



EFFECTIVENESS OF YOGIC INTERVENTION ON PHYSICAL AND MENTAL HEALTH AMONG THE GERIATRIC PATIENTS

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ABSTRACT

The main aim of present research is to study Effectiveness of Yogic Intervention on Physical and Mental Health among the Geriatric male and female Patients. For data collection 50 male and 50 female Geriatric patients were randomly selected from Shanku's Natural Health Centre to see the effect of yogic intervention on physical and mental health. For data collection Mental Health checklist developed by Dr. Pramod Kumar has been used. To analysis the data t-test is used. Results indicates that Yogic Intervention could help significantly in increasing physical health among male geriatric patients, mental health among male geriatric patients, physical health among female geriatric patients, mental health among female geriatric patients.

Keywords: Physical Health, Mental Health, Geriatric Patients, Yogic intervention

INTRODUCTION

The usage of *geriatric* in English goes back to 1920s. *Geriatric* has its genesis from the Greek term *gēras*, meaning “old age” or the science of aging and the suffix *-iatic*, which is related to a medicine or person practicing medicine or physician.

The old stage of life have much complicacies accompanied with challenges to tackle. The older peoples are subject to or are exposed to variety of health and medical issues. These conditions are the result of aging process and aggravates with age. The aging manifests itself through variety of common health issues such as weakening of limbs, reduction in psychomotor coordination, loss of appetite, loss of vision, loss of memory, Parkinson disease, adjustment related problems, managing their daily chores and the list is endless. The intensity or occurrence of these geriatric diseases among the peoples may get delayed or vary because of variable and factors that causes aging. To cope up with the situation, medical intervention is required, which includes frequent medical checkups and trained medical professionals to take care of the geriatric patients. Very often the geriatric patients have to manage with more than one issue and therefore there is a need to incorporate multiple approaches to deal with physical and mental wellbeing of the older peoples.

It is worth noting that not all aged people are infirm, and that the term *geriatric* refers to old age. Geriatric simply doesn't mean illness or poor health but rather it is a stage/ state of life. Geriatric indicates to the population who are of more than 65 years of age.

A psychological condition of mental health i.e, being in depression either among the younger generation or elder generation is not normal at all the elderly population. If in case a person of more than 65 years of age is having such conditions, it should be taken seriously and should not be taken as granted and considered as that of the result of aging process. Depression at any stage need attention and one must seek clinical intervention.

The occasional mood swing or feeling of loneliness or being sad is common but it shouldn't be mistaken with the condition of depression. Depression is mental and emotional disorder, found in Senior Citizens can have a devastating effect on their quality of life, more particularly because of their age.

A large size of the geriatric populace suffers from depressions of lower level. The common symptoms of depression are sleeplessness, anxiety, feeling of tiredness, negative thought of death, less of concentration, weight loss etc. However, the same may results into a major depression disorder if left untreated for a longer period of time and the above symptoms are likely to be more severe over time .



Causes

The most common causes of depression in the geriatric populace have been listed below. But it should be borne in mind that it's not the single cause that initiates depression rather it is the interplay or amalgamation of Social, economic, psychological and biological factors.

- Quality of life
- Social security
- Family bonding and relationship
- Genetic factors
- Morphology of neurotransmitter chemicals in the brain
- Biological complications, deformities or abnormalities
- Chronic medical conditions
- Traumatic events in life such as abuse, loss of a loved one etc.
- Loneliness
- Anxiety of death
- Substance abuse
- Change of location
- Financial status owing to retirement
- Deaths of friends, peers, loved ones
- State of widow or widower

Signs and Symptoms of Geriatric Depression

Irrespective of the age group, the signs and symptoms of depression are almost the same. The major and common symptoms are laziness, intermittent cry, loss of appetite, tiredness, feelings of unimportance, irritability, lack of attention, physical aches and pains not related to any other medical condition, anxiety, sorrow, sleeping problems, suicide thoughts, withdrawal from normal life schedule.

