



RESEARCH ARTICLE

RELATIONSHIP BETWEEN MENTAL HEALTH AND PHYSICAL HEALTH AMONG ELDERLY

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ABSTRACT

India is an ageing society with the rate of growth of ageing population exceeding the growth of the general population. The United Nation has designated 1999 as the year of older person. Aging is a problem of almost every family involving strain of caring stresses of intergenerational interaction. It has become an important socio-psychological problem of disease, disability and psychophysical deterioration occurs, ultimately the support from the family, community, society decreases. Major concern in old age is health. Health problems such as disease and disability not only directly erode mental wellbeing but also have indirect effects by priming people to have negative perceptions of their health. Deteriorated physical health exerts negative effects on the overall quality life and mental well being among elderly. Hence this study was undertaken to know the relationship between physical health status and mental health among elderly. The random sample consist of 80 male and 80 female elderly were randomly selected from Dharwad district in Karnataka state mental health inventory by Jagdish and Srivastav (1983) and status of health of elderly was assessed by physiological health problem checklist developed by Ashwini and Yadav, V.S (2011). Were used to analyses the Physical health status and mental health status. Results depicted that nearly 50 per cent of the elderly had very poor mental health status and Majority of elderly had 11 -30 number of health problems. Significant relationship was found between Physiological health and mental health among elderly as physiological health problem increased the mental health status decreased among elderly.

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INTRODUCTION

Human concern about the phenomenon of aging is age old. Old age is a closing period in the life span. Man has for long been trying to unravel the mystery of growth, aging and death. The objective of modern research on aging is not to prolong life perennially but to make life in the last stage of human existence pleasant and livable. Old age is a part of lifespan, James (1959) defined old age as "regular changes that occur in the mature genetically representative organisms living under representative environmental conditions as they advance in chronological age. Hurlock (1981) stated that old age is the closing period in the life span. It is a period when people move away from previous more desirable periods or times of usefulness. Strehler (1961) proposed four criteria of aging 1) Ageing is universal 2) Aging is progressive and continuous process 3) Aging is intrinsic to the organism and

4) Aging is degenerative. Major concern in old age is health. Health problems such as disease and disability not only directly erode mental wellbeing but also have indirect effects by priming people to have negative perceptions of their health (Jang et al., 2004; Kahana et al., 1995 and Martin et al., 2000) indicators of distress included depressive symptomatology, sleep and appetite disturbances and inability to concentrate in particularly variety of psychosomatic complaints. Among the various disorders that affect the elderly mental health, deserves special attention. According to WHO, participation in light and moderate physical activities may delay the functional decline. Thus an active life improves mental health and contributes towards managing disorders. There is evidence that physically active elderly people present lower prevalence of mental diseases than non-active elderly people. Deteriorated physical health exerts negative effects on the overall quality life and mental well being among elderly (Cuijpers and Vanlammeren, 1999; Cumming, 2002; Watson et al., 2003). For many years researchers and practitioners have found out that there are significant relationship between physical and mental illness among many older adults. Research studies suggest that

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depressive states are not only a common phenomenon among patients with various physical illnesses such as arthritis, cancer, chronic lung disease, neurological disorder and heart disease (Katon and Sullivan, 1990; Wells, Golding and Burnam, 1988) but it also showed up in the physical activity such as activity for daily living so physical health is interrelated with mental health. According WHO, health is a state of complete physical, mental, social wellbeing and not merely absence of disease. People with mental health problems often have worse physical health, as well as worse self-perceived health, than those without mental health problems. Mental health and other physical health conditions have separate but additive effects on well-being. Individuals with both mental health and physical health problems are at particular risk. The physical problem can complicate mental health of individual. Most people today would agree that health is not a one-dimensional experience. Commonly accepted definitions of health, such as that put forward by the World Health Organisation, incorporate physical, mental and social aspects of health. It follows that being healthy does not just mean being physically fit. Being of sound mind is also important, as is social wellness or the ability to form and maintain a network of friends and associates. Some would add spiritual health as another aspect of wellbeing. Mental health and physical health are fundamentally linked. People living with a mental illness are at greater risk of experiencing a wide range of physical health problems. The reverse relationship is also true people living with chronic physical health conditions experience depression and anxiety at twice the rate of the general population. In the context of the importance of the subject, the present has been undertaken to explore the relationship between mental health and physical health among elderly in Dharwad district and elicit suggestion by the elderly to overcome the problems.

