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Significance of Physical Health for Psychological Well-being of Elderly

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ABSTRACT The present research study was designed to explore and compare the level of stress, anxiety and depression among institutionalized and non-institutionalized elderly across their health status. The sample for the present study comprised of total 200 elderly among which 100 were institutionalized and 100 were non-institutionalized. Socio-demographic characteristics of the respondents were assessed using self-designed questionnaire whereas Anxiety, Depression and Stress Scale by Bhatnagar was administered to measure the level of anxiety, depression and stress of respondents. The findings of the present study highlights significant influence of health status on level of stress, anxiety and depression among elderly. Elderly with serious health problems were found to be significantly more stressed, anxious and depressed than those having controllable health problems, irrespective of their place of residence. Thus, result of the present study reflects that good physical health is a prerequisite for psychological well-being among elderly.

INTRODUCTION

Growing old is a normal inevitable phenomenon which includes growth and maturity of the body. There are many physical and psychological changes in the process of aging or growing old. Aging can be defined as a series of time related processes occurring in the adult individual that ultimately brings life to close. It influences an organism's entire physiology, impacts function at all levels, and increases susceptibility to all major chronic diseases (Vijg 2007). This is because in older age, immune system grows poor which makes elders more susceptible to different diseases (Gurung and Ghimire 2014). With advancing age, there is decreased vitality and increased vulnerability to common diseases both acute as well as chronic (Kashyap and Sidhu 2011). Hearing impairment, weakening vision, and the increasing probability of arthritis, hypertension, heart disease, diabetes, and osteoporosis are among the common age-related physical changes. In 2017, a report by WHO also revealed that depression in the elderly can occur due to the presence of comorbid medical illnesses. Similarly, Pushparani et al. (2017) identified a significant association between depression in the elderly and presence of comorbidities like diabetes, cardio vascular diseases, anaemia and malnutrition.

The proportion of older adults needing assistance with everyday activities increases with age (The American Psychological Association 2014). Though, older adults carry strong desire to be independent but due to decline in the health status they reach at the point where they need support and help from others (Brossoie 2013). But in today's scenario, in addition to declining health, the nuclear family concept, urbanization, westernization, industrialization and technical progress has made position of elderly people much more insecure in our society. The separation and loss of assistance from their children has further intensified their feeling of physical and emotional neglect and thereby leads to increase in psychological problems like anxiety, stress, depression, loneliness, feeling of insecurity, social isolation among elderly (Swarnalatha 2013).

Stress is basically a reaction to a stimulus that interrupts our physical or mental equilibrium. In addition, anxiety in later life has also been identified as a risk factor for greater disability among older adults in general (Gellis et al. 2014).

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Austrian neurologist Sigmund Freud (Encyclopaedia Britannica 2015) viewed anxiety as the symptomatic expression of the inner emotional conflict caused when a person suppresses (from conscious awareness) experiences, feelings, or impulses that are too threatening or disturbing to live with. Apart from stress and anxiety, one of the most common neuropsychiatric disorders among elderly is depression (WHO 2016). Depression refers to a profound feeling of sadness, loneliness, monotony, joylessness, impending doom, and a self-accusatory tendency, even to the extent of committing suicide (Bothra and Dasgupta 2011).

The period of old age is a period of challenge illustrated by changes in roles such as becoming a grandparent, retirement and other significant life events like bereavement, potential reductions in social network and support etc. (Dahlberg et al. 2015). That's why in this phase of life, the elderly needs more support of their family (Runcan 2012). Elderly needs to be cared and treated like a child because in old age physical organs malfunction, digestion slows down, movements get limited, friends and colleagues fade away and financial resources deplete (Dhanya et al. 2011). But in today's modern world, mistreatment with elderly is common everywhere which leads to psychological disorders like stress, anxiety and depression. And this risk increases in case of institutionalized elderly than those who live in the community or in their own families (Runcan 2012).

Objectives

Keeping in mind the changing family relationships and physical health status of elderly, the present study has been taken up with the following objectives:

1. To evaluate the level of stress, anxiety and depression among institutionalized and non-institutionalized elderly across their physical health status.
2. To identify if physical health significantly influences the level of stress, anxiety and depression among institutionalized and non-institutionalized elderly.

METHODOLOGY

Locale

All the Old Age Homes of Uttarakhand registered under Society Registration Act (SRA) and nearby local communities were purposively taken as research base for the present study.