Diagnosis

Although detecting, diagnosing and treatment among geriatric depression in an elderly person is quite difficult, one can resort to a psychiatrist, who is a professionally trained in mental and emotional illnesses. A psychiatrist, who is trained for the cause can help diagnose symptoms of geriatric depression by taking a note of the behavior, rhythm of daily chores, physical condition, patient or family history etc. a variety of tools are also available to help diagnose the type of depression (minor, major and Dysthymic disorders). The Geriatric Depression Scale (GDS) is the most commonly used scale to measure the level of depression in the elderly. If a person is diagnosed to have the symptoms of depression for no lesser than 2 weeks than the person is said to be suffering from the depression.

Physical health is defined as **the state of body consideration the absence of disease and fitness level**. Physical health is crucial for complete well-being, and is affected by: Lifestyle behavior (for instance smoking, drinking etc.), physical activity & more particularly the diet.

Prior to the onset of modern medicine, physical health was related to the complete absence of illness. State of serious illness was considered as physically unhealthy. Modern medical innovations have rendered longer life spans to the mankind, which has changed our approach towards defining physical health. Contemporarily, everything ranging from the absence of disease to various fitness level is identified as a state of physical health.

The physical health consists of multiple components. However, the following zones has been identified

- Nutrition & food habit– quality and quantity of nutrient & fluid intake. Alcohol and drugs - includes the abstinence from or reduced consumption of these substances
- Physical movement & condition - including strength & flexibility
- Medical care – resorting to medical care facilities as required. Being concerned about self-medical care and seeking emergency services if required.
- Right dose of sleep & rest – it includes daily dose of night sleep and relaxation so as to maintain the quality of life.

Mental health is equally important at every stage of life, irrespective of the age, right from childhood to adolescence to adulthood to the geriatric group. Mental health is some total of our psychological, social and emotional well-being. Being in a balanced mental health helps us handling the stress, anxiety and the way we think, feel, and act. Mental health helps us relating ourselves to others and makes healthy choices. Mental health is also construed as the absence of mental disorder. However, in reality mental health refers to cognitive,



behavioral, and emotional well-being. Mental health is one of the major issue that affect daily living, inter-personal relationship and physical health.

Taking care of one's mental health is thus an important aspect towards achieving a quality life and enjoys life to its fullest. Caring of mental health involves inculcating balanced activities, nurturing responsibility towards own self, Stress out through physical exercises, pampering ourselves through hobby such as music, travelling, painting, reading etc. the conditions such a anxiety, depression and stress, can affect mental health and disturb the daily chores of a person.

Medical professionals are in the opinion that physical medical conditions are the root cause of the mental health. Even if the mental health is handled independently, the physical ailment has a strong relation or effect over it.

Dhar (2005) is in the opinion that the ageing is associated with multiple medical conditions mainly due to deteriorating physiological reserves and impaired immune mechanisms. Epidemiological and population ageing studies report that chronic, non-communicable diseases such as diabetes, hypertension, ischemic heart disease and arthritis are integral part of ageing (1)

An attempt has been made in this paper to explain what have been conceived by the people towards their understanding of mental health and mental illness. The paper also describes and discusses the common types of mental disorders, its early signs & symptoms and the ways to address the situations.

Wang YY & et al. (2014) specifically suggests that a systematic yoga could significantly reduce the depressive symptoms of elderly participants and improve their quality of sleep after 6 months both for elders living in institutions and the community [2]

Hsu Ch & et al. (2010) revealed through their experimental study that 15-day intimate massage including head, neck, shoulders, hands, palms, fingers, and back could reduce depression and anxiety in 6 elderly people living in institutions [3].

Yoga is one such mind body intervention which is increasingly being explored for therapeutic potentials in elderly. A survey carried out in the American population indicated that about 15.8 million or 6.9% of its population practice some form of yoga and a sizeable proportion willing to take it up in the future(4)

Vanderlinden & et al. (2020) suggests that exercise programs positively affect various aspects of sleep in generally healthy older adults. More specifically, moderate intensity exercise programs, with a frequency of three times per week and a duration of 12 weeks up to 6 months, showed the highest number of significant improvements in different sleep outcomes in older adults. Furthermore, programs that offered single exercise types, such as Baduanjin, Tai chi and the silver yoga program, or a combination of exercises showed the highest proportion of significant versus reported effects on sleep outcomes. (5)

Hu HF & et al (2014) revealed that alternative therapies are also effective for treating depression symptoms in elderly people. Regarding physical contact therapy, the depression and agitated behaviors of 12 older people with dementia significantly improved after they received robot- assisted therapy involving PARO for 40 minutes, twice a week for 4 weeks; simultaneously, their verbal and body interactions were facilitated by nurses [6].

