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# Diagnostic Overlap Of Common Psychological Problems In General Practice

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***Abstract***

***Introduction: Determining the prevalence of common psychological problems—Anxiety, Somatic symptom disorder and Depression—in general practice population, investigating their association with psycho-social stressors and determining the diagnostic overlap of above mentioned three disorders are the main aims of this study.***

***Methods: In this cross-sectional study, 132 patients were approached, out of which 100 patients agreed to participate in this study and later on responded to the questionnaire (75.7%).***

***Anxiety of the sample was assessed with the help of GAD-7 (Generalised Anxiety Disorder 7) whereas assessment of depression was done with Patients Health Questionnaire-8 (PHQ- 8). Patients Health Questionnaire-15 (PHQ-15) was the scale which was used for somatic symptom disorder.***

***Results: Of the approached 132 patients, 100 responded to the 12-item General Health Questionnaire (GHQ), with a response rate of 75.7%. Out of these 100 subjects, 63 were males and remaining 37 were females. 12-item General Health Questionnaire (GHQ- 12) was administered to all the patients and 47 out of these 100 patients were identified as probable cases (47%). 44% males (28 out of 63) and 51% females (19 out of 37) were found out to be GHQ positive cases, indicating that they have some psychological problem. Prevalence of anxiety, somatic symptom disorder and depression from the studied sample was 42%, 28% and 22% respectively. Males had more depression (27%) than females (13.5%) in the study. Women were more likely to present with anxiety (46% versus 36.5%) and somatic symptom disorder (35% versus 23.8%) compared to men. Overlapping of these three common psychological problems was the major outcome of this study. Overlapping of anxiety with depression is 17% and anxiety with SSD is 31%. Overlapping of all the three variables is 21%. Only 0.4 % overlapping is found in depression and SSD, indicating anxiety is more commonly associated with Somatic symptom disorder than depression.***

***Conclusion: Somatic symptom disorder and depression was similar in term of their prevalence, but anxiety was noticed to be at higher level in patients at general practice. Anxiety, somatic symptom disorder and depression in the study sample had high degree of coexistence also.***

## 1. INTRODUCTION

Psychological problems are very much prevalent in general practice but the most common factor which is responsible for the delayed recovery is the failure on the part of general practitioners to recognize and manage the problem. Literature review is supporting this notion and it has already been documented that high degree of psychological disorders exists in general practice (Broers et al.,2006). As the result the health care system as a whole is facing a great burden.

While treating psychological disorders, main focus of attention for any general practitioner is on anxiety and depression only, but somatic symptom disorder, which was earlier known as somatoform disorder, is also has its great presence in general practice. Somatoform disorder's co-morbidity with depression & anxiety is also found to be very high (Maier and Falkai, 1999). Literature review shows that at least 1/3$^{rd}$ of psychological patients with somatoform disorders do have anxiety and depression along with, whereas depression and anxiety co-occur with one another up to the level of 50% (Henningsen et al ., 2003).

High prevalence of anxiety disorder and depression also occurs in the patients having some somatic complaints or in other words it can be said that patients who have depressive disorder and anxiety are having high tendency to develop somatic symptom disorder. It has already been reported about the patients having depression or anxiety that they are likely to complaint about a number of unexplained physical symptoms more than twice than the patients who don't have depression or anxiety (Simon et al.,1999).

Somatic symptom disorder is manifested by a patient with history of multiple somatic complaints to the extent that these complaints continue to have disruption in day-to-day life of the patient. Most of the time only one symptom, generally pain, is being manifested by the patient, but symptom of the patient can be nonspecific like fatigue. As per DSM V, Somatic symptom disorder is having two standards, criterion A and criterion B, by which we can judge it.

**Criterion A**; In this case patient will have significant disturbance in his day-to-day life from multiple current physical symptoms. Generally, symptoms are multiple, but sometime patient can present with only one symptom, which is generally pain. The symptoms can be specific, like some localised pain or non-specific like generalised fatigue.

**Criterion B**; Criterion B can be termed if the symptoms of criterion A have a significant impact on thought, emotion and behavior of the patients.

