

Somatic Symptoms in Old Age Depression

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Frequent somatic symptoms in old age depression lead to the label of "masked depression" and result in under-detection and under-treatment of morbidity in this age group. Depressive symptomatology of 80 elderly (age 60 years and above) was compared with that of 118 young depressives (age range 20-39 years) at psychiatry department of Mayo Hospital. Hamilton Rating Scale for Depression and Bradford Somatic Inventory were used to obtain the somatic symptoms profile of the patients. The elderly depressives did not report more symptoms, however, they had a specific pattern of somatic symptoms easily distinguishable from that of their younger counterparts. With such a characteristic pattern of somatic symptoms in mind, clinicians can help minimize the under-detection and under-treatment of old age depression.

Since Kraepelin's description of 'Involuntary melancholia', the somatic symptoms have been considered the characteristic of old age depression. Many of the studies on phenomenology of old age depression support this view^{2,3,4,5,6} but other refute this stereotype elderly depressives^{7,8}. Alexopoulos⁹ finds 65% of the elderly depressed patients with hypochondriacal symptoms. According to McCullough¹⁰, many elderly patients who deny feelings of depression, present with a variety of somatic complaints; he estimated that up to 48% of the elderly patients with somatic symptoms go undiagnosed. Interestingly, Koenig et al¹¹ found stronger association between somatic complaints and major depression in older than in younger patients but they failed to find any significant difference of number of somatic complaints between the two groups. In a recent study, Nadeem¹² concluded that Pakistani rural depressed patients experience more somatic symptoms than their urban counterparts and these somatic symptoms showed high correlation with severity of depression. Nadeem attributed the higher mean age of rural sample to be one of the probable factors responsible for more somatic symptoms in this group.

The identification of extent and pattern of somatic symptoms of old age depression could prove to be an important step in understanding the phenomenology of geriatric depression^{4,13,14}. This comparative study was aimed at recognizing the extent and pattern of somatic symptoms of depression in old age when compared with young depressives.

Methods:

One hundred and eighteen young patients (group-I) and 80 elderly patients (group-II) met the diagnosis of depressive episode and recurrent depressive disorder according to the ICD-10 Diagnostic Criteria for Research¹⁵. Physical examination, relevant laboratory investigations and liaison with other specialties

meticulously ruled out the presence of physical illness. Hamilton Rating Scale for Depression (HRSD) 16 was applied to assess the severity of depression and the profile of depressive symptoms. Self-rating Urdu version of Bradford Somatic Inventory (BSI) 17 was used to assess the pattern and extent of somatic symptoms of the sample. Student's T-test was applied to see the differences between the two groups along clinical variables.

Results:

Elderly patients were more severely depressed and outnumbered the younger patients in somatic symptoms but both these variables (severity of depression and no. of somatic symptoms) could not reach statistical significance (Table-I)

Table I: Extent of Depressive and Somatic Symptoms. Younger Vs Elderly Patients.

	Group-I (20-39 years) (n=118) mean ± SD	Group-II (>60 years) (n=80) mean ± SD	Difference
HRSD	26.6 ± 4.11	27.0 ± 6.08	N.S.
BSI	53.0 ± 15.22	55.0 ± 16.95	N.S.
No. of Somatic Symptoms on BSI	29.6 ± 7.98	30.2 ± 6.26	N.S.

HRSD: Hamilton Rating Scale for Depression, BSI: Bradford Somatic Inventory, SD: Standard Deviation, N.S.: Not Significant

Table -II Comparison of HRSD Profiles of Somatic Symptoms. Younger Vs Elderly Patients.