Kuei-Min Chen & et al (2010) recommended that yoga exercise be incorporated as an activity program in assisted living facilities or in other long-term care facilities to improve sleep quality and decrease depression in institutionalized elders(7).

Ching Chih & et al (2022) study supported a combination of three-dimensional VR and hands-on horticultural activities on community dwelling older adults to improve self-esteem and mastery. Te findings suggest that the future implementation of a similar program would be feasible and beneficial to community-dwelling older adults. (8)

Thus it is apparent that regular exercise or indulgence in any other activity helps preventing the depression symptoms irrespective of age, and the elderly peoples are most positively affected by it.

STATEMENT OF THE PROBLEM

The objective of this research paper is to study the effect of yogic intervention on physical and mental Health among both genders of Geriatric patient. The exact problem of this research is "Effectiveness of Yogic Intervention on Physical and Mental Health amongst the Geriatric Patients".



OBJECTIVES

1. To understand the effectiveness of Yogic Intervention on Physical Health among male Geriatric patient.
2. To understand the effectiveness of Yogic Intervention on Mental Health among male Geriatric patient.
3. To understand the effectiveness of Yogic Intervention on Physical Health among female Geriatric patient.
4. To understand the effectiveness of Yogic Intervention on Mental Health among female Geriatric patient.

HYPOTHESIS

1. There is no significant effect of Yogic intervention among male Geriatric patient with respect to Physical Health.
2. There is no significant effect of yogic intervention among male Geriatric patient with respect to Mental Health.
3. There is no significant effect of Yogic intervention among female Geriatric patient with respect to Physical Health.
4. There is no significant effect of yogic intervention among female Geriatric patient with respect to Mental Health.

SAMPLE

50 male and 50 female Geriatric patients were randomly selected from Shanku's Natural Health Centre to see the effect of yogic intervention on physical and mental health.

VARIABLES

In present research paper, Yogic intervention is taken as independent variable while the scores of physical and mental health are dependent variable.

TOOL

Mental Health checklist developed by Dr.Pramod Kumar has been used for the purpose.

The inventory of the Mental Health Check-list (MHC) consist of 11 items – 6 mental and 5 somatic, and is presented in a 4 point rating scale format.

SCORING

Numerical value of 1, 2, 3 and 4 is assigned to the 4 response categories, i.e. for 'rarely', 'at times', 'often' and 'always', respectively. The cumulative score varies from 11 to 44. Lower score indicates poor state while the higher score indicates rich state of physical and mental health.

RELIABILITY

To measure the internal consistency, the split-half reliability technique has been used by correlating the both odd & even items. The resultant reliability index is 0.83 after applying the Spearman-Brown formula for doubling the test length where the values are 70 (N=30).

The 65 (N=30) with an index of reliability of .81 has been derived through the test-retest reliability.

VALIDITY

Since the items of the MHC were prepared by referring to the teachers of psychology, the face validity of the MHC is fairly high. Every symptom was listed out to capture the state of mental health. The relevance of the content was ascertained through the experts. Only those symptoms which shows 100% acceptance by the experts were selected for the cause.

STATISTICAL ANALYSIS

To analysis the data t-test is used.

PROCEDURE

Randomly selected 50 male and 50 female Geriatric patients from Shanku's Natural Health Centre were the sample for the present study. In order to address the issue, Mental Health checklist developed by Dr. Pramod Kumar was administered in two phases. The data collection was done on following phase:

1. In first phase before giving the yogic intervention among the Geriatric patients mental health checklist was administered in manageable small group of Geriatric patients. After completion the collection of data, scores were counted as per the scoring key of mental health checklist.

