status including attention, visual spatial proficiency. the MMSE is proprietary and takes about 10-15 minutes to administer.

Scoring system is as follows

Section-C:

1. **Geriatric Depression Scale (GDS)**,

which consists of 15 items, with positive and negative statements. Positive items were scored 1 and reverse scoring was given tor negative statements. The tools were translated in Tamil for the convenience of data collection.

2. **Development of Foot Reflexology Therapy:**

The Depression based foot reflexology was developed after an extensive review of literature and experts opinion. It was prepared in English and translated in to tamil.

Implementation of Foot Reflexology Therapy:

Massage as manual soft tissue, manipulation including holding causing movement and applying pressure to the body. " The massage therapy of elderly effectively improves the health and well-being of people.

Initially, participants were randomly divided into two groups (a, b,). First 15 days group A received foot massage 15 mints each. Foot massage received while in a Supine position of the bed.

Foot massage was performed according to the following procedure. First, the therapist stroked entire lower leg from the ankle to knee, using his entire hand (D mint). Finally, i stroked the toes, one by one from base of the toe towards the tip O mint). The therapist were keep the pressure intensity and rate of massage as consistent as possible for all participants. Each massage was conducted in 15 mints.

On the first 3 days, screening was done with the help of MMSE to assess the cognitive functions structural questionnaire was used to assess the demography data and pre-test was conducted to assess the level of depression by using GDS. The duration taken complete the tool was 15 mins for each sample. Subjects we are divided in to randomly in to 2 groups (A&B) each group containing 25 samples for each session. From 4" day onwards group A alternative 15 days the foot reflexology intervention was given to all the samples, the other group also received same in manner.

Foot reflexology was performed according to the following producer first the investigator stroked the entire lower leg from the ankle to the knee, using his entire hand (5 mins) next stroked the entire foot on the toes to the ankle (5 mins), finally, stroked the toes, one by one, from the base of the toe towards the tip (5 mins). The investigator we are keep the pressure intensity and rate of massage as consistent as possible for all participants. Each foot massage was given 15 mins. Total time duration taken each samples was 30 mins. Then the post-test was conducted with the same geriatric depression scale (GDS) to find out the level of depression.

Section I :

Percentage distribution of samples according to their demographic variables.

Section II :

a) Percentage distribution of samples according to their pre-test and
post test level of depression among elderly persons.

Section III :

a) Comparison of Mean, SD and Mean difference of the pre-test and post- test level of depression among Elderly persons.

Section IV: Hypotheses testing

a) Effectiveness of Foot Reflexology on the level of depression among elderly persons.

b) Association between the pre-test level of depression among elderly persons and their selected demographic variables. Percentage distribution of samples according to their pre-test and post test level of depression among elderly persons.

N=50

Levels of depression	Pre-test		post-test	
	F	%	f	%
Normal (0- 4)	0	0	5	10
Mild depression (5-8)	15	30	35	70
Moderate depression (9- 11)	30	60	10	20
Severe depression (12 - 15)	5	10	0	0

Comparison of Mean, SD and Mean difference between pre-test and post-test level of depression among elderly persons.

Table No: 4.1 Mean, SD and Mean difference between pre-test and post-test level of depression among elderly persons.

Test	Mean	SD	Mean difference
Pre-test	9.2	2.248	1.04
Post-test	8.16	2.309*	

Hypotheses Testing

a) **Effectiveness of foot reflexology on the level of depression among elderly persons.**

Table No.: 4.2. Comparison of Mean, SD, Mean

Test	Mean	SD	Mean difference	Df	Paired 't' test
Pre-test	9.2	2.248	1.04	49	3.0*
Post-test	8.16	2.309			

*Significant at P< 0.05 level Table Value = 2.02

The above table shows that, pre-test mean score is9.2 ±2.248 and the post- test mean score is 8.16 ±2.309. The mean difference is 1.04. The calculated paired 't test value 3.0 is highly significant than the table value 2.756. This shows that foot reflexology was effective in reducing the level of depression among elderly persons at 0.05 level. Hence the research hypothesis H1 is retained.

Summary:

Quantitative evaluative approach with pre-experimental one group pre-test and post-test research design was used to determine the effectiveness of Foot Reflexology on depression among elderly persons. The conceptual framework for the study was based on General System Theory designed by Ludwig Von Bert Landry (1986). The elderly residents initially screened by using Standardised Mini Mental Status Examination (MMSE) to assess the cognitive function and demographic variables, Geriatric Depression Scale (GDS) used to assess the level of depression. Purposive sampling technique was used to select the samples and data was collected from 50 elderly at old age homes, Dharmapuri, Tamil Nadu.

The data were collected and analysed using descriptive and Statistics. To test the hypothesis, paired t-test and chi square test were used. The level of significance was tested at p 0.05. inferential

The Major Findings are

- During pre-test level of depression among samples, 15(306) of the elderly Persons have mild level of depression, 30 (60%) of them have moderate level depression and 5(10%) of depression.

Implications for Nursing Practice:

There are several important implications for nursing practice.

Bibliography

Books:

1. Dr.R. Binoy, (2012). Nursing Research building evidence for practice, (1 edition), PP: 65.
2. Elizabeth K. Tanner, (2005). Recognising late-life depression: Why is this nurses in the home setting Geriatric Nursing. 26(3)important for PP:145 146.
3. Elizabeth, M., et al., (2009). Essentials of Psychiatric Mental Health Nursing. A Communication Approach to Evidence-based Care. Elsevier Publishers, PP:502 504.
4. Gagne, A.M.and Lévesque, (2011). Impact of green vs red light on retinal response of patients with seasonal affective disorder and healthy controls. Neuropsycho-pharmacological Psychiatry, 35(1), PP: 227 231.
5. Helen C.Anderson, et al., (1971). Geriatrics Nursing. (5th Edition). The C.V. Mosby Company, PP:1 340.
6. Herbert Joey and Jave Oyer, Aging and Communication. London: University Park Publishers, PP: 1 119.
7. Jenni Keith, (1985). Old People as People. Canada: Little Brown Company Publishers, PP:1 129.
8. Kaplan and Sadock's, (2012). Synopsis of Psychiatry (10th Lippincott publishers, PP: 527.edition).
9. Lalitha, K., (2007). Mental Health and Psychiatric Nursing An Indian perspective (2nd edition). Bangalore: V.M.G. Book Publishers, PP: 565 568.
10. Lenore Kurlowicz, (2005). The geriatric depression scale. Geriatric Nursing, 20(4), PP:2 12 213.
11. Mahajan, B.K., (2010), Methods in Biostatistics. (7th edition). Jaypee Publishers. PP:154.
12. Martin, D. and Buffum, (2006). Treating depression in the elderly: an upstate on antidepressants. Geriatric Nursing, 26(3), PP:138 139.C.
13. Mary cTownsend, (2012), Psychiatric Mental Health Nursing.
14. (7th edition). Jaypee Publishers. PP:555.
15. Nikhila Sreekumar, (2013). Foot reflexology on depression among elderly. The Nurse, PP:15-19.
16. Noreen CavanFrish, R.N., (2006). Psychiatric Mental Health Nursing. Copy right by Thomson Delmar Learning, PP: 606 615.
17. Sreevani, R., (2009). A Guide to Psychiatric and Mental Health Nursing. (3 edition). New Delhi: Jaypee Brothers Publishers. PP:159.