## MATERIALS AND METHODS

**Sample:** The present study was conducted in Dharwad district. The population of the study was elderly people who were above 60 years residing in Dharwad district. Dharwad city of different areas in Dharwad district were purposively selected or convenience of researcher. Elderly people were contacted by Snowball technique. The elderly people were selected who were living in the family with children and responses were recorded individually. Totally 160 elderly people were contacted. Out of 160 elderly people 80 were female and 80 were male from Dharwad district.

### Tools used

- 1) Personal information schedule includes age, caste, education, size of the family
- 2) Mental health inventory: To assess the mental health status of elderly Mental Health Inventory developed by Jadish and Srivastav (1983) was used to assess mental health of elderly It has six dimensions i.e. positive self-evaluation, perception of reality, integration of personality, autonomy, group oriented attitude and environmental mastery . It contains 54 statements out of which 37 statements are negative and 23 statements are positive each statement has 4 alternative answers like always, most of the

time, some time and never the positive statement scoring was 4, 3, 2, & 1 and negative statement scoring was 1, 2, 3, 4, and the score ranges from 54 to 196. Higher the score indicate better the mental health.

- 3) The status of health of elderly was assessed by physiological health problem checklist. Physiological health problems check list consisted 76 problems. The reliability of the checklist was assessed by Split-Half reliability test. The coefficient of correlation of checklist by using Spearman Brown formula was 0.99 which was significant at 0.01 level. The respondent has to write a checkmark against disease/s experiencing at that time. One score was given to each disease experienced by the individual. The classification of physiological health problem was on frequency and percentage. They are classified in to 1<sup>st</sup> rank to 7<sup>th</sup> rank in the following category:

Level of physiological health problem	Percentage
1 <sup>st</sup> level	51-75
2 <sup>nd</sup> level	41-50
3 <sup>rd</sup> level	31-40
4 <sup>th</sup> level	21-30
5 <sup>th</sup> level	11-20
6 <sup>th</sup> level	6-1
7 <sup>th</sup> level	1-5

## RESULTS AND DISCUSSION

### Background information of the respondents

Table 1 show that the back ground information of elderly. 51.30, 33.80 and 15 per cent of the male respondents belonged to 60-70, 71-80 and more than 81 year of age group respectively, and 42.50, 31.30 and 26.30 per cent of the female respondents belonged to 60-70, 71-80 and more than 81 year of age group respectively. On the whole around 46.90, 32.55 and 20.65 per cent of the elderly belonged to 60-70, 71-80 and more than 81 year of age group. With regard to 67.50, 27.50 and 5 percent of the male respondents belongs to upper cast, OBC and Dalit respectively 75, 22.50 and 2.50 per cent of the female respondents belongs to upper cast, OBC, and Dalit respectively. On the whole 71.25, 25.15 and 3.75 per cent of the elderly belongs to upper cast, OBC and Dalit category respectively. With respect to education level 41.90 per cent of the respondents belong to up to PUC category, followed by 38.80, 15.60 and 3.80 per cent of the respondents belongs to illiterate, graduate and post graduate category respectively. With respect to family size among male elderly 47.50 and 52.50 per cent of them belongs to small and large family size respectively. Among female elderly 51.30 and 48.80 per cent of the respondents belongs to small and large category of family size respectively. On the whole among elderly 49.40 and 50.65 per cent of the respondents belongs to small and large category of family size respectively. On the whole 90 per cent of the male respondents are living with their partner, 10 per cent of the male respondents are widower and 46.30 per cent of the female respondents are living with their partner, 53.80 per cent of the female respondents are widow. On the whole 68.15 per cent of the elderly respondents are living with their partner, 53.8% of the female respondents are widow and 10 per cent of the male respondents are widower. With regard to income level among elderly 54.40 per cent of them had the

income of 20,000-49,999, followed by 23.10, 10.00 and 8.80 per cent of them had income of 10,000-19,999, 5000-9999 and more 50,000 respectively. Equal per cent 1.90 of them had the income of 2,500-4,999 and 1,000-2,499. None of them had the income of less than 1,000.