Somatization disorder patient is having a very characteristic presentation. The patient will present with multiple physical complaints which really make the patient very uncomfortable with unexplained disabilities, (Maier and Falkai,1999). Those patients who are having somatic symptom disorder are difficult to treat and they perform poorly in their day-to-day activities. Multiple studies have been done to prove that depressive disorders have great comorbidity with anxiety and somatic disorders (Rod-riguex et al. (2004).

The interesting observation is that patients high level of illness, chronicity and work and psychosocial functioning impairment are noted in patients having comorbidity than the patients without it. (Kessler et al ., 1998). The comorbidity can easily lead to more psychosocial disability, higher risk for suicide, and poor clinical outcome.

A lot of research has already been done in individual psychological disorders, and it is still increasing but a very little work has been done to establish the comorbidity among the individual disorders. The symptoms will increase many folds if the patient of SSD will have depression and anxiety along with it, (Lowe et al ., 2008).

The psychiatric problem among patients visiting their GPs has already been reported to vary from 10 to 36% (Murthy et al.,1981) and 27% among OPD patients of general hospital. (Murthy and Wig, 1977). A clinical study of 200 general practitioners of Banglore done by Shamsunder in 1978 published with the observation that 24 % doctors found the psychiatric comorbidity in less than 20%, whereas less than 10% comorbidity was observed by 65% of the general practitioners. It simply reflects how much awareness is there among GPs about the mental illnesses.

Not a significant research is performed in India on the prevalence and diagnostic overlapping of Somatic symptom disorder, anxiety and depression. And if we talk about the state of Punjab, very little is known among the general practitioners about the association of somatic

symptom disorder, anxiety and depression in their clinical practice. This lack of knowledge results into under diagnosing of psychological disorders by GPs.

In order to look into the prevalence and overlapping of anxiety, Somatic symptom disorder and depression among the patients visiting general practitioners in the state of Punjab, India, the main aim of this study is to determine the presence and to evaluate the overlapping of said three psychological disorders. No significant work has been performed in India regarding the opinions and attitudes of non-psychiatrist medical practitioners towards psychological illness. Having all this at the back of the mind, the present study was planned.

## 2. METHODS

Phagwara, a small town in the state of Punjab, India was the area where this study was done. The survey was conducted among patients between the age of 25 and 65 years, in the month of August 2019.

Total 100 patients from two different clinics of the town, were selected randomly. Only those patients who visited the general practitioners for their routine check-ups or for new complaints were approached.

The first step is to identify non-psychological cases. For this the first scale of GHQ- 12 was administered to all the patients. The questionnaire was fully explained before administrating the same to the patients. The patients who were positive for GHQ 12 were requested to participate in the second phase.

In the second phase which was meant for GHQ Positive Cases only, 3 different scales—GAD-7, PHQ-8 and PHQ-15, to assess Anxiety, Depression and Somatic symptom disorder respectively, was used. Of the approached 132 patients, 100 responded to the GHQ-12 scale, thus having response of 75.7%. As maximum patients were seen to be reluctant for the written consent for one reason or the other, the basic rationale of the study was well explained to patients in order to obtain their verbal consent. The confidentiality was assured to the patients.

The research assistant appointed by the author did one to one interviews with all the patients and continued to complete the questionnaires until he reached the sample size. The assessments for research work were successfully done by a student perusing post graduation in psychology. Patients with accidental trauma, severe psychiatric illness or some other chronic problems or disease which were diagnosed by the general physicians were excluded from this study. Those patients not interested to share personal information or their history about medical problems, were excluded from this study (32 patients). Because of study topic being a sensitive one, some of the patients didn't like to share their identity in association with psychological disorders. The researcher checked all the four questionnaires to calculate the score so that identification of the probable cases can be done easily.

The first administered scale GHQ-12 is having two sections. The section one includes socio-demographic details of patients whereas second section is having General Health Questionnaire (GHQ-12) having 12 items, which helps to identify the probable potential cases. Once the potential cases identified, GAD-7 scale for anxiety, PHQ-8scale for depression and PHQ-15 scale for somatic symptom disorder were used for collecting data.

## 3. INSTRUMENTS

The GHQ scale was developed by Goldberg in 1988 for the identification of those cases which are non-psychotic but psychiatric in nature. Its shortest version, GHQ-12, is mainly concerned with psycho-emotional disturbance.

