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PSYCHOLOGICAL HEALTH OF ELDERLY IN URBAN WEST BENGAL, INDIA AND ITS ASSOCIATION WITH QUALITY OF LIFE

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ABSTRACT

Introduction: Due to rapid social transformation the geriatric population contributes to significant proportion of total population in both developed and developing countries. This resulting situation has called for attention of sociologists, anthropologists, demographers, economists, researchers, policy makers and program planners and implementers. Quality of life of this section of people is of utmost importance and the present study was planned to asses the psychological health status of geriatric people and its relationship with their quality of life. **Materials and Methods:** It was a community based cross sectional study conducted at Sonarpur and Kolkata areas of West Bengal, India. The data collection was done from 472 geriatric people living in these areas using Quality of Life-BREF questionnaire developed by World Health Organization and General Health Questionnaire-28 developed by David Goldberg. Data analysis was done using SPSS version 16.0. **Results:** Quality of life score decreased significantly in all domains with increase in the somatic symptoms, anxiety/ insomnia, social dysfunction, severe depression and total GHQ score. The increase in GHQ score of a person indicates more chance of psychological morbidity, while increase in QOL indicates better quality of life. So, a person having more chance of psychological morbidity will have poor quality of life in all domains. **Discussion:** Quality of life has a significant association with the psychological health. Overall improvement of geriatric people is only possible if their psychological health as well as quality of life improve. Awareness and active involvement of family members, community people and the Government about the

betterment of the elderly and elderly friendly policy can do a lot. If elderly people's huge experience is utilized properly, then the community will be benefited and the geriatric people will also find meaning of their lives; ultimately their psychological health and quality of life will improve.

KEYWORDS: Life-BREF, psychological health sociologists, anthropologists, demographers, economists.

INTRODUCTION

People aged 60 years and above are known as geriatric people[1]. With the advancement of medical science the life expectancy of people has increased all over the world. The change is clearer in developing countries like India. The result of this change is increase in proportion and total number of geriatric people in India. According to the absolute size of elderly population, India is the second largest country in the world next to China. It has been projected that by the year 2025 there will be 177 million elderly population in India which would constitute 14 percent of whole population. [2,3,4] It has also been projected that by the year 2050 the number of elderly people would rise to 324 million[5]. This social transformation has called for attention to be provided to this aged population suffering from both physical and psychological health problems. With the change in socio-cultural structure this huge number of geriatric people are facing serious problem of maladjustment with the rapidly changing society. Many of them are left by their children at their ancestral house. Loneliness is a common but very serious factor at this age group. Widowed people are lonelier as none is there to hear about their feelings. All these lead to psychological problems. The present study was planned to find out the psychological health status of geriatric people and relationship of psychological health with quality of life in two urban communities in West Bengal, India.

MATERIALS AND METHODS

The present study was conducted in urban West Bengal, India. The metropolitan city Kolkata and non-metropolitan town Sonarpur were selected as study areas. Two wards each from Kolkata and Sonarpur were chosen by simple random sampling technique. The people aged 60 years and more and residing in these wards were chosen as the study population. The total number of people included in this study was 472. The people were included in the study only after taking informed consent. Those who refused to take participation in this study were excluded.

Data collection was done using Quality of life questionnaire BREF (WHOQOL-BREF) developed by World Health Organization and General Health Questionnaire-28 (GHQ-28) developed by David Goldberg.

The WHOQOL-BREF questionnaire has 26 questions which have physical health, psychological health, social relationship and environmental health domains. Beside these there are one question each for overall quality of life and overall health status. Each question has five options and possible score ranges from 1-5 with higher score indicating better quality of life.

The GHQ-28 is composed of 28 questions. There are 7 questions from each domain of somatic symptoms, anxiety-insomnia, social dysfunction and severe depression. The scores were done using GHQ scoring. There are four options for each question. First option indicates better than usual, second option indicates same to usual, third option indicates worse than usual and fourth option indicates much worse than usual. According to GHQ score first two options will get scores of 0 and third and fourth options will get scores of 1. So, minimum and maximum possible scores of an individual for total 28 questions would be 0 and 28 respectively. Higher score indicates greater chance of psychological morbidity.
After collection of data it was entered in SPSS sheet and analysis was done using SPSS (version 16.0). Mean, standard deviation, quartiles of each domains were analyzed according to place of residence.

