A Study on Anxiety, Depression and Mental Health Status among Old Age People

Akansha Gautam [*], **Sandeep Panchal** [**] **and Updesh Kumar** [***]

[*]Scientist 'C', Mental Health Division, DIPR, DRDO (Delhi)
[**]Research Scholar, Mental Health Division, DIPR, DRDO (Delhi)
[***]Scientist 'F', Mental Health Division, DIPR, DRDO (Delhi)

Abstract- The purpose of the study was to explore the relationships between anxiety, depression and mental health status among old age people. The sample consists of 50 participants within range of 60 to 70 years. Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI) and Mithila Mental Health Status Inventory were administered to all the respondents. The data was analysed by using descriptive statistics i.e. mean and SD, Pearson product moment correlation and step wise multiple regression. The result revealed that anxiety was significantly correlated with depression and alienation and negatively correlated with expression (sub-component of mental health status). Depression was found to have significant positive relationship with egocentrism, alienation, emotional un-stability and social non-conformity, and negative relationship with expression. The step wise regression analysis found emotional unstability and alienation to be predictors of depression.

Index Terms- Anxiety, depression and mental health status, old age

I. INTRODUCTION

A healthy person has a healthy mind and is able to think clearly, solve problems in life, work productively, enjoy good relationships with others, feel spiritually at ease, and make a contribution to the society. These aspects of functioning can be considered as mental health. World Health Organization (WHO) defined Mental health as, 'a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community'. Mental health is vital for individuals, family and community, and is more than just the absence of mental disorder. Mental health problem can have a serious impact on an older person' ability to carry out many of the basic activities of daily living (from getting up, washing and dressing, to shopping and cooking, getting adequate exercise and managing financial affairs). The impact on their quality of life, even from minor symptoms, can be huge. Kim, Byeon, Kim, Endo, Akahoshi and Ogasawara (2009) found that perception of general health was significant predictor of depression.

Anxiety is an unpleasant state of mind, which includes excessive fear, nervousness and worry. Anxiety is a mental disorder that is more severe and longer lasting than everyday worries. It interferes with a person's ability to carry out his/ her

work or have satisfying personal relationships. Mental disorder is characterised as any illness that affects people's emotions, thoughts or behaviour, which is out of keeping with their cultural beliefs and personality, and is producing a negative effect on their lives or the lives of their families.

Symptoms of anxiety include unrealistic or excessive fear, worry and following: irritability, worrying about things a lot, feeling that something terrible is going to happen, feeling scared and avoiding certain situations e.g. social events, disturbed sleep, muscle tension, restlessness, physical symptoms like rapid heartbeat and trembling. There are many types of anxiety disorders ranging from mild uneasiness to panic attacks. For many elderly, anxiety and stress seem to be part of the aging process.

Kessler et al. (2005) conducted a study involving interviews with nearly 6000 people nationwide & reported a lifetime rate of 15.3% for DSM-VI diagnosed anxiety disorders in respondents over the age of 60. Study of Ritchie, et al. (2004) revealed 14.2% prevalence for current anxiety disorder among aged 65 and older in French community sample. Levy et al. (2003) compared anxiety symptoms in older adults and younger adults and found that older adults tend to minimize and underreport their anxiety symptoms. In a study Krasucki, Howard and Mann (1999) found that, in primary care settings 30 % of older adults were present with generalized anxiety symptoms.

Depression reflects a range of biological and social factors and it may be difficult to diagnose in older people as compared to younger people. Older people tend to under report depressive symptoms and may not acknowledge being sad, or depressed. This could be due to age, shame and lack of understanding for the disorder or a belief in not talking about depression. Common symptoms of depression are loss of interest in life, lack of enjoyment in normal activities, apprehension, poor sleep, and persistent thought of death, chronic unexplained pain, dementia or poor health. Physical symptoms include dizziness, chronic aches and pains, constipation, weight loss and insomnia.

