VOLUME - 10, ISSUE - 05, MAY- 2021 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

Psychiatry

ALEXITHYMIA AND SOMATOSENSORY AMPLIFICATION AMONG GENERALIZED ANXIETY DISORDER PATIENTS

Dr Puja Pallavi*	Senior Resident, Rajendra institute of Medical Sciences, Ranchi, Jharkhand. *Corresponding Author
Dr Kamlesh Chandra	Senior Resident Rajendra institute of Medical Sciences, Ranchi, Jharkhand.
Dr Navneet Saurav	Senior Resident, Dr. Baba Saheb Ambedkar Hospital, New Delhi.

KEYWORDS :

INTRODUCTION:

Generalized anxiety disorder (GAD) is a chronic, relapsing anxiety disorder characterized by symptom clusters of worry, functional somatic symptoms, and autonomic hyperactivity. International Classification of Diseases 10 (ICD-10) diagnostic criteria still includes symptoms from all the above-mentioned psychopathology clusters of GAD (1). However, in the diagnostic and statistical manual of mental disorders (DSM), focus shift away from somatic to psychic concern in the diagnosis of GAD (2,3). However, the presence of functional somatic symptoms is must for the diagnosis of GAD both in DSM 5 and ICD-10. The literature on functional somatic symptoms in major depressive disorder, somatoform disorders suggest a correlation of the symptoms with constructs such as somatosensory amplification and alexithymia (4, 5).As functional somatic symptoms are one of the essential criteria of GAD, it is very much relevant from the etiological and psychotherapeutic point of views to measure these constructs in subjects with GAD. In our literature search, we could come across very little research on this important area of investigation (6, 7). In addition, patients from the South Asian countries are shown to present more often with somatic symptoms than psychological symptoms (8). However, the research on functional somatic symptoms in general and GAD in particular in South Asian countries is very scant, and none of the studies have evaluated the above-mentioned correlates in patients with GAD (9, 10). The purpose of the current study was to study somatosensory amplification and alexithymia, in patients with GAD.

MATERIAL AND METHOD:

This study was carried out in the outpatient clinic of a psychiatry department in a multi-specialty tertiary care medical institute in Jharkhand. The Ethics Committee of the Institute approved the study, and all the patients were recruited after obtaining proper written informed consent.

A cross-sectional design was employed. The study included patients diagnosed with GAD as per ICD-10,aged between 18 and 60 years, of either gender. Patient's with comorbid psychiatric disorders (including substance use disorder), the presence of physical illness which could explain the anxiety disorder, organic brain syndromes, and chronic, debilitating physical illness like, diabetes, hypertension, end-stage organ failure were excluded from the study. The severity of GAD was assessed with GAD-7 scale (11). These patients were assessed on 10 items somatosensory amplification scale (SSAS) the 20-item Toronto alexithymia Scale Hindi version (TAS-H)(12).

Instruments:

Generalized Anxiety disorder -7 scale:

It is a 7-item anxiety scale with good reliability as well as criterion, and procedural validity (11).Cut-off points of 5, 10, and 15 are interpreted as representing mild, moderate, and severe levels of anxiety on the GAD-7. Increasing scores on the scale are strongly associated with multiple domains of functional impairment.

Somatosensory Amplification Scale:

SSAS is a self-report questionnaire about the respondent's sensitivity to a range of normal bodily sensations and to neutral and noxious stimuli (13). These items are scored on a five-point scale from 1 to 5 with higher scores indicating greater somatosensory amplification. Test-retest reliability of this scale is 0.79 ($P = 0.0001$) and the internal consistency is 0.82 (Cronbach's alpha).

Toranto Alexithymia Scale:

It is a 20-item self-assessing instrument with response rated on a scale from 1 to 5. It has three subscales: difficulty in identifying feelings and distinguishing them from bodily sensations (TAS-1), difficulty in describing the feeling to others (TAS-2), externally oriented thinking (TAS-3). The score >60 is taken as an indicator of alexithymia.(12).

STAISTICAL ANALYSIS:

The statistical analysis was carried out using SPSS 16.0 for windows (SPSS for Windows, Version 16.0. Chicago, SPSS Inc.). Descriptive analysis was carried out using mean and standard deviation with a range for continuous variables such as sociodemographic variables, SSAS scores and 20-item TAS scores. Descriptive analysis was computed as frequency and percentages for discontinuous sociodemographic and clinical variables.