**Table 1. Background information of elderly (N=160)**

Demographic variable	Male (n=80)	Female (n=80)	Total (n = 160)
Age(years)	Mean=73.08, Min=60, Max=107		
60-70	41(56.25)	34(42.50)	75(46.90)
71-80	27(33.80)	25(31.30)	52(32.55)
81-107	12(15.00)	21(26.30)	33(20.65)
Gender			
Male	80(50.00)	80(50.00)	160(50.00)
Female	80(50.00)	80(50.00)	160(50.00)
Cast			
Upper cast	54(67.50)	60(75.00)	114(71.25)
OBC	22(27.50)	18(22.50)	40(25.15)
Dalits	4(5.00)	2(2.50)	6(3.75)
Tribal	-	-	-
Education			
Illiterate	24(30.00)	38(47.50)	62(38.80)
Upto PUC	31(38.80)	36(45.00)	67(41.90)
Graduation	19(23.80)	6(7.50)	25(15.60)
Post graduation	6(7.50)	-	6(3.80)
Family size			
Small(2-5)	38(47.50)	40(50.00)	78(48.75)
Large(>)	42(52.50)	39(48.80)	81(50.65)
Marital status			
With partner	72(90.00)	37(46.30)	109(54.50)
Widow	-	43(53.30)	43(26.65)
Widower	8(10.00)	-	8(5)
Income per month			
>50000	11(6.90)	3(3.80)	14(8.80)
20000-49999	36(22.50)	51(63.80)	87(54.40)
10000-19999	22(13.80)	15(18.80)	37(23.10)
5000-9999	9(5.60)	7(8.80)	16(10.00)
2500-4999	1(1.20)	2(2.50)	3(1.90)
1000-499	1(1.20)	2(2.50)	3(1.90)
<1000	-	-	-

Figures in the parentheses indicate percentage

**Table 2. Status of elderly on mental health with respect to gender (N=160)**

Category	Total		
	Male (n = 80)	Female (n = 80)	Total (n = 160)
Very good	-	-	-
Good	-	3(3.80)	3(1.90)
Average	6(7.50)	1(1.30)	7(4.40)
Poor	23(28.80)	37(46.30)	60(37.40)
Very poor	51(63.80)	39(48.80)	90(56.30)
$\chi^2$		11.438*	
F value		2.144	

\* Significant at 0.05 level, NS – Not significant

Figures in the parenthesis indicate percentage

Table 2 among male elderly 63.8 per-cent of them had very poor mental health followed by 28.80 and 7.50 of them had poor and average mental health respectively. Among female elderly 48.80 per cent of them had very poor mental health followed by 46.30, 3.80 and 1.30 per-cent of them had poor, good and average mental health respectively. On the whole among elderly 56.30 per cent of them had very poor mental health followed by 37.40, 4.40 and 1.90 per-cent of them had poor, average and good mental health, respectively. The results of analysis of variance of rural elderly clearly revealed that the

results of F value indicated that F value was higher than the CD value with regard to gender and locality which shows no significant difference between genders on mental health but only on environmental mastery it shows significant difference on gender. The results of this study is supported to the results of Carmell and Bernstein (2003) found that elderly men had more significant decline in psychosocial well-being as compared to women because they had significant decline in the sense of control. Nagaratnamma and Vimala (2002) reveal that significant difference was observed in well being and mental health between men and women, they also explained that factors contributing to the well being of males were different from that of females.