Beck and Averill (2004) reported that anxiety in older adults has been found to often co-occur with depression. Hopko, Bourland and Stanley (2000) reported that presence of depression has been associated with higher severity of Generalized Anxiety Disorder (GAD) among older adults. Lenze, Mulsant and Shear (2000) revealed that presence of GAD symptoms among depressed older adults has been associated with greater suicidality. Abramowitz, Franklin and Street (2000) indicated that anxiety disorder treatment has been found to be less effective when major depressive episodes are present. Ettner and Hermann (1997) found that older adults with anxiety disorder are

less likely than older adults with depression, dementia, or any other mental disorder to receive treatment from a mental health professional. Naomi, Marlyne and Patricia (1991) conducted a study with a sample size of 1007 young adults by using the National Institute of Mental Health Diagnostic Interview Schedule. They concluded that persons with nicotine dependence had higher rates of major depression and anxiety disorders. The purpose of the present study was to explore the relationship between anxiety and depression with the mental health status among old people. It was hypothesized that anxiety shows positive relation with depression and will be positively correlated with emotional un-stability (Mental Health Status). It was further hypothesized that depression would have negative relationship with expression (Mental Health Status).

II. METHOD

Sample

The sample consisted of 50 participants, who were selected from urban population of NCR. It was sample of convenience selected by approaching the participants at their house. Participants were selected in the range of 60-70 years old and all the participants were free of any severe medical illness, were able to communicate well and understand instructions. An informed consent was taken from all the participants and confidentiality was ensured.

Procedure

The appropriate instructions were directly administered on target sample for obtaining the data. It was ensured that the participants had understood the method of responding for the tests. Thereafter scoring was done according to the manual. The scores were statistically analyzed in the light of 'descriptive statistics', correlation and regression analyses.

Measures

The following psychometric tools were used for the collection of data in the present study.

Beck Anxiety Inventory (BAI; Beck & Steer, 1990): The BAI is a 21-item self report questionnaire that lists symptoms of the anxiety. The respondent is asked to rate how much each symptom has bothered him/her in the past week. The symptoms are rated on a four –point scale, ranging from ''not at all'' (0) to ''severely'' (3). The instrument has excellent internal consistency (alpha= .92) and high test-rest reliability = .75 (Beck & Steer, 1990).

Beck Depression Inventory (BDI; Beck 1991): The Beck Depression Inventory is a 21item self report scale measuring depression. The internal consistency of the BDI ranges from .73 to .92, with a mean of .86. The BDI demonstrates high internal consistency, with alpha coefficient of .86 and .81 for psychiatric and no psychiatric patients. The BDI has split-half reliability coefficient of .93.

Mithila Mental Health Status Inventory (MMHSI; Anand Kumar and Giridhar P. Thakur 1984): The MMHST Inventory is a 50 item self-report scale measuring the mental health status of the people. The responses were to be obtained on a five point response format. This inventory has five sub-scales viz, Egocentrism, Alienation, Expression, Emotional Unstability and Social non-conformity. Reliability co-efficient of the MMHSI scales ranged from .74 to .88 with reference to internal consistency and .73 to .89 in test re-test stability.

III. RESULTS AND DISCUSSION

The present study was conducted on anxiety, depression and mental health status among old age people. The obtained data were analysed by applying descriptive statistics i.e. mean and SD, and Pearson's Product Moment method of correlation. Regression analysis was conducted with mental health status as the predictor variable and depression as the outcome variable.

