

A Study to Evaluate the Effectiveness of Guided Imagery Technique on Stress among the Elderly People Residing at Selected Old Age Homes, Lucknow

Shivendra Dixit¹, Lalitha. P²

¹M. Sc. Nursing 2nd yr. Student

²Professor and HOD (psychiatric) Era College of Nursing

Abstract: ***Background:** According to Mental Health. gov (2010), Human development is the process of growth and change that takes place between birth and maturity. There are some stages of human development which includes infancy, childhood, adolescence, adulthood and old age. Mental health is important at every stage of human life. It includes our emotional, psychological and social wellbeing. It affects how we think, feel and act. It also helps to determine how we handle problems, relate to others and make choices. Mental health is also a level of psychological wellbeing or an absence of a mental disorder. It is a psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment. It includes an individual's ability to enjoy life, and create a balance between life activities and efforts to achieve psychological resilience. **Objectives:** The study was conducted with the objectives to assess the level of stress among the elderly people in selected old age home, to evaluate the effectiveness of guided imagery technique on stress among elderly people at selected old age home and to associate the level of stress of the elderly people with the selected demographic variables. **Method:** The researcher used a pre experimental one group pretest posttest design. The researcher approach was quantitative evaluative approach. The study was conducted in Aastha Health Resort Lucknow. 40 samples were selected by using Non - probability convenience sampling technique. The data was collected by using structured questionnaire before and after administration of guided imagery technique. **Results:** The findings of this study shows that, there was significant reduction in stress level among elderly after administration of guided imagery technique. The mean in the pretest and posttest was 57.475 ±8.430 and 11 ±4 respectively. The mean difference was 46.475. The paired "t" test value was 46.26 which was significantly higher than the table value 2.02 at p≤0.05. Hence it was evidenced that guided imagery technique was more effective in terms of reducing stress among elderly. **Interpretation and Conclusion:** The overall findings of the study clearly shows that the guided imagery technique was significantly effective in reducing stress among elderly.*

Keywords: Assess, Effectiveness, Guided Imagery Technique, Elderly

1. Introduction

In mental disorder, Stress is the major important factor which affects the majority of elderly people. Geriatric psychiatry is concerned with preventing, diagnosing and treating psychological disorders in elderly adults. There are many psychotherapies and psychopharmacologies available for the management of stress but the Guided imagery technique is the best for all. It produces an amazing positive effect in the human body which is a self - help therapy and cost nothing which can be done anywhere and also improve the social skills of the individuals who involve in it.

An article was written on the travails of a greying nation mentioned that India is an example of a developing country, which lacks organized services for the elderly in the health, social or economic sectors. The health services available for the elderly in India are generally contained within the health services for the general population, without any special or specific initiatives for this group. It is estimated that 45% of the elderly have chronic disease and disabilities. One among this disease is stress. So specialized geriatric is necessary.

Stress becomes a significant part of the health care environment. While many traditional stress management techniques may be effective. Guided Imagery is a naturally

occurring phenomenon and it helps us make sense of understand and cope with reality as serve as nature's bio feedback and stress control system. It plays an important role in stress management and it should be recognized and encouraged.

2. Material and Method

A quantitative evaluative, pre experimental, one group pretest posttest design was followed. The study was conducted between 10.7.21 to 25.7.21 in Astha Health Resort - Old Age Home, Lucknow. The Institutional Ethical Committee approval was obtained before the study. Population of the study was elderly people those who were residing at Astha Health Resort - Old Age Home. And willing to participate in the study. Non - probability convenience sampling technique was used to select the 40 samples. Informed consent of the participants was obtained.

Demographic variables such as Age, Religion, Marital Status, Education, Occupation, Financial Support, and Number of Children, Mode of Admission, Recreational Activities and Duration of stay in old age homes. The **Structured Questionnaire** consist of 28 multiple choice items. Each item has 4 options and score of them are dealt as below –

Score	Statement
0	Did not apply to me at all
1	Applied to me to some degree, or some of the time
2	Applied to me to a considerable degree, or a good part of time
3	Applied to me very much, or most of the time

Nominal data were described and expressed in frequency and percentage. Both descriptive and inferential statistics was used to analyze data. Inferential Statistics ‘t’ test, was used to find relationship of stress level with selected demographic variable. Descriptive statistics (frequency distribution and percentage, mean and SD) was used to analyze the socio - demographic.

Strength and limitations

The specified population assessed in this research study and standardized tools used were the strength of the study. Study

is limited to the elderly people who were residing at Astha Health Resort - old age home, Lucknow

3. Results

Descriptions of subjects

During the study period, 40 elderly were enrolled in the study based on inclusion criteria. **The table1:** Table summarized that among 40 elderly people in the old age home age group majority of 27 (67.5%) were in 60 - 65years, 27 (67.5%) were Hindu, In marital status 35 (87.5%) were married, 15 (37.5%) had primary education, 16 (40.5%) were business holder, 23 (57.5%) were having any other support, 14 (35.0%) those who had 2 children, 19 (47.5%) were admitted by the children, 15 (37.5%) were interested in watching, 26 (65.0%) were staying below one year.

