



Research Paper

Aroma Oil Massage: An Effective Measure to Reduce Stress among Caregivers of Children Attending Special School

Dr. Prof. Neelakshi. G,

MSN, Ph.D., Faculty of Nursing, Sri Ramachandra University, Porur, Chennai, &
Ms. DhivyePraba. K.P., MSN.

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ABSTRACT:- Aim: The aim of this study was to examine the effectiveness of aroma oil massage on stress among caregivers of children attending special school.

Background:- Disability of mentally challenged children contributes to cause stress among caregivers of their children as well as diminish their participation during rehabilitation.

Design used: An experimental one group pretest and posttest design.

Methodology: The setting selected for the study was Aravind Foundation, a home for mentally challenged located at Iyyapanthangal, Chennai. The samples selected for the study were caregivers of children attending special school. The sampling technique used was convenience sampling.

Findings: There was a significant decrease in the level of stress among caregivers of children attending special school with the paired t- test value, $t=25.058$ at $p<0.001$. There was no statistically significant association between the levels of stress with selected background variables.

Conclusion: This study concludes that the practice of aroma oil massage is an effective method to decrease the level of stress. These type of complementary alternative therapy reduce complications and it is a simple measure and easy to practice.

I. INTRODUCTION

Children are God given blessings to the parents. The birth of the baby is usually anticipated with great excitement and expectations of a future filled with happiness and success. But when they realize that their baby is retarded, exploitation of dream occurs. The family faces stressful experiences when they found that their child was retarded and feels embarrassed to grow a disabled child into an adult. American Association of Special Children estimated that 9 million infants (6% of worldwide births) are born with serious birth defects every year.

Stress management is one of the main facets of nursing care, where nurses need to be competent. Nurses are obligated to mitigate different level of stress that patients undergo in their daily life practices. Undoubtedly, stress becomes an important source of discomfort for the parents or caregiver who takes care of the mentally challenged children. Thus the researcher has analyzed the impact of a child with special needs on the family using various approaches to bring out some changes in the level of stress among the caregivers. Aroma oil massage is one of the complementary techniques adopted for relieving various stress levels. This study explored the effect of 'aroma oil massage' over the stress for caregivers of children attending special school.

Need for the study

According to Association for Special Children, 3% of the populations are children with special needs in India. There is a paucity of systemic research related to the understanding of the impact of the child with special needs focusing mainly on the various psychological and social variables. However there are a few studies in India showing that the child with special needs can cause emotional reactions, like shock, guilt, and increase in interpersonal conflicts among family members. In most of the cases, all parents may not be able to cope with home care of children who are mentally retarded. Hence it is the task of the health care professional to identify the parental stress and promote their coping strategies.

A study done by Debarati B in 2006 to show that there is an increase in the parental stress of the children with special needs. Presence of the disabled child in a family has impact for families by generating stress and special needs not only for the disabled person but also for the family members.

Jain.R and Sathyawathi.G (2000) explored the problems encountered by the family with a mentally retarded child. The results showed that majority, 89% of the parents reported that they were unable to do the routine household work satisfactorily and most of their time was spent to attend their mentally retarded child. 82% of the parents reported that their interpersonal relations were affected.

II. OBJECTIVES

1. Assess the level of stress among caregivers of children attending special school.
2. Determine the effectiveness of aroma oil massage on stress among caregivers of children attending special school.
3. Associate the level of stress with the selected demographic variables of the caregivers.

III. LITERATURE REVIEW

An extended review of literature and research studies were done through primary and secondary sources which has enabled the investigator to collect further ideas to support the selected problem. Various supportive studies are arranged under the following headings:

Part I: Studies related to caregivers' stress with special needs.

Part II: Studies related to the effectiveness of aroma oil massage on stress.

Marsha Mailick Seltzer, (2009) conducted a study to explore psychosocial and biological markers of daily lives of midlife parents of children with disabilities. Using daily telephone interviews, 82 midlife parents (mean age = 57.4) of children with disabilities (mean age = 29.9) were compared with a closely matched sample of unaffected parents (n = 82). It is found that parents of children with disabilities had elevated levels of stress, negative affect and physical symptoms. In addition, their diurnal rhythm of cortisol expression differed significantly from the comparison group, for parents of children with disabilities on days when they spent more time with their children.

