RESEARCH ARTICLE

IMPACT OF PRANAYAMA ON DEPRESSION AMONG OLD AGED PEOPLE RESIDING AT OLD AGE HOME

Deepti Saini[1] and Pooja Godiyal[2]

1. Departmentof Mental Health Nursing, State College of Nursing, Dehradun, Uttarakhand, India.
2. Assistant Professor, Departmentof Mental Health Nursing, State College of Nursing, Dehradun, Uttarakhand, India.

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Manuscript Info

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Abstract

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Background: Life is precious gift send by the universe, but many of us live with lots of stress and tension as a result we suffer with depressive symptoms. Old age is one of the vulnerable age group that suffer from depression. Pranayama is one of the effective therapy that can be used in old age to reduce depression.

Objectives: To evaluate the effectiveness of pranayama on depression among old people residing in old age home at selected area of Dist. Dehradun.

Materials and method: Quasi-experimental approach with time series design was used in the study. Purposive sampling technique was used to collect data from 40 old age people with age group 60 or above from Snehasadan old age home.

Result:A significant reduction in Depression with mean difference of (MD)1.075 was found significant (p= 0.001). Calculated 'f' value is 9.63 which is greater than tabulated value 3.05 which was found significant (p=0.001).

Conclusion: This study concluded that pranayama is effective in reducing depression.

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Introduction:-

Life is a precious gift send by the universe, everyone should live happily but unfortunately now a days it's difficult to live without any stress or anxiety kind of problems in this materialistic world as a result person suffer with the depression. Taking care of your soul physically, mentally, socially and spiritually is very important. Old age people are vulnerable group who suffer with the depression as grown children who ignore their parents can provoke a great deal of emotional distress and even physical health problems in elder loved ones.

Talk to grandparents and every elderly people you come across because later, they will talk and you will listen. Hear them, they are God's last messengers. As children grow, they think that they are the superior and they don't listen to their parents. Children now a days, feel burdened in staying with their old age parents, they don't have time to spend with their parents, and start to fight, argue and use abusive language with their elderly parents, and then finally send them in old age homes.

It has been observed that most of the old age homes that care for the elderly have no facility for mental health care

Corresponding Author:- Deepti Saini
Address**:-** Departmentof Mental Health Nursing, State College of Nursing, Dehradun, Uttarakhand, India.

and only take care of the essentials like food, shelter and basic health. Elders in old age home feel lonely as compared to elders living with happy and caring family. Elders at home and those living in the community have better psychological health, are more independent and happier as compared to those living alone or in old age homes.

According to WHO by the year 2020, Depression, a silent killer of the modern era, is predicted to become the second-most important cause of morbidity throughout the world. Approximately 264 million people across the range of age suffering from depression. Studies included 487,275 elderly individuals in which the geriatric depression in the Indian population was comparatively higher (21.9%). A global meta-analysis of 74 studies showed the prevalence of depressive disorders between 4.17-16%.

Material and Methods:-
In this Quasi experimental study 40 old age people enrolled at Sneha Sedan with the age group 60 or abovewere selected by applying Cochrane's sample size formula and purposive sampling technique. The inclusion criteria for the study were elderly people both male and female who were able to perform pranayama, were interested to participate in the study. Standardized Geriatric Depression scale was used to assess Depression level. Pre-test was taken and followed by that intervention was given for 2 weeks and post-test 1st was conducted after that again 2-weeks intervention was given and then post-test 2nd was conducted. Investigator gave pranayama for approximately 15min, 6 days in a week. The effectiveness of study was analysed through ANOVA and Post hoc analysis.

Instrument/tool
Tool consists of Section A and Section B. Section A consist of socio demographic data such as age in years, gender, education status, occupation, monthly income, marital Status, type of family, residence before joining old age home, medication, previously have joined yoga. Section B consist of Standardized Geriatric Depression Scale.The scale contains total of 30 items with yes or no response. The items in the scale contain both positive and negative worded questions. Each item scored 0-1 point based on the response.00 to 09–Normal or no depression,10 to 19- Mild Depression and 20 -30 is severe depression.

Statistical analysis
Frequency and percentage distribution were used to analyses the demographic variables and level of stress, Mean and standard deviation calculated. ANOVA analysis was performed to compare mean depression level between pre-test and post-test after intervention among higher old age people age 60 or above. Post-hoc analysis was performed to find MD in depression score between the three levels of assessment.

Table No.1(a):- Frequency and percentage distribution of sociodemographic variables among the old aged people residing in old age home N=40.