**Table 3. Status of elderly on physiological health problems with respect to gender (N=160)**

Number of health problem	Elderly		
	Male (n=80)	Female (n=80)	Total (n = 160)
0-5	15(20.10)	4(5.10)	19(12.92)
6-10	14(17.60)	13(16.40)	27(34.00)
11-20	26(32.10)	16(18.90)	42(23.50)
21-30	13(17.40)	27(34.00)	40(25.20)
31-40	7(9.00)	10(12.60)	17(10.92)
41-45	2(2.60)	4 (5.10)	6(3.85)
46-50	1(1.30)	5(6.30)	6(3.80)
51-54	-	1(1.30)	1(0.05)
$\chi^2$		72.63*	
F value		9.008**	
CD		3.84	

\* Significant at 0.05 level, \*\* Significant at 0.05 level

Figures in the parenthesis indicate percentage

Table 3 shows physiological health status of elderly. 32.1 per cent of male elderly had 11-20 number of health problems ,followed by 20.1, 17.6, 17.4, 9.0, 2.6 and 1.3 of them had 0-5, 6-10, 21-30, 31-40, 41-45 and 46-50 number of health problems respectively. None of the male elderly had 51-54 number of health problems. Among female elderly 34.00 per cent of them had 21-30 number of health problems followed by 18.90, 16.40, 12.70, 6.30 and 1.30 per cent of them had 11-20, 6-10, 31-40, 46-50 and 51-54 number of health problems respectively. Totally 25.2 per cent of them had 21-30 number of health problem, followed by 23.5, 17, 12.92, 10.92, 3.85, 3.8 and 0.65 per cent of them had 11-20, 6-10, 0-5, 31-40, 41-45, 46-50 and 51-54 number of health problems respectively. The results of frequency classification were subjected to chi square analysis Among elderly it was 72.63 there is significant association between male and female elderly with physiological health. The F value so there was a significant difference between genders on physiological health problems. This finding supports to the study of Crimmins *et al.* (2011) reported that there is remarkable consistency in direction of gender differences in health across these 13 countries. The size of the differences is affected in many cases by the similarity in behaviours of men and women; similarly, Kabir *et al.* (2003) disclosed that more number of elderly women in both rural and urban regions reported having four or more health problems compared with elderly men in the urban and rural regions, subsequently, Etelka (2005) reviewed and concluded that some survey health report women not only complain more than men but actually less healthy, particularly

not only physiological but also psychological conditions are taken into account.

**Table 4. Relationship between physiological health problem and mental health (N=160)**

Elderly	Variable	Mental health
Total (n=160)	Physiological health	-0.45**

\*\* significant at 0.01 level

The results of Table 4 depicted that relationship between physiological health and mental health among elderly the coefficient of correlation between physiological health and mental health was -0.45 which was negatively significant at 0.01 levels. This indicates that there was negative and significant relationship between physiological health and mental health of elderly as a health problem increases the mental health status decreases. The results of the study supported to the results of the study of co-occurrence of depression and a chronic medical condition especially among the elderly is not surprising. When accompanied by serious declines in functional capacity, chronic illness robs an individual of the ability to carry on his or her usual social functions and consequently, places that person at elevated risk of depression (Berkman *et al.*, 1986). Meeks *et al.* (2000) found that different durations of depressive symptoms have different reciprocal relationships to self-reported health, of middle – aged and older adults. Though they failed to find strong reciprocal relationship between short-term period of depression and health, they found longer term depressive symptoms had a clear impact on health.

## Conclusion

Aging is a problem of almost every family involving strain of caring stresses of intergenerational interaction. Among the various disorders that affect the elderly mental health, deserves special attention. According to WHO, participation in light and moderate physical activities may delay the functional decline. The results of the present study conclude that 50 per cent of the elderly had very poor mental health status and Majority of elderly had 11 -30 number of health problems. Significant relationship was found between Physiological health and mental health among elderly as physiological health problem increased the mental health status decreased among elderly. Hence there is a need to proper care for elderly for better health and mental health so we can save the elderly. We should provide proper care, love and affection to elderly to increase the health and mental health status among elderly.

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