

## Somatisation of Symptoms in the Geriatric Population of Mangalore City (A Cross Sectional Study)

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**Abstract:** Aim & Objectives: This cross sectional study was conducted to bring out a better understanding of the link between somatic symptoms and underlying psychiatric conditions in geriatric population of Mangalore city. Material and methods: 200 subjects with the age above 50 years in the outpatient department of hospitals, except the psychiatry wards, and consist of a face to face interview using the standard HADS scale. Result: A total of 105 males and 95 females were interviewed during the study period. The HAD scores of the patients were noted. It was found that in the anxiety sub-scale of the HADS scale 79(39.50%) patients scored less than 8 ('normal') 29(14.50%) scored between 8 and 11 ('borderline abnormal') and 92(46%) patients scored more than 11 ('abnormal'). In the depression sub-scale of the HADS scale 79(39.50%) scored less than 8('normal') and 34(17%) scored between 8 and 11('borderline abnormal') and 87(43.50%) scored more than 11('abnormal'). In the combined score, 71(35.5%) scored less than 8('normal') 54(27%) scored between 16 to 22('borderline abnormal') 75(37.50%) scored more than 22('abnormal'). Among those who were borderline abnormal and abnormal on the HADS scale, it was found that somatic manifestations of underlying depression was found in 64.21% women and 63.81% men. The chief complaints of these patients mostly included dizziness(10.85%), GI symptoms (10.85%), headache(18.60%), menopausal symptoms(17.05%), sleep disturbances (18.60%), general malaise(14.73%) others(9.30%). Conclusion: The present study suggested that somatic symptoms could be due to an underlying psychiatric condition(depression). The patients might present with complain of dizziness, GI symptoms, headache, menopausal symptoms, sleep disturbances, general malaise. While examining a patient, the psychological well-being of the patient should be assessed too. Ageing is another important aspect, and aging patients are more prone to somatisation. This should be kept in consideration while examining a patient. [Keshava Pai et al NJIRM 2013; 4(5) : 15-19]

**Key Words:** geriatric psychiatry, sleep disturbance, Head ache

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**Introduction:** Somatisation is currently defined as "a tendency to experience and communicate somatic distress in response to psychosocial stress and to seek medical help for it.<sup>1</sup>The simplest definition of somatisation is the presentation of physical symptoms in the absence of organic pathology, or the amplification of physical complaints accompanying organic disease beyond what can be accounted for by physiology<sup>2</sup>.

Three different definitions of somatisation have been identified. The first emphasizes presentation with somatic symptoms. Goldberg and Bridges<sup>3</sup> point out that many patients with psychiatric disorders seek care for somatic symptoms. The second definition emphasizes the association between depression and medically unexplained somatic symptoms.<sup>4-7</sup> Barsky<sup>8</sup> describes the influence of psychological distress on the perception or reporting of somatic symptoms as "somatosensory amplification." According to this

view, patients with somatisation are those who have psychological disorders but who report multiple unexplained somatic symptoms. The third definition emphasizes the denial of psychological distress and the substitution of somatic symptoms. From this perspective, somatisation is a psychological defense against the awareness or expression of psychological distress. Nemiah<sup>9</sup> and Lesser<sup>10</sup> view somatisation as related to alexithymia (the inability to express feelings). Kleinman<sup>11,12</sup> has described somatic symptoms as an alternative "idiom of distress" that is prevalent in cultures where psychiatric disorders carry great stigma.

Finally, particularly among psychoanalytic writers, somatisation sometimes refers not to a pattern of behavior but to hypothetical mechanisms by which emotions can give rise to somatic signs and symptoms of illness<sup>13</sup>This includes the production of the vegetative symptoms of depression and somatic manifestations of anxiety; the processes involved in

conversion symptoms; and the genesis of psychophysiological disorders in which a physical lesion exists but the ultimate cause is thought to be emotional stress.