S. No.	Variables		Frequency	Percentage
1	**Age in years**			
	60-65		38	95.0
	65 - 70		2	5.0
2	**Gender**			
	Male		0	0.0
	Female		40	100.0
3	**Marital status**			
	Unmarried		6	15.0
	Widow/Widower		34	85.0
4	**Educational Status**			
	No Formal Education		9	22.5
	Primary		24	60.0
	Secondary		0	0.0
	Higher Secondary		7	17.5
5	**Occupational Status**			
	Private employee		4	10.0
	Any other		36	90.0
6	**Type of family**			

Joint	33	82.5
Nuclear	7	17.5

Table No.1(b):- Frequency and percentage distribution of sociodemographic variables among the old aged people residing in old age home N=40.

S. No.	Variables	Frequency	Percentage
7	**Residence before coming to old age home**		
	Dehradun	28	45.0
	Meerut	5	12.5
	Bangalore	1	2.5
	Hyderabad	4	10.0
	Srinagar	2	5.0
8	**Do your family member contact you**		
	No	40	100.0
9	**From how long you are staying in old age home**		
	1-5 year	38	95.0
	5-10 year	2	5.0
10	**How frequently your family member come to meet you**		
	No	40	100.0
11	**Have you practiced Yoga**		
	No	40	100.0
12	**Are you taking any kind of medication**		
	Yes	10	25.0
	No	30	75.0
13	**Number of children**		
	0-2	22	55.0
	3-5	18	45.0
14	**Reason for joining old age home**		
	By self	5	12.5
	Kicked out by child	34	85.0
	By someone who get out from outside	1	2.5

Table No. 1(a) and (b) shows that the majority of 95% old-age people were between 60-65 years age group in this study.All the study participants were female in this study. Majority of 85% old-age people were widowand 15% old age were unmarried in this study.A total of 60% old-age people had primary education, 22.5% old-age people had no formal education and 17.5% old age had higher secondary education. Most of the study participants 90% had any other occupation as own business and farmers.Approximately 82.5% old-age people had joint family and 17.5% old agehad nuclear family in this study.Half percentage of old-age people were belonged to Uttarakhand i.e. Dehradun and Srinagar.No participant was not being in contact of their family member.Majority of 95% old-age people were staying from last 1-5 years in the old age home and 5% were staying from last5-10years.No family member is coming to meet the study participants in the old age home. Study participants are not practicing yoga. Most of the subjects 75% did not take any kind of regular medication.Nearly half percentage 55% old age people had 0-2 children and 45% old age people had 3-5 children.Majority of 85% old age people joined old age home by kicked out by the child; 12.5% old age people joined by themselves and 2.5% old age people joined old age home by someone who get form outside in this study.

Table No. 2(a):- Changes in depression score of old age people before, during and after intervention N=40 .

Variable	Pre - test	Post test 1	Post test 2	F value	df	p value
Depression score (Mean ± SD)	20.0±3.78	18.65±3.64	17.58±2.89	9.636	39	0.001

Hypothesis is tested at the level of $p \leq 0.05$

Table No.2(b):- Post – hoc analysis (pair-wise multiple comparison) of Depression at three levels of assessment. N=40

Depression score	Mean difference	St. Error	p value
Pre - test - Post test 1	1.350	0.417	0.007
Post test1 -Post test 2	2.425	0.553	0.001
Pre - test- Post test 2	1.075	0.451	0.066

Hypothesis is tested at the level of $p \leq 0.05$

Table No. 2(a) and (b) shows that there was statistically significant comparison between two follow up test in depression score with p=0.001 after applying repeated measured ANOVA. Result was showing decrease depression score after giving two intervention that means depression was improving after intervention in this study. After applying post hoc test, there was significant comparison between pre-test and post-test 1 with p=0.007 and significant comparison between pre-test and post-test 2 with p=0.001 but there was no significant comparison showing between post-test 1and post-test 2 with p=0.066. Following first intervention depression score was decreased but between first and second intervention, there was no such difference in depression score in this study.

Discussion:-
This study aimed to deliver an intervention that would lower depression among old aged people and provide coping skills in reducing depressive symptoms. However, result showed that pranayama was found effective in reducing depression with 'f' value 9.63 at p=0. 001. After one month of pranayama MD was found 1.075. A similar study conducted by Ramamurthy G to investigate the combined effect of pranayama and yogain reducing depressionamong old age people residing at old age homeshowed that more than 50% of the elderly became normal after the intervention. The mean difference was found -3.48. The calculated paired 't' test value was 3.56 at p≤0.05. It was concluded that the pranayama was effective in reducing depressive symptoms of the elderly. It is possible that scheduling the intervention in old aged homes was too overwhelming for old aged people residing in old age homes. It is also possible that old aged people attended the pranayama sessions with the expectation that the intervention would provide a more mentally challenging experience, or those not familiar with pranayama before the intervention may have anticipated that the intervention would provide a quick fix for depression.

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