RESULT:

We approached 70 patients for this study out of which 30 patients were excluded because of psychiatric and physical comorbidity. Hence,40 patients were included for this study.

The sociodemographic details are summarized in (Table-1). As shown in (Table-1), mean age of onset of GAD was 39.80 (SD-9.62; range 17–58) years and the mean duration of illness at the time of assessment was 48.40 (SD- 44.40; range 10–236) months, suggesting that the patients had been ill for a reasonable period at the time of assessment.

The results of the GAD-7 scale, SSAS and TAS-H-20 are depicted in (Table-2). Majority of the patients (85%) scored more than 10 on GAD-7 scale, and more than half of the patients (55%) had a moderate level of anxiety. More than two-fifth (42.5%) of subjects with GAD scored above the cut-off mark for alexithymia.. The mean score of first factor of alexithymia (difficulty in identifying feeling) was 25.62 ± 3.92. The mean score of second factor (difficulty in describing feeling) and third factor (externally oriented thinking) were 17.17 ± 2.60 and 26.67 ± 4.24,respectively.

Table-1. Sociodemographic and clinical characteristic of sample (n=40)

		GAD n(%)
Gender	Male	21 (52.5)
	Female	19 (47.5)
Marital Status	Unmarried	35 (87.5)
	Married	05 (12.5)
Religion	Hindu	24 (60)
	Muslim	04 (10)
	Christian	09 (22.5)
	Others	03 (7.5)
Habitat	Urban	24 (60)
	Rural	16 (40)
Occupation	Unemployed	18 (45)
	Employed	20 ((50)
	Student	02 (5)
Socioeconomic status	Lower	17 (42.5)
	Middle	22 (55)
	Upper	01 (2.5)
Family History of Psychiatric Illness	No	27 (67.5)
	Yes	13 (32.1)

Table-2. Summary of score on Generalized anxiety disorder-7 scale, Somatosensory amplification scale and Toranto alexithymia scale -20

Item		Mean ± SD(%)	Range
Total GAD-7 Score		13.37 3.54	4-20
Severity grade	Mild	4 (10)	
	moderate	22 (55)	
	severe	14 (35)	
Total SSAS score		33.50 ± 6.90	12- 41
Total TAS Score		69.47 ± 9.29	
Factor of TAS	TAS-1(Difficulty in Identifying Feeling)	25.62 ± 3.92	
	TAS-2(Difficulty in Describing Feeling)	17.17 ± 2.60	
	TAS-3(Externally Oriented Feeling)	26.67 ± 4.24	

DISCUSSION

The mean score of the GAD-7 scale of the sample in the present study is similar to that reported in other studies(14). Younger patients had higher GAD-7 total score, and this suggests that GAD is more severe in younger patients and as the age progresses the illness becomes less severe. However, it is important to note that it is also quite possible that the older patients were on treatment for longer duration and hence had less severe anxiety.

Somatosensory amplification refers to the tendency of experiencing somatic and visceral sensations as unusually intense, noxious, and disturbing(15). Although originally intended to account for the symptom reporting of hypochondriacal patients, the amplification of benign bodily sensations has also been related to more general processes of functional somatic complaints reporting and health appraisal. The mean score on SSAS in this study (33.50 ± 6.90) is comparable to that reported for patients with panic disorder (mean score - 27.6) but higher than earlier studies on patients of depression (mean score - 21.56) and somatoform disorder (mean score - 19.38) (16). These comparisons again suggest that GAD is more akin to other anxiety disorders on various psychological constructs and differs from depression and somatoform disorders.

In the present study, 42.5% of GAD patients had alexithymia as defined by TAS scores of >60. In one of the earlier studies from Italy, the prevalence of alexithymia in patients with GAD was reported to be 44.3%, which is very much similar to the findings in the present study (6,7). When we compare the findings of our study with the study from Italy the mean scores of TAS-20, TAS - III are higher in our study and TAS-I, TAS-II mean scores appear similar. The higher scores in TAS-III may be related to the cultural factors related to externally oriented thinking. There are some studies which have evaluated alexithymia in patients of anxiety disorders and have reported that 34%–66.7% of patients with panic disorder, 28.3%–58% of patients with social phobia, and 12.5% of patients with simple phobia and 12.9%–35.7% of patients with obsessive-compulsive disorder patients to have alexithymia (17).Given the above findings it can be concluded that the rate of alexithymia in GAD patients is similar to that reported for other anxiety disorders but less than that reported for patients of depression.