Symptoms	Group-I (20-39 years) Mean ± SD	Group-II (>60 years) Mean ± SD	Difference
Insomnia Early	1.6 ± 0.84	1.8 ± 0.44	N.S.
Insomnia Middle	0.4 ± 0.84	0.2 ± 0.44	N.S.
Insomnia Late	0.4 ± 0.84	0.4 ± 2.82	
Retardation (Psychomotor)	0.2 ± 0.37	0.6 ± 1.34	N.S.
Agitation	1.2 ± 1.03	2.6 ± 2.82	S(P<0.05)
Anxiety Somatic	1.6 ± 0.69	1.8 ± 0.44	N.S.
Somatic Symptoms (GIT)	1.0 ± 0.94	0.8 ± 0.44	N.S.
Somatic Symptoms (General)	1.4 ± 0.51	1.6 ± 0.70	N.S.
Genital Symptoms	1.4 ± 0.69	1.2 ± 1.09	N.S.
Hypochondriasis	1.3 ± 1.49	1.3 ± 0.83	N.S.
Loss of weight	0.8 ± 0.78	1.6 ± 1.14	S(P<0.05)
Diurnal variation (P/A)	0.9 ± 0.78	1.4 ± 0.89	N.S.
Diurnal variation (Severity)	1.2 ± 0.91	1.0 ± 0.70	N.S.

HRSD: Hamilton Rating Scale for Depression, SD: Standard Deviation, GIT: Gastrointestinal Tract, P/A: Present / Absent, S: Statistically Significant, N.S.: Not Significant

Table III: Self-Rated Somatic Symptoms Profile Younger Vs Elderly Patients.

Symptoms	Group-I(20 -39 years) (n = 118) mean ± SD	Group-II (>60years) (n = 80) Mean ±SD	Differenc e
Severe headaches	1.2 ± 1.02	1.4 ± 0.89	N. S.
Stomach fluttering	0.8 ± 1.37	0.6 ± 0.89	N. S.
Neck pain and tension	1.7 ± 0.67	1.6 ± 0.89	N. S.
Skin burning	0.9 ± 0.99	0.4 ± 0.54	S(p<0.01)
Head constriction	1.4 ± 0.84	1.4 ± 0.89)
Chest pain	1.4 ± 0.72	0.6 ± 0.89	N. S.
Dry mouth	1.5 ± 0.84	1.6 ± 0.45	S(p<0.01)
Misty vision	1.1 ± 0.84	1.4 ± 0.89)
Stomach burning	0.7 ± 0.82	0.4 ± 0.89	N. S.
Weakness or energy	2.0 ± 0.00	1.8 ± 0.45	N. S.
Head hot or burning	1.3 ± 0.94	1.2 ± 0.83	N. S.
Sweating a lot	1.1 ± 0.99	0.8 ± 1.09	S(p<0.05)
Chest pressure	1.5 ± 0.70	1.00 ± 1.00)
Abdominal aches	0.7 ± 0.94	0.80 ± 0.44	N. S.
Choking sensations	0.9 ± 0.94	1.2 ± 0.83	N. S.
Hand or feet pins & needles	1.5 ± 0.70	1.4 ± 0.89	N. S.
Total body aches & pains	1.8 ± 0.42	1.4 ± 0.89	N. S.
Heat inside body	1.4 ± 0.96	1.00 ± 0.70	N. S.
Palpitations	1.7 ± 0.48	0.6 ± 0.89	N. S.
Eyes painful or burning	1.00 ± 0.81	1.00 ± 0.83	N. S.
Indigestion	1.10 ± 0.99	0.80 ± 0.83	S(p<0.005)
Trembling or shaking	0.90 ± 0.87	1.40 ± 0.89)
Urine frequency	0.40 ± 0.84	1.20 ± 1.09	N. S.
Low back trouble	1.00 ± 1.05	0.40 ± 0.89	N. S.
Stomach swollen or bloated	0.80 ± 0.87	0.80 ± 1.09	N. S.
Head heavy	1.70 ± 0.67	1.20 ± 0.83	N. S.
Tired all the time	1.70 ± 0.67	1.40 ± 0.89	N. S.
Leg pains	1.50 ± 0.84	1.00 ± 1.00	N. S.
Nausea	0.70 ± 0.97	0.60 ± 0.89	N. S.
Head about to burst	1.70 ± 0.67	1.40 ± 0.89	N. S.
Breathing difficulty	0.60 ± 0.84	1.00 ± 1.00	N. S.
Tingling all over	1.10 ± 0.99	0.60 ± 0.89	N. S.
Constipation	1.30 ± 0.88	1.20 ± 0.83	N. S.
Bowel frequency	0.30 ± 0.67	0.40 ± 0.45	N. S.
Palms sweating	1.00 ± 0.94	0.20 ± 0.44	N. S.
Throat lump	0.40 ± 0.69	0.40 ± 0.89	S(p<0.01)
Giddy or Dizzy	1.80 ± 0.42	1.60 ± 0.89)
Bitter taste	0.50 ± 0.84	1.40 ± 0.89	N. S.
Whole body heavy	1.40 ± 0.84	1.60 ± 0.89	N. S.
Urine burning	0.80 ± 0.91	1.20 ± 0.83	S(p<0.01)
Bussing in ears or head	1.00 ± 1.05	1.00 ± 1.00)
Heart weak or sinking	1.80 ± 0.42	1.20 ± 0.83	N. S.
Excessive wind or gas	1.20 ± 1.03	0.80 ± 0.83	N. S.
Hands or feet cold	1.40 ± 0.69	1.00 ± 1.00	S(p<0.01)
)
			N. S.
			N. S.