RESULTS AND ANALYSIS

In Table 1 it is seen that the mean and median scores of GHQ-28 of the study population in Sonarpur was quite higher than that of in Kolkata. Table 2 indicates that the mean of somatic symptoms scores among the study subject in Sonarpur was slightly higher than the score in Kolkata while the median scores in both the places were same. Table 3 indicates that the mean score of anxiety-insomnia in Sonarpur was slightly higher than that of in Kolkata and the median score was also higher in Sonarpur than the score in Kolkata. Table 4 highlights that the mean score of social dysfunction in Sonarpur was slightly higher than that of in Kolkata and the median scores in both the places were same. In Table 5 it is seen that the mean score of severe depression in Sonarpur was slightly higher than that of in Kolkata and the median scores were same in both the places.

In Table 6, it is seen that the quality of life score is decreased significantly in all domains with increase in the somatic symptoms, anxiety/ insomnia, social dysfunction, severe depression and total GHQ score. The increase in GHQ score of a person indicates more chance of psychological morbidity, while increase in QOL indicates better quality of life. So, a person having more chance of psychological morbidity will have poor quality of life in all domains.

Table 1: Scoring of General Health Questionnaire-28 of the study population according to the place of study

	Total GHQ score (n=472)	Total GHQ score (Sonarpur) (n=236)	Total GHQ score (Kolkata) (n=236)
Mean	15.97	16.57	15.36
Median	17	18	15
Standard deviation	8.341	8.664	7.978
Minimum	0	0	0
Maximum	28	28	28
1st quartile	9	8.25	9
3rd quartile	23.75	25	23

Table 2: Somatic symptoms scores of participants according to the place of study

	Somatic symptoms score (n=472)	Somatic symptoms score (Sonarpur) (n=236)	Somatic symptoms score (Kolkata) (n=236)
Mean	4.36	4.62	4.09
Median	5	5	5
Standard deviation	2.360	2.326	2.367
Minimum	0	0	0
Maximum	7	7	7
1st quartile	2	3	2
3rd quartile	7	7	6

Table 3: Distribution of anxiety-insomnia scores of the study population according to the place of the study

	Anxiety-insomnia score (n=472)	Anxiety-insomnia score (Sonarpur) (n=236)	Anxiety-insomnia score (Kolkata) (n=236)
Mean	4.03	4.28	3.79
Median	4	5	4
Standard deviation	2.301	2.305	2.192
Minimum	0	0	0
Maximum	7	7	7
1st quartile	2	2	2
3rd quartile	6	7	6

Table 4: Distribution of social dysfunction score of the study population according to place of study

	Social dysfunction score (n=472)	Social dysfunction score (Sonarpur) (n=236)	Social dysfunction score (Kolkata) (n=236)
Mean	4.57	4.64	4.51
Median	6	6	6
Standard deviation	2.774	2.951	2.589
Minimum	0	0	0
Maximum	7	7	7
1st quartile	2	1	2
3rd quartile	7	7	7

Table 5: Severe depression scores of the study population according to place of the study

	Severe depression score (n=472)	Severe depression score (Sonarpur) (n=236)	Severe depression score (Kolkata) (n=236)
Mean	3.01	3.04	2.97
Median	3	3	3
Standard deviation	2.393	2.450	2.339
Minimum	0	0	0
Maximum	7	7	7
1st quartile	1	0.25	1
3rd quartile	5	5	5

Table 6: Association between different domains scores of GHQ-28 with different domains scores of WHOQOL-BREF

Quality of Life domains	Domains of GHQ-28	Spearman Correlation coefficient	P value
Physical health	Somatic symptoms	-0.595	<0.001
	Anxiety-insomnia	-0.547	<0.001
	Social dysfunction	-0.556	<0.001
	Severe depression	-0.562	<0.001
Psychological health	Somatic symptoms	-0.537	<0.001
	Anxiety-insomnia	-0.556	<0.001
	Social dysfunction	-0.522	<0.001
	Severe depression	-0.632	<0.001
Social relationship	Somatic symptoms	-0.373	<0.001
	Anxiety-insomnia	-0.367	<0.001
	Social dysfunction	-0.389	<0.001
	Severe depression	-0.421	<0.001
Environmental	Somatic symptoms	-0.385	<0.001
	Anxiety-insomnia	-0.388	<0.001