Sample

The sample for the present study comprised of two groups of elderly population *viz.* institutionalized elderly and non-institutionalized elderly. Sample comprising of the institutionalized elderly (n1 =100) was drawn from the Society Registration Act (SRA) recognized old age homes of Uttarakhand through census method and equivalent sample of non-institutionalized elderly (n2 =100) was drawn through lottery method from the nearby localities adjacent to the old age homes, thus, making a total of 200 respondents for the present study.

Tools

A self-designed questionnaire was used to study the health status of respondents. Health status of the respondents was categorized as serious health problems and controllable health problems. Here, serious health problems refer to those that leads to physical dependency on others for daily routine work and controllable health problems refer to those like B.P., diabetes, etc., which does not lead to physical dependency of any sort. Further, anxiety, depression and stress were assessed by employing Anxiety, Depression and Stress Scale by Bhatnagar et al. (2011). This scale comprises of 48 items divided into 3 subscales which are stress subscale, anxiety subscale and depression subscale. The scores have been presented in four fold categorization that is Normal, Mild, Moderate and Severe.

Procedure and Data Analysis

The researchers approached the Director of the institutions through a letter of request from the Department. After getting the permission, respondents were approached directly at the old age homes and families itself. The purpose of study was made clear to them and then they were requested to give honest responses. Hindi version of the scale was used. Each sampled elderly was given questionnaires for limited time and asked to fill it under the strict supervision of the researchers. Data was analysed statistically using Frequency, Percentage, Arithmetic Mean, Standard Deviation and Z-Test.

RESULTS AND DISCUSSION

Frequency and percentage distribution of institutionalized and non-institutionalized elderly on stress, anxiety and depression across their health status is presented in Table 1. A close look at the table highlights that amongst total elderly population for the study, the elderly with serious health problems were seen to be more moderately and severely stressed, anxious and depressed than those having controllable health problems. Further, the percentage of elderly with controllable health issues showing normal and mild level of stress, anxiety and depression was high in comparison to the elderly with serious health problems. In particular, 36.96 percent of the elderly with serious health problems had severe stress whereas only 11.69 percent of elderly with controllable health issues had severe stress. Similarly, 23.91 percent of elderly with serious health problems showed moderate level of stress however only 19.48 percent of elderly with controllable health issues were seen to be moderately stressed. Across normal and mild level of stress, the percentage of elderly with controllable health problems was high (37.66% and 31.17%, respectively) in comparison to the elderly with serious health problems (17.39% and 21.74%, respectively).

Across the second dimension of study that is, anxiety, the Table reveals similar picture. A total of 32.61 percent of elderly with severe sickness were found severely anxious whereas in contrast, 12.34 percent of elderly with controllable health problems seen to be severely anxious. Further, 38.96 percent and 31.82 percent of elderly with controllable health problems found normally and mildly anxious, respectively. These percentages were found comparatively less among elderly with serious health issues (15.22% and 26.09%, respectively). In addition, relatively more elderly with serious health issues (26.09%) were found to have moderate anxiety when compared with those suffering controllable health problems (16.88%).

Moving towards depression increases our worries when we see that the percentage of elderly with serious health problems is high across severe (36.96%) and moderate (26.09%) level of depression in comparison to elderly with controllable health problems (11.69% and 15.58%, respectively). Only 17.39 percent and 19.57 percent of elderly with serious health problems were identified as normally and mildly depressed, respectively. Conversely, 38.96 percent and 33.77 percent of elderly with controllable health problems found to have normal and mild depression, respectively.

Comparison as per their place of residence that is, whether they are institutionalized or non-institutionalized, reveals that most of the institutionalized elderly with serious health problems had severe stress (36.67%), anxiety (33.33%) and depression (40.00%). Further, 23.33 percent, 30.00 percent and 26.66 percent of elderly with serious health problems were identified as moderately stressed, anxious and depressed, respectively. Unfortunately, lesser number of seriously unwell elderly revealed to have normal and mild level of stress, anxiety and depression. Only 16.67 percent, 10.00 percent and 16.67 percent were found to have normal stress, anxiety and depression, respectively. Similarly, only 23.33 percent, 26.67 percent and 16.67 percent were assessed as moderately stressed, anxious and depressed, respectively. Further, contrastingly, in case of elderly with controllable health problems, most elderly revealed to have normal and mild stress (34.28% and 31.43%, respectively), anxiety (35.71% and 30.00%, respectively) and depression (32.86% and 34.28%, respectively). Some elderly had severe stress (14.29%), anxiety (12.86%), depression (12.86%) and some had moderate stress (20.00%), anxiety (21.43%) and depression (20.00%).