Table 1: Distribution of samples according to their socio demographic variables

S. no	Demographic variables	Options	Percentage	Frequency
1	Age in years	60 – 65	67.5%	27
		66 – 70	20.0%	8
		71 - 76	7.5%	3
		Above 76	5.0%	2
2	Religion	Hindu	67.5%	27
		Christian	20.0%	8
		Muslim	12.5%	5
		Others	0.0%	0
3	Marital status	Married	87.5%	35
		Single	7.5%	3
		Divorced	2.5%	1
		Widowed	2.5%	1
4	Education	No formal education	27.5%	11
		Primary	37.5%	15
		Higher secondary	27.5%	11
		Graduate	7.5%	3
5	Occupation	Government	7.5%	3
		Business	40.0%	16
		Private	27.5%	11
		Others	25.0%	10
6	Financial support	Old age pension	25.0%	10
		Government Pensioner	7.5%	3
		Any other support	57.5%	23
		No financial support	10.0%	4
7	No. of children	1 child	30.0%	12
		2 children	35.0%	14
		More than 2	17.5%	7
		No children	17.5%	7
8	Mode of admission	Self	17.5%	7
		Referred by trust	17.5%	7
		By the children	47.5%	19
		Others	17.5%	7
9	Recreational activities	Watching TV	37.5%	15
		Reading books	15.0%	6
		Talking with others	30.0%	12
		Others	17.5%	7
10	Duration of stay in old age home	Below one year	65.0%	26
		2 - 3 years	25.0%	10
		3 - 5 years	10.0%	4
		More than 5 years	0.0%	0

Table 2: Effectiveness of guided imagery technique on stress among elderly
Mean and Standard Deviation of pre - test and post - test level of stress among elderly

Category	Mean	STD	Mean Difference	PAIRED "t" – value
Pre Test	57.475	8.430	46.475	t = 46.26 at the table value 2.02 at P≤0.05
Post Test	11	4.00		

Table 2: Shows that the mean in the pretest and posttest was 57.475 ±8.430 and 11 ±4 respectively. The mean difference was 46.475. The paired "t" test value was 46.26 which was significantly higher than the table value 2.02 at p≤0.05. Hence it was evidenced that guided imagery technique was more effective in terms of reducing stress among the elderly.

Table 3: Distribution of samples according to the pre - test and post - test level of stress
Frequency and percentage distribution of elderly according to their level of stress, n=40

Level of Stress	Pre Test		Post Test	
	f	%	f	%
Mild Stress	0	0%	40	100%
Moderate Stress	16	40%	0	0%
Severe Stress	24	60%	0	0%

Table 3: Shows that in pre - test none of the samples were having mild level of stress, 16 (40%) were having moderate level of stress and 24 (60%) were having severe level of stress

In the post - test 40 (100%) were having mild level of stress after the intervention, none of the samples were having moderate and severe level of stress.

Table 4: Association between the pre - test levels of stress with selected demographic variables
n=40

Demographic variables		Moderate	Severe	χ ²	Table value	df	Result
Age in years	60 – 65	11	16	1.7284	7.815	3	Not Significant
	66 – 70	4	4				
	71 - 76	1	2				
	Above 76	0	2				
Religion	Hindu	10	17	0.4321	5.991	2	Not Significant
	Christian	4	4				
	Muslim	2	3				
	Others	0	0				
Marital status	Married	15	20	1.5079	7.815	3	Not Significant
	Single	1	2				
	Divorced	0	1				
	Widowed	0	1				
Education	No formal education	6	5	1.7677	7.815	3	Not Significant
	Primary	6	9				
	Higher secondary	3	8				
	Graduate	1	2				
Occupation	Government	0	3	6.5152	7.815	3	Not Significant
	Business	8	8				
	Private	2	9				
	Others	6	4				
Financial support	Old age pension	2	8	5.2536	7.815	3	Not Significant
	Government Pensioner	0	3				
	Any other support	12	11				
	No financial support	2	2				
No. of children	1 child	2	10	13.71*	7.815	3	Significant
	2 children	3	11				
	More than 2	6	1				
	No children	5	2				
Mode of admission	Self	5	2	10.99*	7.815	3	Significant
	Referred by trust	5	2				
	By the children	6	13				
	Others	0	7				
Recreational activities	Watching TV	8	7	1.8254	7.815	6	Not Significant
	Reading books	2	4				
	Talking with others	4	8				
	Others	2	5				
Duration of stay in old age home	Below one year	9	17	0.8974	5.991	2	Not Significant
	2 - 3 years	5	5				
	3 - 5 years	2	2				
	More than 5 years	0	0				

Table 4: Shows the association between the pre - test level of stress and their socio demographic variables. There is a significant association between the stress level and demographic variables such as no. of children and mode of admission. So hypothesis H_2 is retained for the above mentioned variables.