- In second stage yogic intervention was applied 40 minutes for three day per week for three month after completion of yogic intervention again mental health checkup was given to Geriatric patients in small manageable group. After doing away with data collection of second phase scores were counted as per the scoring key of mental health checklist.

Yogic Intervention Module was as bellow:

RESULT AND DISCUSSION

Table No.-1

Mean, Standard Deviation and t-value of Pre and Post Yogic Intervention on Physical Health and Mental Health of Male and Female Geriatric patient.

Sr No	Yogic Intervention	Time
1	Om Chanting	5 min
2	Anulom-Vilom Pranayam (With Awareness of Breathing)	10 min
3	Sandhi Sanchalan kriya	05 min
4	Laughter therapy	5 min
5	Dhyan	05 min
6	Walking Like a king (joint exercise) (<i>sharir sandhi sanchalan kriya</i>)	10min
	Total	40 min

	Group	N	Mean	SD	t value	Level of significance
Physical Health(Male)	Pre	50	7.40	3.14	2.63	0.01
	Pro	50	5.90	2.20		
Mental Health(Male)	Pre	50	7.66	2.98	2.88	0.01
	Pro	50	6.10	2.36		
Physical Health(Female)	Pre	50	8.00	2.40	3.88	0.01
	Pro	50	6.10	2.12		
Physical Health (Female)	Pre	50	7.98	3.10	2.03	0.05
	Pro	50	6.54	2.99		

The results of Table no.1 show that t value of pre and post Yogic Intervention on Physical Health of male Geriatric Patient is 2.63. Means scores of Physical Health of Male Geriatric patients were found 7.40 and 5.90 respectively on before yogic intervention and after yogic intervention with SD 3.14 and 2.20. These results indicate that pre and post mean scores of yogic intervention on Physical Health of male Geriatric Patients vary significantly at 0.01 level. Thus the null Hypothesis that, "There is no significant effect of Yogic intervention among male Geriatric patient with regards to Physical Health" is rejected. It means that yogic intervention could help considerably in increasing physical health among male geriatric patients.

t- value of pre and post Yogic Intervention on Mental Health of male Geriatric Patient is 2.88. Means scores of Mental Health of male Geriatric patients were found 7.66 and 6.10 respectively before yogic intervention and after yogic intervention with SD 2.98 and 2.36. These results shows that pre and post mean scores of yogic intervention on Mental Health of male Geriatric Patients differ considerably at 0.01 level. Thus the null Hypothesis that, "There is no significant effect of Yogic intervention among male Geriatric patient with regards to Mental Health" is rejected. It shows that yogic intervention could help considerably in increasing Mental health among male geriatric patients.

t value of pre and post Yogic Intervention on Physical Health of female Geriatric Patient is 3.88. Means scores of Physical Health of female Geriatric patients were found 8.00 and 6.10 respectively on before yogic intervention and after yogic intervention with SD 2.40 and 2.12 These results indicate that pre and post mean scores of yogic intervention on Physical Health of female Geriatric Patients vary considerably at 0.01 level. Thus the null Hypothesis that, "There is no significant effect of Yogic intervention among female Geriatric patient with regards to Physical Health" is rejected. It denotes that yogic intervention could help considerably in increasing physical health among female geriatric patients.

t value of pre and post Yogic Intervention on Mental Health of female Geriatric Patient is 2.03. Means scores of Mental Health of female Geriatric patients were found 7.98 and 6.54 correspondingly on before yogic intervention and post yogic intervention with SD 3.10 and 2.99. These results indicate that pre and post mean scores of yogic intervention on Mental Health of female Geriatric Patients vary considerably at 0.05 level. Thus the null Hypothesis that, "There is no significant effect of Yogic intervention among female Geriatric patient with regards to Mental Health" is rejected. It implies that yogic intervention could help significantly in increasing mental health among female geriatric patients.



CONCLUSIONS

1. Yogic Intervention could help significantly in increasing physical health among male geriatric patients.
2. Yogic Intervention could help significantly in increasing mental health among male geriatric patients.
3. Yogic Intervention could help significantly in increasing physical health among female geriatric patients.
4. Yogic Intervention could help significantly in increasing mental health among female geriatric patients.

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