Table 1: Correlation Matrix of Mental Health Status with Depression and Anxiety

	Anxiety	Depression	Egocentrism	Alienation	Expression	Emotional un-stability	Social Non-conformity
Anxiety	1	.42**	**.23**	**.37**	-.49**	**.37**	**.05**
Depression		1	**.49**	**.69**	-.57**	.72**	**.34***
Egocentrism			1	**.41**	-.42**	**.46**	**.37**
Alienation				1	-.73**	**.76**	**.49**
Expression					1	-.71**	-.24
Emotional un-stability						1	.26
Social Non-conformity							1
Mean	25.70	22.74	28.62	25.92	22.76	35.70	27.22
S D	9.28	6.50	4.12	4.00	5.31	5.00	4.05

*Significant at .05 level and ** Significant at .01 level

Table 1 represents correlation matrix of anxiety, depression and mental health status variables. It shows that there is positive meaningful correlation between anxiety and depression with correlation coefficient of .42 which is significant at .01 level. It means that people with high anxiety have high level of depression. Anxiety is found to be positively correlated with alienation (.37) and emotional un-stability (.37) which are significant at .01 levels. The correlation between anxiety and expression is found to be negative with a correlation coefficient of -.49 which is significant at .01 levels. It reflects that highly anxious people would have low level of expression. Further, anxiety was found to be non-significant with egocentrism and social non-conformity.

Depression is found to be positively correlated with egocentrism (.49), alienation (.69) and emotional un-stability (.72) which is significant at .01 level. The relationship between depression and social non conformity is found to be positively correlated (.34) at .05 level. On the other hand negative association is found in depression and expression with a correlation coefficient of -.57 which is significant at .01 levels. It indicates that depressive people lack in expression.

Table 2   Step wise Regression Analysis: Dependent variable (Depression)

Variable	R	R^2	R^2 Change	F	p
Emotional Un-stability	.72	.52	.52	53.18	.001
Alienation	.75	.57	.05	5.17	.001

Table 2 shows the stepwise regression analysis. The predictor measure of emotional un- stability accounts for 52 % variance in depression. (R =.72, R^2 =.53) F value is equal to 53.18 which is significant at .001 level. It may be interpreted that emotional unstablity appropriately predicts depression. The second predicator measure of alienation accounts only 5% variance in depression (R =.75, R^2 =.57) F value is equal to 5.17 which is significant at .001 level. It indicated that alienation is predictor of depression.

The study explores an important area pertaining to mental health status of the elderly residing in urban area. Anxiety is a warning sign for depression in elderly and depression is the most common mental health problem in older people. The relationship between anxiety and depression is found to be positive in the present study. Byrne and Pachana (2010) have also reported that there is a positive relationship between depression and anxiety among old people. They also found that depression leads to cognitive decline and dementia. Schultz, Moser, Bishop and Ellingrod (2005) demonstrated that older adults (age 55 and older) with clinically significant anxiety show poorer cognitive functioning as measured by the RBANS, a measure of general cognitive function.

On mental health status's subscale, anxiety was found to be non significant with egocentrism and social non conformity. People high on egocentrism have difficulty in identifying or sympathizing with other people in family and society. In old age stage, people start thinking that the society has changed so much and feel a distance from the social system. On the other hand a positive association was found between anxiety and alienation and emotional un-stability. It indicates that high anxiety old people have high level of alienation and emotional unstability. Results shows that people high depression have high level of alienation. The correlation between anxiety and expression is found to be negative. It indicates that depressive people do not open with others and found less expressive. Basic behavioral, psychophysiological, and neuroimaging research in emotion processing suggests that emotion expression changes with aging. Lawton and Kleban (1993) found distinctly different factor structures for self-reported affect in young, middle aged and older individuals.

The correlation between depression and expression is found negative and reveals that depressive old age people are less expressive and do not share thoughts and feelings with others. The result indicates that the person high in depression shows high alienation, high emotional stability and high egocentrism. Alienation and emotional unstability are found to be predictors of depression in the present study.

This study, while valuable, has some limitations. First, this study was conducted on small sample size and data was collected from limited area. Thus the results may not generalize to other sample with different characteristic. Another limitation is that study has not emphasised on gender difference which is considered an important variable. An additional limitation is some of the participants were retired and some were working which may effect the mental health of a person. Future studies might be focused on larger sample size with respect to the old age population especially in gender difference and socio-cultural context.