The following limitations must be kept in mind while interpreting the results of this study. This study lacked the healthy control group and had a small sample size. The sample consisted of 40 consecutive outpatients attending a general hospital psychiatric unit. Although in the literature the incidence of GAD is higher in females, in our study males equivalent to females. Results of this study, therefore, be cannot be generalized to other patient populations.

CONCLUSION:

The patients with GAD are shown to be having higher sensitivity for learning from negative feedback. The presence of significant somatosensory amplification and alexithymia may be the factors why individuals with GAD have higher sensitivity for learning from negative feedback that leads to excessive worry in more than one spheres of life. There is also a need to develop effective interventions focused on the identified psychological factors in GAD to improve the outcome.

Conflict of study: Nil
Funding: Nil

REFERENCES:

1. Kessler RC, Wang PS. The descriptive epidemiology of commonly occurring mental disorders in the United States. Annu. Rev. Public Health. 2008 Apr 21;29:115-29.
2. Gilbody S, Bagnall AM, Duggan L, Tuunainen A. Risperidone versus other atypical antipsychotic medication for schizophrenia. Cochrane Database of Systematic Reviews. 2000(3).
3. Nagalski A, Kozinski K, Wisniewska MB. Metabolic pathways in the periphery and brain: contribution to mental disorders?. The international journal of biochemistry & cell biology. 2016 Nov 1;80:19-30.
4. De Gucht V, Heiser W. Alexithymia and somatisation: a quantitative review of the literature. Journal of psychosomatic research. 2003 May 1;54(5):425-34.
5. Nakao M, Barsky AJ. Clinical application of somatosensory amplification in psychosomatic medicine. BioPsychoSocial Medicine. 2007 Dec;1(1):1-7.
6. Mennin DS, Heimberg RG, Turk CL, Fresco DM. Preliminary evidence for an emotion dysregulation model of generalized anxiety disorder. Behaviour research and therapy. 2005 Oct 1;43(10):1281-310.
7. De Berardis D, Serroni N, Campanella D, Marini S, Rapini G, Valchera A, Iasevoli F, Mazza M, Fornaro M, Perna G, Di Iorio G. Alexithymia, suicide ideation, C-reactive protein, and serum lipid levels among outpatients with generalized anxiety disorder. Archives of suicide research. 2017 Jan 2;21(1):100-12.
8. Hoge EA, Tamrakar SM, Christian KM, Mahara N, Nepal MK, Pollack MH, Simon NM. Cross-cultural differences in somatic presentation in patients with generalized anxiety disorder. The Journal of nervous and mental disease. 2006 Dec 1;194(12):962-6.
9. Chaturvedi SK, Bhandari S, Rao S. Illness behaviour assessment of psychiatric patients with somatic presentation. Indian journal of psychiatry. 1988 Apr;30(2):205.
10. Sarkar J, Chandra P. Alexithymia and illness behaviour among female Indian outpatients with multiple somatic symptoms. Indian journal of psychiatry. 2003 Oct;45(4):229.
11. Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. Archives of internal medicine. 2006 May 22;166(10):1092-7.
12. Pandey R, Mandal MK, Taylor GJ, Parker JD. Cross–cultural alexithymia: Development and validation of a Hindi translation of the 20–item Toronto alexithymia scale. Journal of clinical psychology. 1996 Mar;52(2):173-6.
13. Barsky AJ, Wyshak G, Klerman GL. The somatosensory amplification scale

and its relationship to hypochondriasis. Journal of psychiatric research. 1990 Jan 1;24(4):323-34.
14. Ruiz MA, Zamorano E, García-Campayo J, Pardo A, Freire O, Rejas J. Validity of the GAD-7 scale as an outcome measure of disability in patients with generalized anxiety disorders in primary care. Journal of affective disorders. 2011 Feb 1;128(3):277-86.
15. Barsky AJ, Goodson JD, Lane RS, Cleary PD. The amplification of somatic symptoms. Psychosomatic medicine. 1988 Sep 1;50(5):510-9.
16. De Berardis D, Campanella D, Gambi F, La Rovere R, Sepede G, Core L, Canfora G, Santilli E, Valchera A, Mancini E, Salerno RM. Alexithymia, fear of bodily sensations, and somatosensory amplification in young outpatients with panic disorder. Psychosomatics. 2007 May 1;48(3):239-46.
17. Cox BJ, Swinson RP, Shulman ID, Bourdeau D. Alexithymia in panic disorder and social phobia. Comprehensive psychiatry. 1995 May 1;36(3):195-8.