Edge, (2003) addressed the effectiveness of aroma oil massage on stress among eight subjects referred for aroma oil massage; each received a standardized aroma oil massage weekly for 6 weeks. The sample's level of stress was measured using the Perceived Stress Scale. The study results showed that six out of eight subjects had decreased stress level at $p < 0.01$.

Conceptual Framework

The conceptual framework used for the study was developed on the basis of Roy's Adaptation Theory, designed by Sr.Callista Roy (1976), which described nursing in three steps as input (background variables, subjective and objective stressors, determination of the level of stress), throughput (application of aroma oil massage) and output (evaluation of change in the level of stress). The selected theory helped the caregivers to identify their level of stress and overcome the stressors by undergoing aroma oil massage.

IV. METHODOLOGY

One group pretest and posttest design was adopted for this study. A convenience sampling technique guided by inclusion criteria was used to select 30 caregivers' of children attending special school.

Data collection tool includes:

The tool used for the study contains 2 sections;

Section A: Demographic data consists of two parts: age, locality, educational status, occupation, family income and marital status of the caregivers, type of the family, number of children, duration of the children and money spent for transport.

Section B: Caregivers' Stress Scale: Devised originally by Mark Noval and Carol Guest (1989) and developed by Caserta, Wright & Lund (1996) to assess the physical and emotional stress in caregiving. The tool contains totally 24 items, grading of five points Likert scale which is subdivided into 5 dimensions. The maximum score is 96.

Score interpretation

The obtained score is classified as

- Mild stress : 0 - 32
- Moderate stress : 33 - 64
- Severe stress : 65 - 96

Data collection method

Data collection method was done for 4 weeks from 19th June to 16th July 2012. Permission was obtained through proper channel to conduct the study. Caregivers' who met the inclusion criteria and scored above 65 as per Caregivers' Stress Scale were selected for the study. Consent was obtained from the participants.

The pretest was conducted using Caregivers' Stress Scale to find out the level of stress. Aroma oil massage, a blend of lavender oil and coconut oil applied over face, neck, shoulders and back of the body for about 10 minutes each day was given for 7 consecutive days. The posttest was conducted for each participant on the 8th day following the aroma oil massage using the same tool. Schematic representation of the study design is given in Figure 1.

