

Stress, anxiety and depression: Comparison among institutionalised and non-institutionalised elderly across gender

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ABSTRACT : The present research study was carried out to explore and compare the level of stress, anxiety and depression among institutionalized and non-institutionalized elderly across gender. The sample comprised of 100 institutionalized and 100 non-institutionalized elderly making a total of 200 elderly. A self-designed questionnaire was used to study the socio-demographic characteristics of respondents whereas, Anxiety, Depression and Stress Scale by Bhatnagar et al. (2011) was administered to identify the levels of anxiety, depression and stress of respondents. The findings of the study highlighted the significant variations in stress, anxiety and depression among institutionalised and non-institutionalised elderly across gender. Male elderly were significantly found to be more stressed but less anxious and depressed than their female counterparts. Frequency distribution underlined the common belief that institutionalized elderly experience more stress, anxiety and depression than non-institutionalized elderly. Thus, the findings of the present study highlight the effect of gender and institutionalization on the emotional health of elderly.

Key words: Emotional Health, female, male, old age homes

Aging is an unescapable developmental phenomenon which brings along a number of changes in the physical, psychological, hormonal and social conditions. The world's population getting aged rapidly and elderly persons, those who aged 60 or above, estimated to double from about 12% to 22% between 2015 to 2050 (from 900 million to 2 billion people) (WHO, 2016). In India, the population of elders is increasing frighteningly, they constitute about 8% of the total population and estimated to increase to 12.2% by 2026 (Census of Indian, 2011). Elderly constitute one of the most susceptible sections of the society. Along with physical weakness they also lack in economic resources, self-esteem and social status (Rajkumar *et al.*, 2009). Thus, old age puts more wrinkles on one's mind than on his face.

The changing lifestyle of today's population has changed the status of senior citizens in our society. Because of nuclear family concept, urbanization, westernization, industrialization and technical progress, the position of elderly people are much insecure now a days. This changing scenario has made an unfavourable impact on aged. They have lost much of respect and care in the family and in the community. Now, there is no space for elders in the family and may go for institutionalization (Panigrahi and Dash, 2015).

Institutional support for the older persons in the form of old age homes is western concept and a recent concept in India. Thus, separation and loss of assistance from their children make them physically and emotionally neglected that lead to psychological problem like anxiety, depression, loneliness, feeling of insecurity, social isolation (Swarnalatha, 2013), frequent mood swings, distress and other psychological disorders. Elderly people suffer with many physical, social, emotional and psychological problems which ultimately enhance their level of stress (Maddepalli *et al.*, 2016). Stress is basically a reaction to a stimulus that interrupts our physical or mental equilibrium. It is an omnipresent part of life. A little bit of stress, which is known as acute stress, can be exciting as it keeps us active and alert. But long-term or chronic stress can have unfavourable effects on health (Psychology Today, 2017). Apart from stress, one of the most common neuropsychiatric disorders among elderly is depression and it constitutes a major public health problem worldwide (WHO, 2016). In many cases, the institutionalization of the elderly leads to loneliness, isolation, and eventually to depression (Runcan, 2012). 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). In addition to stress and depression, anxiety in later life has

also been identified as a risk factor for greater disability among older adults in general and more prevalent than depression (Gellis *et al.*, 2014).

In old age, every individual is required to be cared and treated like a child because in this period physical organs malfunction, digestion slows down, movements get limited, friends and colleagues fade away, children turn a blind eye even to just demands and financial resources deplete (Dhanya *et al.*, 2011). And unfortunately, in today's modern world, elders are the mean of a burden on the family in all societies and cultures and mistreatment with elderly is common everywhere. Every member of the family is engaged in their own business. They do not spend much time with the elder ones. Hence, old people who do not receive much support experience psychological disorders like stress, depression and anxiety.

So, keeping in mind the impact of today's fast moving world and changing family relationships on the psychological well-being of elderly, with the below mentioned objectives, the present study is an endeavour to investigate the level of stress, anxiety and depression among institutionalized and non-institutionalized elderly across their gender:

1. To evaluate the level of stress, anxiety and depression among institutionalized and non-institutionalized elderly across gender.
2. To identify if gender significantly influences the stress, anxiety and depression levels of institutionalized and non-institutionalized elderly.

MATERIALS AND METHODS

Sample

A total of 200 elderly were the respondents for the present study. The sample comprised of two groups of elderly population i.e. institutionalized and non-institutionalized elderly of Uttarakhand State. Through census method, 100 elderly were selected from SRA recognized old age homes located in Uttarakhand whereas, lottery method was used to select 100 non-institutionalized elderly from the localities adjacent to old age homes.

Tools

A self-designed questionnaire was used to study the socio-demographic characteristics of respondents whereas, 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 anxiety subscale, depression subscale and stress subscale. The scores have been presented in four fold categorization i.e. Normal, Mild, Moderate and Severe.