Across non-institutionalized elderly, most elderly with serious health problems were found severely stressed (37.50%), anxious (31.25%) and depressed (31.25%) followed by moderate (stress: 25.00%, anxiety: 18.75%, depression: 25.00%), mild (stress: 18.75%, anxiety: 25.00%, depression: 25.00%) and normal (stress: 18.75%, anxiety: 25.00%, depression: 18.75%). In contrast, most elderly with controllable health problems were identified as normally stressed (40.48%), anxious (41.67%) and depressed (44.05%) followed by other three levels. Rest of the elderly revealed to have mild, moderate and severe level of stress (30.95%, 19.05% and 09.52%, respectively); anxiety (33.33%, 13.10% and 11.90%, respectively) and depression (33.33%, 11.90% and 10.72%, respectively).

Looking at the broader picture, it can be interpreted that stress, anxiety and depression among elderly with severe health problems were found to be on the higher side in comparison to

Table 1: Frequency and percentage distribution of institutionalized and non-institutionalized elderly onstress, anxiety and depression across their health status

Dimensions of study	*Levels*	*Score range*	*Institutionalized elderly (n_1=100)*				*Non-Institutionalized elderly (n_2=100)*				*Total elderly (n=200)*			
			Elderly with controllable health problems (n_{1a}= 70)		*Elderly with serious health problems (n_{1b}= 30)*		*Elderly with controllable serious health problems (n_{2a}= 84)*		*Elderly with health controllable problems (n_{2b}= 16)*		*Elderly with controllable problems health (n_1=154)*		*Elderly with serious health problems (n_2=46)*	
			n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
Stress	Normal	0-3	24	34.28	5	16.67	34	40.48	3	18.75	58	37.66	8	17.39
	Mild	4-5	22	31.43	7	23.33	26	30.95	3	18.75	48	31.17	10	21.74
	Moderate	6-8	14	20.00	7	23.33	16	19.05	4	25.00	30	19.48	11	23.91
	Severe	Above 9	10	14.29	11	36.67	8	09.52	6	37.50	18	11.69	17	36.96
Anxiety	Normal	0-4	25	35.71	3	10.00	35	41.67	4	25.00	60	38.96	7	15.22
	Mild	5-6	21	30.00	8	26.67	28	33.33	4	25.00	49	31.82	12	26.09
	Moderate	7-8	15	21.43	9	30.00	11	13.10	3	18.75	26	16.88	12	26.09
	Severe	Above 9	9	12.86	10	33.33	10	11.90	5	31.25	19	12.34	15	32.61
Depression	Normal	0-3	23	32.86	5	16.67	37	44.05	3	18.75	60	38.96	8	17.39
	Mild	4-5	24	34.28	5	16.67	28	33.33	4	25.00	52	33.77	9	19.57
	Moderate	6-7	14	20.00	8	26.66	10	11.90	4	25.00	24	15.58	12	26.09
	Severe	Above 8	9	12.86	12	40.00	9	10.72	5	31.25	18	11.69	17	36.96

those with controllable health issues. Here, physical health status seems to influence the psychological well-being of individuals.

Mean differences in stress, anxiety and depression among institutionalized and non-institutionalized elderly across their health status have been presented in Table 2. The table portrays that there exists a significant difference between elderly with controllable health problems and elderly with severe health problems on their level of stress (Z = 2.63, p<0.05), anxiety (Z $\bar{X}$= 3.70, p<0.05) and depression (Z = 2.26, p<0.05). In totality, stress, anxiety and depression of severely unwell elderly were significantly higher ($\bar{X}$= 5.75, 6.25 and 5.92, respectively) than those with controllable health problems ($\bar{X}$= 4.45, 4.14 and 4.97, respectively). In particular also, significant differences were observed in stress, anxiety and depression level of elderly. It was found that stress, anxiety and depression among institutionalized elderly with controllable health problems was significantly different from elderly with serious health problems (Z = 3.09, 2.40 and 3.19, respectively). Similarly among non-institutionalized elderly, significant differences were witnessed in the perceived level of stress, anxiety and depression of elderly with serious and controllable health problems (Z = 3.70, 2.54 and 2.63 respectively). Specifically, institutionalized elderly with serious health problems had significantly higher stress ($\bar{X}$= 5.65), anxiety (X= 7.82) and depression ($\bar{X}$= 6.51) than those with controllable health issues ($\bar{X}$= 4.06, 6.38 and 4.96, respectively). Further, stress, anxiety and depression among non-institutionalized elderly with serious health problems were significantly on the higher side ($\bar{X}$= 6.25, 6.65 and 5.75, respectively) than those having controllable health problems ($\bar{X}$= 4.14, 5.15 and 4.45, respectively).