SD. Standard Deviation, S: Significant, N. S: Not significant

The comparison of observer-rated somatic symptom profiles of the two groups (Table -II) showed that the elderly patients had more early insomnia (1.8+ 0.44 Vs 1.6+ 0.84) and psychomotor disturbances; agitation reached the level of significance (2.6+ 2.8vs 1.2+ 1.03, p<0.05). Marked weight loss was observed in older patients (1.6+ 1.14vs 0.8+ 0.78, p<0.05), whereas, they were less likely to express loss of appetite and loss of

libido. The elders showed diurnal variation of mood towards evening against the youngsters' towards morning.

The pattern of somatic symptoms exhibited by each group could be worked out from the self-report symptom profile. (Table-III)

Among the elderly, frequent head and neck related complaints were severe headaches, misty vision, eyes painful or burning, dry mouth and significant bitter taste (1.40 ± 0.89 Vs 0.50 ± 0.84, p<0.01). The two groups were high scorers on symptoms 'neck pain and tension', 'total body aches and pains', 'tired all the time' and 'whole body heavy'. The most common symptom reported was weakness or energy in both the groups and the difference between the groups was significant in favour of older patients (2.00+ 0.00 Vs 1.8+ 0.45, p<0.05).

The younger lot of the sample tended to have appreciably intense heart related and autonomic symptoms. The younger reported mean score of 1.7+ 0.48 on 'palpitations' against elders 0.60+ 0.89 with p<0.05, 'heart weak or sinking' (1.8+ 0.42 Vs 1.20+ 0.83; p<0.01) and 'skin burning' (0.9+ 0.99 Vs 0.4+ 0.54; p<0.01). The youngsters were fairly more frequent to express 'palms sweating' (1.00+ 0.94 Vs 0.20+ 0.44; p<0.01), 'sweating a lot', 'hands and feet cold', 'giddy or dizzy feeling', 'feeling of pins and needles in hands or feet', 'feeling of heat inside the body' and 'tingling all over the body'.

Discussion:

The view that somatic symptoms are characteristic of old age depression could not be supported in this study. Such results are in line with those of Reischies et al'18, who observed a linear decrease in the intensity of somatic symptoms and hypochondriasis after involutional years of age. Reischies et al' also agreed that multi-morbidity goes on increasing with age and the differentiation of somatic complaints from somatic disease may become impossible. But in our setting better facilities of clinical laboratory services and excellent liaison with neurology and other medical specialties helped minimize such bias.

The elder patients were having more difficulty falling asleep rather staying asleep or waking up early morning. Koenig et al'19 advocated middle or late insomnia as a characteristic symptom of depression in elder medical patients against our psychiatric patients with minimum physical illness. Over 40% of the Koenig et al's non-depressed medical patients also reported middle or late insomnia. Therefore, the finding of early insomnia categorically seems to be more a symptom of old age depression.