Anxiety of the patients was assessed with the GAD-7 which is a validated scale, developed by Spitzeret al ., in 2006, to analyse generalized anxiety disorders. The response options against GAD-7 items are having a wide range varying from as low as 0 to as high as 21, with

four responses 1. 'not at all', 2. 'several days', 3. 'more than half the days' and 4. 'nearly every day'. These responses were scored as 0 (for 'not at all'), 1(for 'several days;) , 2 (for 'more than half the days' ) and 3 (for 'nearly every day') respectively.

The assessment of depression was done with the help of PHQ 8 scale, which is eight item scale developed in 2002 by Kroenke and Spitzer fpr assessing depression. This eight items scale is having all the items from PHQ 9- scale except one question regarding any attempt of suicide, which is considered as a hidden factor in Indian community.

The questionnaire had four different options and these were scored as 0, 1, 2 and 3 respectively. Somatic symptom disorder was measured using PHQ-15 scale developed by Kroenke et al. in 1998.

All the fifteen symptoms mentioned in PHQ-15 scale are rated with 0,1 and 2, where 0 stand for "not bothered at all", 1 for "bothered a little" and 2 for "bothered a lot". Thus, range of the PHQ-15 score varies from 0 to 30.

## 4. RESULTS

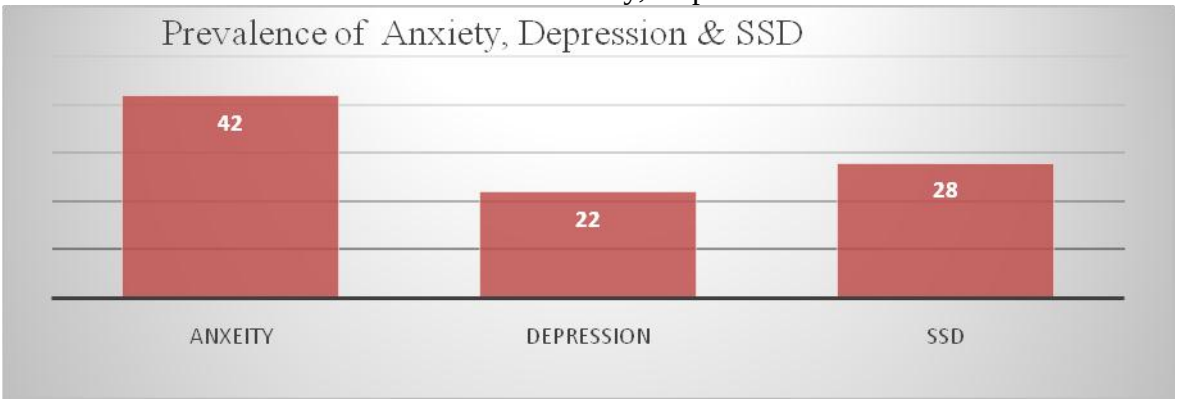
Out of the 132 patients approached, 100 gave their consent for this study (75.7%). Out of these 63 were males and remaining 37 were females. 47 out of hundred patients were identified as probable cases (47%). 44% males (28 out of 63) and 51% females (19out of 37) were found out to be GHQ positive cases, indicating that they have some psychological problem.