REFERENCES

[1] Abramowitz, J. S, Franklin, M. E, Street, G. P, Kozak, M., & Foa, E. (2000). Effect of comorbid depression on response to treatment for obsessive compulsive disorder. *Behaviour Therapy, 31*, 517-528.

[2] Beck, J. G., & Averill, P. M. (2004). Older adults. In D. Mennon, R. Heimberg, C. Truk (Eds.), *Generalized Anxiety Disorder: Advances in research and practice*. New York: NY, Guilford Press, 409-433.

[3] Byrne, G. J., & Pachana, N. A. (2010). Anxiety and depression in the elderly: do we know any more? *Current opinion in psychiatry*, *23* (6), 504-9.

[4] Ettner, S. L., & Hermann, R. C. (1997). Provider specialty choice among Medicare beneficiaries treated for psychiatric disorders. *Health Care Financing Review, 18*(3), 43-59.

[5] Hopko, Bourland, S. L., Stanley, Beck, J. G., Novy, D. M., Averill, P. M., & Swann, A. C. (2000). Generalized Anxiety Disorder in older adults: examining the relation between clinician severity rating and patient self report measures. *Depression Anxiety, 12(4),* 217-225.

[6] Krasucki, C., Howard, R., & Mann, A. (1999). Anxiety and its treatment in the elderly. *International Psychogeriatrics, 11*(1), 25-45.

[7] Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-VI disorder in the national co-morbidity survey replication. *Archives of General Psychiatry, 62,* 593-602.

[8] Kim, Oksoo, Byeon, Young-Soon, Kim, Jung-Hee, Endo, Emiko, Akahoshi, Makoto, & Ogasawara, Hiromi. (2009). Loneliness, depression and health status of the Institutionalized elderly in Korea and Japan. *Asian Nursing Research*, 3(2), 63-70.

[9] Lawton, M. P., Kleban, M.H., & Dean, J. (1993). Affect and age: cross-sectional comparisons of structure and prevalence. Psychological Aging, *8*, 165–175.

[10] Lenze, E, J, Mulsant, B. H, Shear, M. K., Schulberg, H. C., Dew, Mary, A., Begley, Amy, E. ...& Reynolds, Charles, F. (2000). Comorbid anxiety disorder in depressed elderly patients. *American Journal of Psychiatry, 157*(5), 722-728.

[11] Levy, B., Conway, K., Brommelhoff, J., & Merikengas, K. (2003). Intergenerational differences in the reporting of elders' anxiety. *Journal of Mental Health and Aging, 9* (4), 233-241.

[12] Naomi, B., Marlyne, K.., & Patricia, A. (1991). Nicotine dependence, major depression, and anxiety in young adults. *Archives of General Psychiatry, 48*(12), 1069-1074.

[13] Ritchie, K., Artero, S., Beluche, I., Ancelin, M. L., Mann, A., Dupuy, A. M. ...& Boulenger, J. P. (2004). Prevalence of DSM-VI psychiatric disorder in the French elderly population. *British Journal of Psychiatry, 184*, 147-152.

[14] Schultz, S. K., Moser, D. J., Bishop, J. R., Ellingrod, V. L. (2005). Phobic anxiety in late-life in relationship to cognition and 5HTTLPR polymorphism. Psychiatry Genet, *15*, 305–306.

AUTHORS

First Author – Akansha Gautam, M.Phil, Sc 'C', Defence Institute of Psychological Research(DIPR), DRDO, Delhi, email: akansha.vikas06@gmail.com

Second Author – Sandeep Panchal, Ph.D Scholar, DIPR, DRDO, Delhi, email: sandeepkuk88@gmail.com

Third Author – Dr. Updesh Kumar, Sc 'F', DIPR, DRDO, Delhi, email: updeshkumar@dipr.drdo.in

Correspondence Author – Akansha Gautam, email: akansha.vikas06@gmail.com