Marked psychomotor signs in elderly were in unison with previous studies^{3,18,19,20}. Contamination of the sample with bipolar affective disorder or psychosis may be suspected. The old age depressives reported less psychic anxiety and insignificantly more somatic anxiety. These deviant findings from most of the previous studies may be the result of missing involutional age group. Co-existence of depression and anxiety in the elderly may be another

explanation of this mixed picture; Tyrer²¹ advocates 58% diagnosable anxiety disorder in patients of major depression.

Marked weight loss in older patients was in accordance with other studies^{1,2,8}, but the elders were less likely to report loss of appetite and libido. Marked involuntional changes, decreased morbidity and highly selective dietary behaviour may explain this weight loss with covert loss of appetite in old age. Defensive or adaptive behaviour of the elderly may prevent them reporting loss of libido.

There was a specific pattern of somatic symptoms in old age depression, which was different from that found in younger patients. The elderly patients reported more severe headaches, misty vision, painful or burning eyes, dry mouth and marked bitter taste. The elder were more likely to report abdominal aches, bowel frequency, breathing difficulties, choking sensations, burning micturation and trembling or shaking.

The younger depressives frequently reported head hot or burning, head heavy, head about to burst, stomach fluttering, stomach burning, indigestion, nausea, excessive wind or gas and they were also more constipated. The younger age depression was characterized by symptoms of palpitations, weak or sinking heart, sweating palms, sweating a lot, hands or feet cold, giddy or dizzy feeling, skin burning, feeling of heat inside the body and tingling all over the body. The youngsters were more likely to express low back trouble, leg pains, neck pains and tension, total body aches and pains, tired all the time, whole body heavy and frequency of micturation. They also reported more chest pressure and marked chest pain.

The patterns of somatic symptoms reported in older and younger depression during the study are almost similar to those observed by Koenig et al¹⁹. However, the most frequent and common symptom in Koenig et al's younger and older patients was 'palpitations' against our commonest finding of 'weakness and anergy' among both the groups. This highly reported weakness and anergy by younger and elders points towards comparable core psychopathology of depression, common underlying mechanism responsible for the somatizing behaviour and somatic awareness in both the cohorts. The somatic symptom pattern of the younger age group seems to be more a cluster of bodily symptoms of anxiety.

Although the symptoms like dry mouth, misty vision, bitter taste, abdominal aches, constipation, nausea and dizziness could have been the side effects of the drugs, the majority of our patients were not taking drugs at all or were taking drugs irregularly at low doses (Table-IV). The robust support to consider these symptoms as the part of depressive symptomatology rather than side effects of the drugs comes from the findings of Koenig et al¹⁹

who observed in their drug free patients that 60% younger Vs 80% elders complained of dry mouth, 87% of younger Vs 80% elders complained of dizziness. Furthermore, the pattern of somatic symptoms seen in younger patients is somewhat unexpected; dizziness, dry mouth, nausea, constipation are common antidepressants' side effects, whereas, palpitations, heavy all the body, stomach fluttering, head hot or burning and sweating are relatively rare.

Table-IV Detail of previous medication of the total sample (n = 198)

Drugs	n=	Average dose per day (mg)
No drug	122	-
Dothiapien	25	64.5
Amitriptyline	21	41.6
Fluoxetine	9	20
Benzodiazepines (Diazepam equivalent)	21	12.3

Based on these findings, it can be believed that somatic symptoms in depressed elderly are no more common than in depressed younger patients and should be taken seriously and worked up for medical causes vigorously.

The specific pattern of somatic symptoms deserves attention and may be used to facilitate early recognition of depression in elderly patients.

The results require cautious interpretation because of expected sampling bias, exclusion of involuntional age group and lack of longitudinal follow-up study of the sample.

In conclusion, the stereotype of increased somatic symptoms and hypo-chondriasis could not be confirmed after extensive work-up for screening high-risk elderly for physical illness. However, a characteristic pattern of somatic symptoms easily distinguishable from that of younger depressives was found in elderly depressed patients. With such characteristic pattern of somatic symptoms along with cognitive symptoms in their mind, clinicians can help minimize the under-detection and under-treatment of old age depression.

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