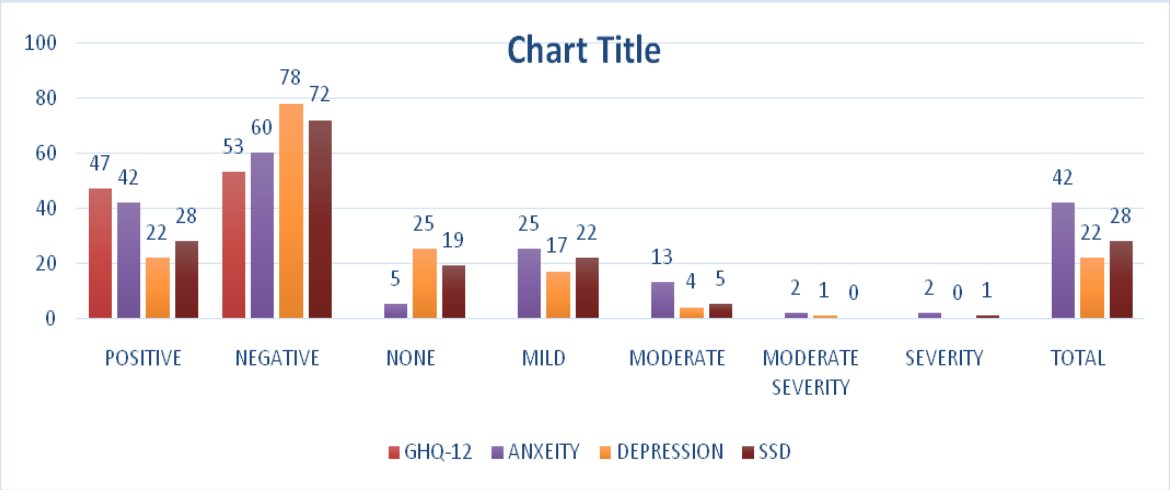
Table 1 Gender GHQ-12 Cross tabulation

| | | GHQ-12 | | |
|---|---|---|---|---|
| | | Score 0-4 (Negative) | 4 Onwards (Positive) | Total |
| Gender | Male | 35 | 28 | 63 |
| | Female | 18 | 19 | 37 |
| Total | | 53 | 47 | 100 |

Out of 47 GHQ positive cases, 28 were male and 19 females. The prevalence of anxiety, somatic symptom disorder and depression in this studied sample was 42%, 28% and 22% respectively.

Table 2 Prevalence of Anxiety, Depression and SSD





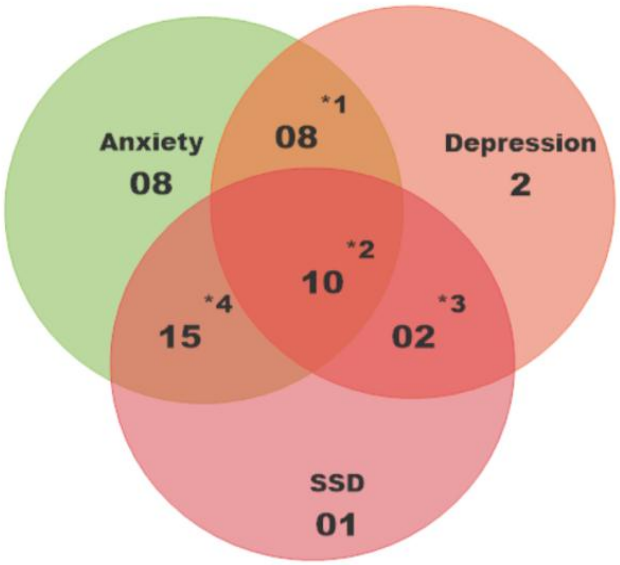

The detail of the patients having Anxiety is that out of the total 42 anxiety patients, 25 were having mild, 13 moderate and only 4 patients were having severe anxiety. And if we talk about depression, out of the 22 patients having depression, 17 were having mild and 4 had moderate symptoms. Only one patient was having moderately severe depression. There were 28 patients who were having SSD in this study, 22 having mild, 5 having moderate and only one patient was having severe SSD.

Males had more depression (27%) than females (13.5%) in the study. Women were found to present more with anxiety (46% versus 36.5%) and somatic symptom disorder (35% versus 23.8%) compared to men.

| GENDER | Total sample | Anxiety | Depression | S.S.D. |
|---|---|---|---|---|
| Males | 63 | 23 (36.5%) | 17 (27%) | 15 (23.8%) |
| Females | 37 | 17 (46%) | 5 (13.5%) | 13 (35%) |

Psychological disorders were more frequent with under graduate (UG) and graduate (G) than post graduate individuals (36%, 34% and 29% respectively).

The overlapping of anxiety, depression and somatic symptom disorder (SSD) of the sample (n = 47) is illustrated in Venn diagram (Figure 1).




*1: Anxiety + Depression
*2: All Three (Anxiety + Depression +SSD)
*3: Depression + SSD
*4: Anxiety + SSD

Figure one; Overlap of Anxiety, Depression and Somatic symptom disorder (SSD) of the identified sample (n = 47): anxiety = 42; depression = 22; somatic symptom disorder = 28. Total number of cases in Venn diagram = 47.