4. Discussion

Discussions of the study based on its objectives:

The first objective of the study is to assess the level of stress among the elderly people in selected old age home:

Table 3 reveals that among 40 samples in pre - test none of the samples were having mild level of stress, 16 (40%) were having moderate level of stress and 24 (60%) were having severe level of stress

In the post - test 40 (100%) were having mild level of stress after the intervention, 0 (0%) having moderate level of stress and 0 (0%) having severe level of stress.

This study is consistent with the study which was conducted by Mrs. Dalbirkaur (2014) on guided imagery technique among elderly people with stress. It was observed in pre - test experimental group 1 (3.3%), 0, 29 (96.66%) subjects' falls in mild moderate, severe stress respectively. Control group had 1 (3.3%), 2 (6.6%) and 27 (90%) mild, moderate and severe level. In posttest, there was no decrease level of stress among control group as compared to pretest of experimental group after guided imagery technique 20 - 25 minutes daily for 15days. Only 5 (16.6 %) elderly people remained in severe stress after guided imagery technique. It showed that shifting of samples in various level of stress due to guided imagery technique in experimental group only.

The second objective of the study was to evaluate the effectiveness of guided imagery technique among elderly people at selected old age home:

Table 2 Shows that the mean in the pretest and posttest was 57.475 ± 8.430 and 11 ± 4 respectively. The mean difference was 46.475. The paired "t" test value was 46.26 which was significantly higher than the table value 2.02 at $p \leq 0.05$. This difference was due to the intervention, guided imagery technique. Hence it was evidenced that guided imagery technique was more effective in terms of reducing stress among elderly.

This study is consistent with the study conducted by by Khaskey A D and Smith JC (2009) on the effect of guided imagery technique on stress and anxiety. 114 participants in 4 groups practiced 25 minutes of guided imagery relaxation training, and some other task.

The participants were tested by Smith Quick Stress Test before and after training. in the post test, guided imagery relaxation had an effect on the stress which helped the individual to cope.

The finding was supported by a study conducted by Elizabeth Scott (2010) about using guided imagery technique for stress management. He stated that guided

imagery technique was found to provide significant stress reduction benefits by quickly relaxing the body, physically and efficiently. It also helped them to reduce stress and manage their life better.

The third objective of the study was to associate the level of stress of the elderly people with the selected demographic variables.

Hence the stated Hypothesis – H1: "There is a significant association between the stress level and demographic variables such as No. of children and Mode of admission. So hypothesis H_2 is retained for the above mentioned variables."

In order to find out the association between the post - test level of stress and selected socio demographic variables, a Chi square analysis was done. Table 4 reveals the association between the pre - test level of stress and selected socio demographic variables, among elderly, there was a significant association between the level of stress and selected socio demographic variables such as no. of children and mode of admission. There was no significant association between the post - test level of stress and the other socio demographic variables.

Hence the state hypothesis - H2: "There is no significant association found between the level of stress and demographic variables, hence hypothesis H_2 is rejected."

The result of present study imply that adding a guided imagery techniques has contributed more benefits which in turn reduced stress among the elderly.

Financial support ad sponsorship

Nil

Conflicts of interest

There are no conflicts of interest

References

- [1] Aldwin CM (2002). "Stress, coping and development: An integrative perspective". New York: Guilford, 1 - 49.
- [2] Basavanthappa B. T. (2003). "Nursing Research". 1st edition, Bangalore: Jaypee Brother's medical publishers, 118.
- [3] Bhatia M. S. (1997). "A Consise Textbook of Psychaitric Nursing." New Delhi, C. B. S Publishers.
- [4] Caplan Gerald. D (1964). "Principles of Preventive psychiatry" New York: Wiley, 1 - 49.
- [5] Crookes. A. Patrick, Davis Sue, (1998) "Research into practice" Second Edition, Edinburgh, Tindal, PP. No 133 - 141
- [6] David M. Kevin J. K. (1982) "Psychiatric Nursing" 5th Edition London Churchill Livingstone.
- [7] Dr. Suresh K. Sharma (2013), "Nursing Research and Statistics" –reprint 2013 published by Elsevier, a division of Reed Elsevier India (pvt) ltd.
- [8] Elizabeth M (1998), "Foundation of Psychiatric Mental Health Nursing", 3rd edition; Philadelphia; W B Saunders Company.

- [9] Fadem Barbara (2004) "*Behavioural Science in Medicine*", 1st edition; Philadelphia; Lippincott.
- [10] Fortinash. M. k. Frisch. L. E (2002) "*Psychiatric Mental Health Nursing*" 1st Edition Missouri: Mosby Publisher.
- [11] Gail. W. Stuart (2005), "*Principles and Practice of Psychiatric Nursing*" seventh Edition, Philadelphia Mosby Health Science Company
- [12] Gupta. S. P. (1998) "*Statistical Methods*" 28th Edition New Delhi: Sultan Chand and Sons Publishers.
- [13] James. F. A (2003) "*Reading Understanding and Applying Nursing research*" 2nd Edition Philadelphia; F. A Davis Company.