Hence, from the above discussion it can be concluded that irrespective of place of residence, elders who suffered from severe health problems were more stressed, anxious and depressed than the ones suffered from controllable health issues. The most plausible reason hides behind the fact that sound mind can reside only in the sound body. We all know that illness often grants functional limitation which apart from devastatingly effecting the psychological well-being of elderly, detracts opportunities for positive effect and life satisfaction. Apart from illness, decreasing emotional support, love and

Table 2: Mean differences in stress, anxiety and depression among institutionalized and non-institutionalized elderly across their health status

Dimension of study	*Institutionalized elderly ($n_{1=}$ 100)*					*Non-institutionalized elderly ($n_{2=}$ 100)*					*Total elderly (n=200)*				
	Elderly with controllable health problems (n_{1a} = 70)		*Elderly with serious health problems (n_{1b} = 30)*		*z calculated*	*Elderly with controllable health problems (n_{2a} = 84)*		*Elderly with serious health problems (n_{2b} = 16)*		*z calculated*	*Elderly with controllable health problems (n_1=154)*		*Elderly with serious health problems (n_2=46)*		*z calculated*
	Mean	*S.D*	*Mean*	*S.D*		*Mean*	*S.D*	*Mean*	*S.D*		*Mean*	*S.D*	*Mean*	*S.D*	
Stress	4.06	2.03	5.65	2.54	**3.09***	4.14	2.12	6.25	2.08	**3.70***	4.45	2.32	5.75	1.69	**2.63***
Anxiety	6.38	2.01	7.823	3.01	**2.40***	5.15	2.35	6.65	2.12	**2.54***	4.14	2.12	6.25	2.08	**3.70***
Depression	4.96	2.19	6.51	2.24	**3.19***	4.45	2.32	5.75	1.69	**2.63***	4.97	2.36	5.92	1.93	**2.26***

Note: (a) * Stands for significant at p<0.05 level, (b) Higher mean score represents higher stress, anxiety and depression.

affection from family members, death of spouse or loved ones, retirement, lack of social support network, stressful life events, medication, hormonal changes, etc. often occur together to make the life of an aged more stressful. In addition, when they start feeling that they are dependent on others for their routine work, they lose their identity. This loss of self-respect and identity ultimately influence their psychological well-being hence leaving them stressed, depressed and anxious.Similar results were revealed by Kashyap and Sidhu (2011). They identified that poor physical health of aged had significantly negative relation with total subjective well-being. Bonner et al. (2017) also found association between stress and worse health status, in their research work. As per Goldstein et al. (2005), well-being is positively correlated with sustaining physical health. Similarly, Cho et al. (2011) in their research work discovered that subjective health was strongly associated with psychological well-being among oldest-old adults. Frias and Whyne (2015) also revealed that life stress is inversely related to physical health. An association between health status and well-being seems intuitively clear. Aged suffering with deteriorated health status is bound to have lower purpose of life (Kashyap and Sidhu 2011). Further, according to Mannell and Zuzanek (1999), people in poor health are less satisfied with their lives than those in good health. As observed by Ravindran (1998), for aged illness poses a deep threat to their well-being. A report by WHO (2017) on depression in India, also highlights that depression during old age can occur due to the presence of comorbid medical illnesses.

Hence, it is clear from the above discussion that physical health status has direct association with the psychological status. Elderly with better physical health feel less stress, anxiety and depression in comparison to those having poor physical health.

CONCLUSION

Results of the present study have emphasized the importance of health in one's life and how it affects the psychological well-being of elderly. Elders with severe health problems found to be more stressed, anxious and depressed than those whose health problems were controllable. It is a well-known fact that health of the aged declines chronologically and it has deep impact on their psychological well-being. Sickness is often being associated with displeasure or pain, so the presence of illness might directly increase negative affect. Precaution and timely awareness about physical health results in better quality of life during old age. So, one should always remain healthy to successfully experience this natural process of aging with sound psychological well-being.

RECOMMENDATIONS

1. Elderly should be encouraged to pursue yoga as it helps to attain a sound body and mind.
2. Meditation keeps stress, anxiety and depression at bay. Meditation classes can be organised at home, community centre and old age homes for enhancing the psychological well-being of elderly.
3. Music therapy can be provided to those who are bed ridden.
4. Physical activity of any form is beneficial for achieving good health. Caretakers are required to indulge elderly in some form of physical activity like walking and yoga.
5. Elderly should be encouraged to pursue their hobbies. It is one of the best pass-time.

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