42 patients had anxiety, and out of these 08 patients were having overlapping of depression along with anxiety. 15 patients found to be overlapped with SSD along with anxiety. It means anxiety is more commonly associated with SSD than depression.
Out of the 22 depressed patients, only 2 had overlapping of SSD. It simply signifies that depression is much more associated with anxiety than SSD. Overlapping of anxiety with depression is 17% and anxiety with SSD is 31%. Overlapping of all the three variables is 21%. Only 0.4 % overlapping is found in depression and SSD. Another interesting finding of this study is that total 10 patients are those who were having all the three psychological problems, anxiety, depression and SSD, at the same time.

## 5. DISCUSSION

This study reviews comorbidity between anxiety, depression and somatic symptom disorder (SSD) at the general practice level (primary care level) in the state of Punjab. The timely recognition and co-occurrences of these psychological problems is very important because if not recognised or undiagnosed, can create big medical problems in general practice.
Comorbidity of these problems appears to have an important role and as consequence the symptoms of the patients increase many folds. A lot of patients having psychological problems generally visit their family GPs with some somatic complaints. One of the vital issue at general practice level is that patients wants treatment for those physical symptoms which can't be explained medically. The same finding is also resonating in this study. Significant degree of somatic symptom disorder (28%), depression (22%) and anxiety (42%)

in patients visiting general practitioners was the main highlight of this study. Although anxiety was more frequently seen but prevalence of somatic symptom disorder and depression found to be similar. A similar percentage of depression (7–19%), somatoform disorders (9–29%) and anxiety disorder (10–25%) was also reported by Spitzer et al., in 1999.

Till date, author has not seen any similar study done in India on overlapping SSD, depression and anxiety, in general practice. Hence, the outcome figures of this study are compared with findings reported in some other developed nations.

It has already been reported by Kroenke in 2007 that somatization, depression and anxiety are the most frequent disorders related to mental health which are seen in primary healthcare.

The pervasiveness of somatoform disorders was also studied by Fink in 1999 and he observed that this psychological disorder was there in general practice up-to the level of 30.3%. This observation was quite similar with the observed value in this study.

Prevalence of three psychological disorders was also different in men and women studied in this sample; anxiety (36.5% versus 46%), depression (27% versus 13.5%), and somatic symptom disorder (23.8 versus 35%). It simply means that Males had more depression (27%) than females (13.5%) in the study. Women were more likely to present with anxiety (46% versus 36.5%) and somatic symptom disorder (35% versus 23.8%) compared to men.

Gorman in year 2006 has already observed higher incidence of psychological problems among females.

The prevalence psychological disorders in higher ration in this study show that patients had experienced anxiety more than depression and somatic symptom disorder. Thus Anxiety had a much stronger association with somatic symptom disorder than depression.

The current study finding of excessive comorbidity of anxiety with depression (17%) and somatic symptom disorder (31%) is resembling with many other studies which also reported high level of comorbidity among the said three disorders. One of such study was done by Ansseau et al. in year 2004, and another similar study was done by Mergl et al. in 2007.

An important overlap between all the three psychological disorders was clearly visible with the help of a Venn diagram. 10% patients were found to be those who had all the three disorders—anxiety, somatic symptom disorder and depression. Comorbidity of anxiety, depression and SSD was one of the common findings in the previous studies and the present one. The considerable overlapping among three psychological disorders shows that one psychological problem may be a risk factor for another psychological problem. Early diagnosis of psychological problems is a very important key for the improvement of mental health outcomes. Thus, this present study explored comorbidity among three major psychological disorders at primary care centers.

## 6. CONCLUSION

The study done by the author found that anxiety was more common in the patients visiting general practitioners, followed by somatic symptom disorder and depression. A high degree of overlapping of anxiety, depression and somatic symptom disorder was found. An association of higher level between these three psychological disorders in patients was indicated by the data. The prevalence of anxiety was much higher followed by somatic symptom disorder and depression. The overlapping of anxiety with SSD was also much higher than depression was also reported.

*Competing interests*

The author hereby declares that he has got no competing interests.

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