These definitions of somatisation involve quite distinct issues. However, as Mechanic (1980)<sup>14</sup> notes the relationship between psychological and somatic symptoms is not simply a technical artifact to be eliminated but a phenomenon to be understood in its own right. He identifies the following sources of association between physical and mental symptoms of illness or distress:

- (1) Some symptoms, like fatigue and loss of appetite are general symptoms that occur in many circumstances (i.e. depression, GI disorder);
- (2) Psychological states may contribute to physical symptoms by a direct (psychophysiological) effect or by influencing habit patterns and lifestyle;
- (3) Psychological orientations may be associated with bodily arousal that can be appraised as symptoms by the individual.
- (4) Psychological state may affect how persons monitor their bodies and their readiness to interpret bodily changes as illness. To this list we might add
- (5) Physical symptoms may lead to psychological symptoms of anxiety or depression.

Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. At its worst, depression can lead to suicide, a tragic fatality associated with the loss of about 850 to 1000 lives every year<sup>15</sup>

"The ageing process is of course a biological reality which has its own dynamic, largely beyond human control. However, it is also subject to the constructions by which each society makes sense of old age. In the developed world, chronological time plays a paramount role. The age of 60 or 65, roughly equivalent to retirement ages in most developed countries is said to be the beginning of old age. Age classification varied between countries and over time, reflecting in many instances the social class differences or functional ability related to the workforce, but more often than not was a reflection

of the current political and economic situation. Many times the definition is linked to the retirement age, which in some instances, was lower for women than men. This transition in livelihood became the basis for the definition of old age which occurred between the ages of 45 and 55 years for women and between the ages of 55 and 75 years for men. Hence, upon further deliberation and discussion during the 2001 Dares Salaam MDS Meeting, the working definition of "older" or "old" for the purposes of this project was changed to the age of 50 years<sup>16</sup>. Somatisation is a frequently cited feature of depression in patients seen by primary care physicians.<sup>17-19</sup> Some studies suggest that patients in non-Western cultures or developing countries report somatic symptoms and deny psychological symptoms more frequently than patients in Western or developed countries.<sup>20</sup> One conclusion drawn from these data is that patients from non-Western cultures and those of lower socioeconomic status are less willing or less able to express emotional distress.<sup>21</sup>

**Material and Methods:** This cross sectional study was conducted in outpatient departments (OPD) of KMC Hospital Attavar, Manipal University, India. The study protocol was submitted and approved by institutional ethical and review board. A total of 200 subjects of both the gender above the age of 50 years were included in the study. The exclusion criteria of the study were patients with the history of psychiatric disorder or who were visiting the outpatient department of psychiatry KMC hospital at the time of conducting study (interview). The patients who were not willing to participate in the study were excluded.

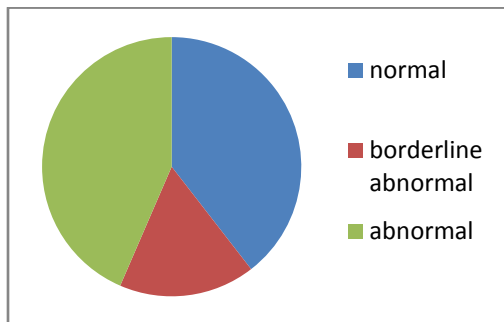
Data collection methodology: The subject who agreed to participate in the study by giving written consent underwent a MMSE to rule out any psychiatric conditions (dementia in particular) which are common amongst the geriatric population. A standard HADS questionnaire was used. The purpose of the study was explained to the patient and they were assured confidentiality of their identities. Written informed consent (the consent form is provided as separate attachment) was obtained from each of the participant who was willing to participate in the study.

**Data analysis:** The data was analyzed with the help of SPSS (Statistical Package For Social Sciences) version 11.5. Comparison was done across the specialties. For statistical analysis, chi square test and ANOVA 't' were used and p value<0.05 was considered statistically significant.