Procedure and Data Analysis

The investigator 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 researcher. Data was analysed statistically using Frequency, Percentage, Arithmetic Mean, Standard Deviation and Z-Test.

RESULTS AND DISCUSSION

Frequency and percentage distribution of stress, anxiety and depression among institutionalized and non-institutionalized elderly across their gender is presented in Table 1. A cursory look at the table explains that in totality, highest percentage of males had mild stress (36.70%), normal anxiety (34.86%) and mild depression (27.52%). Similarly, highest percentage of females had mild stress (34.07%), normal anxiety (28.57%) and moderate depression (32.97%). But worry arises when we see that 30.27% of males and 40.66% of females showed moderate to severe stress. By the same token, 38.53% of males and 46.15% of females found to have anxiety ranging from moderate to high. Likewise across depression, 35.78% of males found to have moderate to severe depression while 15.38% of females identified as severely depressed.

Assessment across their place of residence reveals that out of 48 males and 52 females living in institutionalized setting, 10.42% of males and 11.53% of females had severe stress, 29.14% of males and 26.92% of females had severe anxiety and 10.42% of males and 19.23% of females had severe depression. These percentages were found less among elderly living in their own homes. Out of 61 males and 39 females, fortunately, only 3.28% of males and 5.13% of females were found to have severe stress. In the same way, in comparison to institutionalized elderly, lesser non-institutionalized

Table 1: Frequency and percentage distribution of stress, anxiety and depression among institutionalized and non-institutionalized elderly across gender

Dimensions of Study	Levels	Score range	Institutionalized elderly (n ₁ =100)				Non-Institutionalized elderly (n ₂ =100)				Total elderly (n=200)			
			Male (n _{1a} =48)		Female (n _{1b} =52)		Male (n _{2a} =61)		Female (n _{2b} =39)		Male (n ₁ =109)		Female (n ₂ =91)	
			n	%	n	%	n	%	n	%	n	%	n	%
Stress	Normal	0-3	12	25.00	10	19.23	24	39.34	13	33.33	36	33.03	23	25.27
	Mild	4-5	18	37.50	18	34.62	22	36.07	13	33.33	40	36.70	31	34.07
	Moderate	6-8	13	27.08	18	34.62	13	21.31	11	28.21	26	23.85	29	31.87
	Severe	Above 9	5	10.42	6	11.53	2	03.28	2	05.13	7	06.42	8	8.79
Anxiety	Normal	0-4	15	31.25	7	13.46	23	37.70	19	48.72	38	34.86	26	28.57
	Mild	5-6	8	16.67	14	26.92	21	34.43	9	23.08	29	26.61	23	25.28
	Moderate	7-8	11	22.92	17	32.69	15	24.59	8	20.51	26	23.85	25	27.47
	Severe	Above 9	14	29.16	14	26.92	2	03.28	3	07.69	16	14.68	17	18.68
Depression	Normal	0-3	13	27.08	6	11.54	19	31.15	12	30.77	32	29.36	18	19.78
	Mild	4-5	12	25.0	14	26.92	26	42.62	15	38.46	38	34.86	29	31.87
	Moderate	6-7	18	37.5	22	42.31	12	19.67	8	20.51	30	27.52	30	32.97
	Severe	Above 8	5	10.42	10	19.23	4	06.56	4	10.26	9	08.26	14	15.38

males and females were found to have severe anxiety (3.28% & 7.69%, respectively) and depression (6.56% & 10.26%, respectively).

Thus, the above discussion of the frequency table points out that institutionalized elderly had higher level of stress, anxiety and depression in comparison to non-institutionalized elderly. And across both the genders, a good percentage of elderly were found to possess mild to severe levels of stress, anxiety and depression. Findings of Maddepalli *et al.* (2016) also reveal the similar result that the perceived stress was high among inmates of old age homes. Another study on stress level of senior citizen residing in selected old age home shows that most of the senior citizen (86.66%) had moderate stress whereas similar percentage (6.66%) of them had mild and severe stress, respectively (Panigrahi and Dash, 2015). Likewise, Sridevi and Swathi (2014) revealed that the stress and depression are high in institutional setting rather than home setting. In the similar line, people, who lived in their own homes, had lesser stress than those who lived in impersonal homes, has been revealed by Babazadeh *et al.* (2016).

The most probable reason behind institutionalized elderly suffering more stress, anxiety and depression than free living elderly might be that majority of them have no contact with their beloved ones, so they have less opportunities to share their feelings and emotions. They are also living in a disciplined atmosphere which often lacks freedom and privacy thereby promotes psychological problems. However, in case of free living

elderly, the presence of family members helps in decreasing the effects of stressful situations, by building up their strengths and comforting them in times of need. Apart from this, communication with family members also helps in reducing the amount of stress, anxiety and depression caused by this age bracket. In addition to all the above mentioned reasons, lack of financial support might be one of the contributing factors for the presence of these psychological problems among institutionalized senior citizens.