	Social dysfunction	-0.378	<0.001
	Severe depression	-0.443	<0.001
Overall quality of life	Somatic symptoms	-0.320	<0.001
	Anxiety-insomnia	-0.271	<0.001
	Social dysfunction	-0.335	<0.001
	Severe depression	-0.316	<0.001
Overall health status	Somatic symptoms	-0.532	<0.001
	Anxiety-insomnia	-0.549	<0.001
	Social dysfunction	-0.488	<0.001
	Severe depression	-0.619	<0.001

DISCUSSION

Quality of life has association with overall psychological health of a person. The psychological health of the person was assessed in the present study using GHQ-28. It was revealed that quality of life was significantly poorer in persons having more score (more psychologically morbid) in somatic symptoms, anxiety-insomnia, social dysfunction and severe depression domain.

In a study by Kamimura A et al it was seen that presence of somatic symptoms was associated with poor quality of life.[6] In another study by Gracia-Camapayo J et al they have also found that somatic symptoms were strongly associated with poor quality of life.[7] Hussain MM et al in their study explored that somatic symptoms particularly pain is associated with poor quality of life.[8] Caballero L et al conducted a study in Spain and also found that the score of quality of life increases significantly in persons having no somatic symptoms if other factors remain constant.[9]

Brenes GA in his study has found that anxiety was significantly associated with poor quality of life.[10] Serafini G et al also found significant association between anxiety and poor quality of life.[11] In the study by Jones JD et al also the relationship between anxiety and quality of life was found to be significant.[12]

In a study by András Szentkirályi et al it was found that insomnia and day time sleepiness was significantly associated with poor quality of life.[13] Rosekind MR et al conducted a study on insomnia risk and cost. They highlighted the fact that insomnia and poor quality of life are interrelated.[14] Ishak WW in their study clearly mentioned that quality of life was significantly impaired in patients with insomnia.[15] Sasai T et al found that in patients with insomnia, psychological QOL was improved with treatment of insomnia but physical QOL deteriorated slightly due to adverse effect of medication.[16]

It is sure that anxiety and insomnia are associated with poor physical health of a person and high blood pressure is common in these persons. All these affect the quality of life badly. In a study conducted by Angermeyer MC et al it was found that the quality of life in patients with persisting depression was poorer than the general population.[17] In a study conducted by Bonicatto SC et al it was observed that quality of life was significantly worse in depressed population in comparison with healthy persons in Argentina.[18] Lin JH et al in their study conducted in China have found that worse QOL and Activity of daily living among depressed elderly.[19] In London city one study was conducted by Ayerbe et al. They found that depression of 3 months or more duration was associated with poor quality of life. After one year of depression, if the condition improved, then also the quality of life remained poorer among elderly.[20] Wada T et al in a study in Japan found that depression was significantly associated with poorer ADL and quality of life among elderly Japanese.[21] It has been seen that patients of major depressive disorders have poorer quality of life than general patients (Papakostas GI et al).[22] Akyol Y also found the negative association between depression and quality of life.[23] In a study conducted by Gallegos-Carrillo K et al it was seen that older adults having depression had lowest QOL score and there was a positive correlation between social networks and health related quality of life.[24]

In a study by Grover S et al it was highlighted that psychiatric disorder was mostly common among elderly due to prevalence of psychosocial risk factors, neurobiology, impact of depression, prevention of depression in addition to the efficacy and tolerability of various anti-depressants.[25]

CONCLUSION

Overall there is a strong relation between quality of life and psychological morbidity. The holistic development of elderly people in the society is only possible if they enjoy the life in a meaningful way. In this regard there is combined responsibility of the family members, the society as well as the Government to make elderly friendly policy. Active involvement of the elderly people in the society can help a lot. The elderly people should not be considered as a burden of the society; rather their huge experience can be utilized as a wealth of the society. If proper importance is given to the opinion of the elderly people, then they will also feel well and quality of life as well as psychological health will improve.

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