**Results:** In the present study 200 patients above the age 50 years (according to the definition of old age in developing countries by the world health organization) were interviewed and the data was collected, and analyzed. A total of 95 female patients and 105 male patients were recruited in the study. Among the study population ,in the depression subscale of the HADs scale,79 patients were 'normal'(with a score of less than 8 on the HADs-d scale).34 were 'borderline abnormal'(with a score ranging between 8 and 11) and 87 were 'abnormal' (with a score greater than 11 on the HADs-d scale). In the anxiety subscale of the HADs scale,79 were 'normal'(with a score of less than 8)29 were 'borderline abnormal' with the score ranging from 8 to 11.and 92 were 'abnormal'(with a score greater than 11)

The total score on the HADs scale was also calculated and a total of 71 people were 'normal'(with a score of less than 16)54 were 'borderline abnormal' with a score ranging between 16 to 22 and 75 were 'abnormal' (with a score greater than 22).the p value calculated was less than 0.005.which is statistically significant. This data has been shown in Chart 1 and 2. HADs score by using HADs-A and HADs-D and combined score

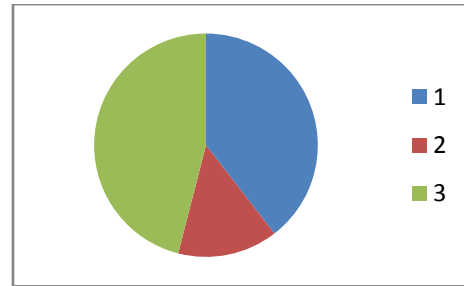
**Chart 1: HADs- D score among the study population**



According to the data collected, patients who scored more than 16 on the HADs scale (combined anxiety and depression), out of the 105 males interviewed 67 were either borderline abnormal or abnormal.

On the other hand, out of the 95 females interviewed 61 were found to be borderline abnormal or abnormal. The percentage of patients with abnormal and borderline abnormal score on the HADs scale.64.21% females had a borderline abnormal or abnormal score and 63.81% males scored with a score which was abnormal or borderline abnormal. (Table1)

**Chart 2: HADs – A score**



1: Normal 2: Borderline abnormal 3: Abnormal

**Table 1: Combined Anxiety And Depression Score**

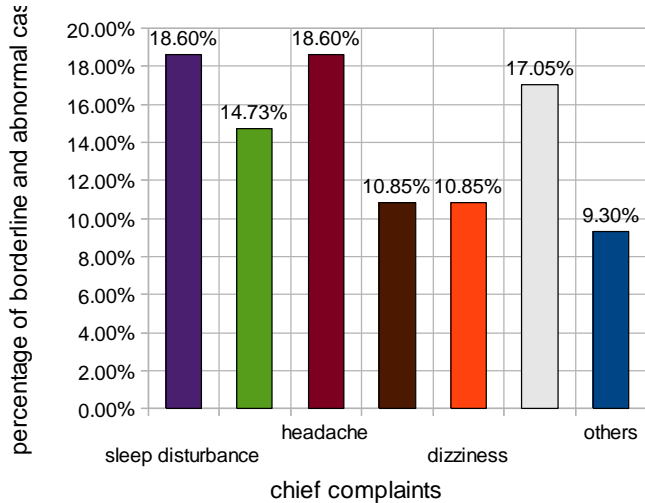
Patients gender	Number of patients	Abnormal and borderline abnormal patients	Percentage of people with abnormal and borderline abnormal patients.
Male	105	67	63.81%
Female	95	61	64.21%

The patients, who were borderline abnormal and abnormal (with a total score of more than 16),came mainly with chief complaints of sleep disturbance(18.60%) and headache (18.60%) 14.73% reported general malaise and 10.85% came with the chief complaints of GI disturbances.10.85% reported dizziness and 17.05 % females reported menopausal symptoms.9.30% patients came with other complaints. It has been compiled in the form of a bar graph below (Chart 3)