Mean differences in the level of stress, anxiety and depression of elderly across their gender has been presented in Table 2. The table portrays that there exist a significant difference between males and females on their level of stress ($Z = 2.57, p < 0.05$), anxiety ($Z = 4.92, p < 0.05$) and depression ($Z = 2.26, p < 0.05$). Irrespective of place of residence, females were found to possess significantly higher anxiety and depression ($x = 7.46$ and 5.92 , respectively) than those of males. In contrast to anxiety and depression, males reflected significantly higher stress ($= 5.70$) than their counterparts. Looking at the place of residence particularly, both institutionalized and non-institutionalized females displayed significantly higher anxiety and depression but lesser stress than males. Similar result was highlighted by Babazadeh *et al.* (2016) in their work that stress, anxiety and depression rate in elderly men and women have statistically significant difference. To be more exact, the older women were found to have higher levels of anxiety and depression but lesser stress than older men. Likewise, Thilak *et al.* (2016) revealed that female gender has

Table 2: Mean differences in the stress, anxiety and depression of institutionalized and non-institutionalized elderly across gender

Dimensions	Institutionalized elderly (n ₁ = 100)			Non-institutionalized elderly (n ₂ = 100)			Total elderly (n=200)								
	Male (n _{1a} = 48)		z calculated	Male (n _{2a} = 61)		z calculated	Male (n ₁ = 109)		z calculated						
	Mean	S.D		Mean	S.D		Mean	S.D							
Stress	6.19	2.57	5.02	2.45	2.32*	5.97	2.41	4.31	2.49	2.507*	5.70	2.45	4.35	2.5	2.57*
Anxiety	4.46	2.77	6.83	3.16	3.97*	4.75	2.26	5.95	2.24	2.55*	4.64	2.65	7.46	2.77	4.92*
Depression	4.35	2.36	6.92	1.94	5.92*	4.163	2.22	6.97	1.03	8.55*	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.

Higher risk of developing geriatric depression than males. The study conducted by Alizadeh *et al.* (2012) showed that the risk of depression in women is 1.7 times more than men. In addition, on sex wise analysis by Gopal *et al.* (2009), depression was found to be more among females.

Firstly, the most obvious reason behind experiencing more stress by males could be that they carry a greater responsibility of family. Even when they get old, they want to be a support system of their children as well as grandchildren. So, to carry the responsibility of whole family along with all the problems imposed by old age, adds more stress into the life of an elderly male. Secondly, males are often observed to be less expressive about their worries than females which indirectly increases their level of stress.

The plausible reason behind females being more depressed and anxious than their counterparts could be that life satisfaction is more closely associated with family and social relations for women than for men. Women are posited to be more sensitive than men to co-residence and contact with family members and their well-being is more affected by their social activities and interactions with others. Females expect emotional support, love and affection from their children whereby they get a feeling of security but when they don't receive it, they feel shattered, lonely and totally broken. In addition, major risk factors for depression among elderly women include death of spouse or loved ones, retirement, chronic illness, lack of social support network, stressful life events, medication, hormonal changes (Rasquinha, 2013). In contrast to females, males have got strong decision-making power and they tackle any problem more effectively and practically and thus they develop lower levels of anxiety and depression. In a study done by Singh *et al.* (2013), it was highlighted that social adjustment of males was significantly better than

females. And, it is a known fact that frequent social interaction and adjustment increase the chances of finding social support and social contracts, hence, reduce the depression and anxiety caused by family or other factors.

CONCLUSION

Result of the present study has underlined the importance of home in one's life and how gender affects the level of psychological problems among elderly. Firstly, higher percentage of institutionalized elderly were found severely stressed, anxious and depressed than those living with their families. Secondly, females were found to be more depressed and anxious but less stressed than their counterparts. The changing lifestyle of today's population has changed the status of senior citizens in our society. Because of nuclear family concept, urbanization, westernization, industrialization and technical progress, the position of elderly people are much insecure now a days. They have lost much of respect and care in the family and in the community. Now, there is no space for elders in the family and may go for institutionalization. Thus, separation and loss of assistance from their children make them physically and emotionally neglected that lead to psychological problems like stress, anxiety, depression, loneliness, feeling of insecurity and social isolation. Women are posited to be more sensitive than men when it comes to family. They expect emotional support, love, and affection from their children whereby they get a feeling of security but when they don't receive it, they start to feel depressed and become more restless. However, males carry strong decision-making power, are more emotionally strong and confront every problem more effectively and practically as compared to females. Henceforth, it can be concluded from the findings of the present study that elderly people around us need more emotional, social and financial support. Further elder women, being more emotionally weak and less socially

active, require more attention and care. By sharing some of our time and resources with them and by giving them their due respect and attention, we all can help our elders to live a happy and psychologically healthy life.

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