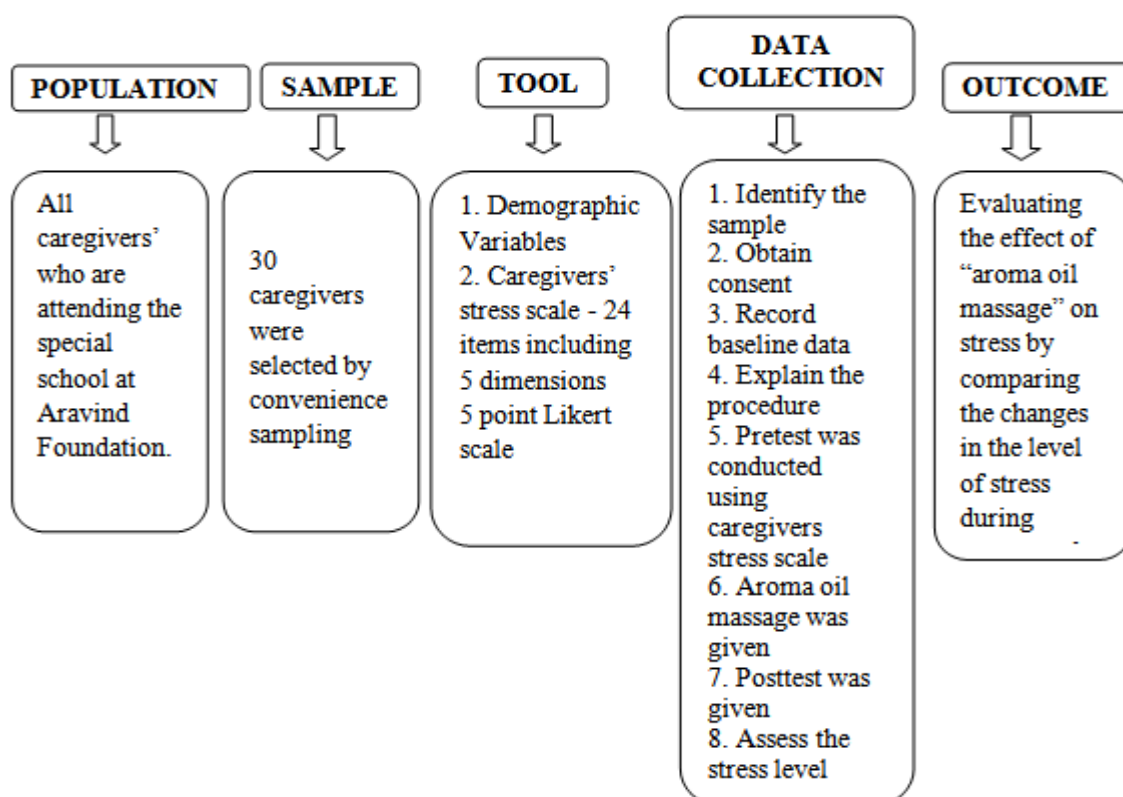


Fig 1: Schematic representation of the Study Design

Major Findings of the study

Based on objectives, the findings of the study were depicted as follows;

1. The frequency and percentage distribution of level of stress among caregivers of children with special needs showed that majority of the caregivers, 30 (100%) had moderate stress during the pretest, but in the posttest thirty (100%) caregivers had mild stress (Table 1).
2. There was a significant difference at $p < 0.001$ in the mean 31.20 and standard deviation 6.82 of stress between the pretest and posttest among caregivers of children attending special school (Table 2).
3. Table 3 shows there was a significant reduction in the level of stress aspects such as time dependency, developmental, physical health, social relationship and emotional health dimensions with Paired 't' test values of 14.869, 16.476, 14.297, 17.051, 14.881 at $p < 0.001$ in the posttest.
4. There was no significant association between the levels of stress with selected background variables.
5. This clearly depicts that there was a significant decrease in the level of stress among caregivers' of children attending special school.

Table 1. Frequency and percentage distribution of level of stress among caregivers of children with special needs in pretest and posttest (N=30).

Level of Stress	Pretest		Posttest	
	No.	%	No.	%
Mild stress (0 – 32)	0	0.0	30	100.0
Moderate stress (33 – 64)	30	100.0	0	0.0

Severe stress (65 – 96)	0	0.0	0	0.0
Total	30	100.0	30	100.0

Table 2. Mean difference on stress among caregivers of children attending special school (N=30).

Stress	MD	SD	Paired 't' test and p value
Overall stress	31.20	6.82	25.058 0.000***

***p<0.001

Table 3. Mean difference on various aspects of stress among caregivers of children attending special school (N=30).

Various stress aspects	MD	SD	Paired 't' test and p value
Time Dependency	7.77	2.86	14.869 0.000 ***
Developmental	6.27	2.08	16.476 0.000 ***
Physical Health	5.67	2.17	14.297 0.000 ***
Social Relationships	5.63	1.81	17.051 0.000 ***
Emotional Health	5.60	2.06	14.881 0.000 ***

***p<0.001

Limitations

1. The study was limited to moderate level of stress
2. The evaluation of aroma oil massage on stress was limited to one posttest.

Nursing Implications:

1. The nursing students need to be educated regarding the aroma oil massage, so as to preserve the physical, emotional and social functions among caregivers of disabled children. The knowledge of the nurse educators should be updated from time to time with the emerging trends.
2. The nurse administrator should arrange proper resources and organize programs like continuing nursing education and workshops to implement aroma oil massage as these measures will help to keep abreast of the current trends in patient care.
3. More research should be conducted on aroma oil massage as a measure to overcome stress and the findings of the research should be utilized in the clinical practice.
4. The community nurse can carry out aroma oil massage as a part of psychiatric rehabilitation in the community.

Recommendations

1. A similar study can be replicated with a larger sample size, on a longitudinal basis.
2. This study can be conducted by using true experimental design.

V. CONCLUSION

The above observations highlight the effectiveness of 'aroma oil massage' to reduce the stress level among caregivers' of children attending special school. Aroma oil massages aims to enhance overall developmental functioning that in turn enhances social and mental functioning.

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