**Discussion:** 200 patients were interviewed over period of 2 months. On the basis of the scores obtained in the HADs scale it was found that 64.5% of the patients had borderline abnormal and abnormal scores.27% had borderline abnormal and 34.5% had abnormal scores. In the HADs-A subscale it was found that 60.50% patients had anxiety(either borderline abnormal(14.50%) or abnormal(46.00%)).

in the depression subscale of the HADs scale it was found that 60.50% had depression(either borderline abnormal(17.50%) or abnormal(43.00%)).This is consistent with a study conducted by Gregory E. Simon et al<sup>22</sup> where they found that majority of the patients initially presented with only somatic symptoms (45 - 95 %) (With an overall prevalence of 69 %.)

**Chart 3**



In the present study, it was found that 34.5% patients presented with abnormal depression scores pointing to a depressed state. A similar result was observed by Cadoret, et al (1980)<sup>23</sup> where in 44 percent of the patients presented with pain or functional symptoms without psychosocial complaints. The reduction in the percentage could be attributed to better psychosocial health and improvement in the healthcare system.

With the current concept of nuclear families, the old are many a times rendered alone. Loneliness is a factor that also that contributes to depression. While some patients were just anxious about their illness and aging in general. Anxiousness could also be a factor contributing to depression. These risk factors could lead to general depressed state. Similar observations were observed by PetronellaJet al<sup>24</sup> in their study. With regard to the risk factors found, attention should be brought to functional disability, loneliness since these risk indicators are amenable for improvement.

Among the men and women interviewed it was observed that more women scored abnormally and

borderline abnormally on the HADs scale (men being 63% and women being around 64%).on comparing the two percentages it was found to be around 1.01,which is not very significant. This data was consistent with earlier studies conducted by Gudrun et al<sup>25</sup> (Subjective body complaints as an indicator of somatisation in elderly patients) where in No significant group differences in subjective body complaints were found between men and women.

The chief complaints the depressed patients presented were mainly dizziness(10.85%),GI symptoms(10.85%),headache(18.60%),menopausal symptoms(17.05%),sleep disturbances(18.60%),general malaise(14.73%).( graph 3).This was almost consistent with the study conducted by Cheung et al<sup>26</sup> where in it was observed that sleep disturbance (31 percent), general malaise (29 percent), headache (20 percent), GI discomfort (10-20 percent), dizziness (20 percent) and menopausal symptoms (20 percent) were the common symptoms the depressed patients presented with. It was observed that the patients presenting with dizziness and general malaise were not as high as was observed by Cheung et al <sup>26</sup>which could be attributed to the geographical factors and the time at which the studies were conducted or introduction of the better drugs.

**Conclusion:** From the present data, it was found that depression is prevalent in the elderly and might manifest as somatic symptoms. The most common being general malaise, dizziness, headache, gastrointestinal symptoms, menopausal symptoms and sleep disturbances. It is equal in occurrence in males and females. Somatisation has to be considered as a cause of these symptoms and has to be investigated. Though somatisation might present at any age group it increases as age advances. An overall wellbeing of the patient should be considered while treating the patient. Psychological wellbeing should also be considered and mere treatment of the somatic symptoms should be avoided.

**References:**

1. Lipowski ZJ (1988). "Somatisation: the concept and its clinical application". *Am J Psychiatry* 145 (11): 1358–68.

2. Katon, Kleinman & Rosen, 1982. Katon, W., Kleinman, A. and Rosen, G. 1982. Depression and somatisation : A review. I & II. American Journal of Medicine 72: 127-135 and 241-247.
3. Goldberg DP, Bridges K. Somatic presentations of psychiatric illness in primary care setting. J Psychosom Res 1988; 32:137-144.
4. Bridges KW, Goldberg DP. Somatic presentations of DSM III psychiatric disorders in primary care. J Psychosom Res 1985;29:563-569
5. Escobar JI, Golding JM, Hough RL, Karno M, Burnam MA, Wells KB. Somatisation in the community: relationship to disability and use of services. Am J Public Health 1987;77:837-840
6. Lipowski ZJ. Somatisation: the experience and communication of psychological distress as somatic symptoms. Psychother Psychosom 1987;47:160-167
7. Simon GE, VonKorff M. Somatisation and psychiatric disorder in the NIMH Epidemiologic Catchment Area study. Am J Psychiatry 1991;148:1494-1500
8. Kroenke K, Spitzer RL, Williams JBW, et al. Physical symptoms in primary care: predictors of psychiatric disorders and functional impairment. Arch Fam Med 1994;3:774-779
9. Barsky AJ. Amplification, somatisation, and the somatoform disorders. Psychosomatics 1992;33:28-34
10. Nemiah JC. A reconsideration of psychological specificity in psychosomatic disorders. Psychother Psychosom 1982;38:39-45
11. Lesser IM. Current concepts in psychiatry: alexithymia. N Engl J Med 1985;312:690-692
12. Kleinman AM. Depression, somatisation and the "new cross-cultural psychiatry" SocSci Med 1977;11:3-10
13. Hunter, r. C. A. 1979. Psychoanalysis, somatisation and psychosomatic disease. Canadian Journal of Psychiatry 24:383-390.
14. In D. Mechanic, ed., Symptoms, Illness Behavior and Help-Seeking. New York: Neale Watson, pp. 55-86.
15. [http://www.who.int/mental\\_health/management/depression/definition/en/](http://www.who.int/mental_health/management/depression/definition/en/)
16. <http://www.who.int/healthinfo/survey/ageingdefnolder/en/index.html>
17. Diagnostic and statistical manual of mental disorders. 4th ed. Primary care version. Washington, D.C.: American Psychiatric Association, 1995.
18. The ICD-10 classification of mental and behavioral disorders: clinical descriptions and diagnostic guidelines. Geneva: World Health Organization, 1992.
19. Depression Guideline Panel. Depression in primary care. Vol. 1. Detection and diagnosis. Clinical practice guideline. No. 5. Rockville, Md.: Agency for Health Care Policy and Research, 1993. (AHCPR publication no. 93-0550.)
20. Kleinman A. Neurasthenia and depression: a study of somatisation and culture in China. Cult Med Psychiatry 1982;6:117-190
21. Pfeiffer W. The symptomatology of depression viewed transculturally. Transcult Psychiatry Res Rev 1968; 5:121-124.
22. An International Study of the Relation between Somatic Symptoms and Depression Gregory E. Simon, M.D., M.P.H., Michael VonKorff, Sc.D., Marco Piccinelli, Ph.D., Claudio Fullerton, M.D., and Johan Ormel, Ph.D.
23. Cadoret, R., Widmer, R. B. and Troughton, E. P. 1980. Somatic complaints: Harbinger of depression in primary care. Journal of Affective Disorders 2:61-70.
24. Petronella J.[29] (Nelleke) van't Veer-Tazelaar, b, Harm W.J. van Marwijk, b, Aaltje P.D. (Daniëlle) Jansen, b, Frank Rijmenc, Pieter J. Kostense, Patricia van Oppen, b, d, Hein P.J. van Houta, b, Wim A.B. Stalman, b and Aartjan T.F. Beekman (Depression in old age (75+), the PIKO study.
25. Cheung, F. M. 1982. Psychological symptoms among Chinese in urban Hong Kong. Social Science and Medicine 16:1339-1344. Cheung, F. M., LAU, B. W. K. and Waldmann, E. 1981. Somatisation among Chinese depressives in general practice. International Journal of Psychiatry in Medicine 10:361-374.
26. Subjective Body Complaints as an Indicator of Somatisation in Elderly Patients Gudrun Schneider, M.D., Michael Wachter, Ph.D., Georg Driesch, M.D., Andreas Kruse, Ph.D., Hans-Georg Nehen, M.D., and Gereon Heuft, M.D. Psychosomatics 44:91-99, April 2003.

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