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Research Article

# A COMPARATIVE STUDY OF DEPRESSION AND ANXIETY

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## Abstract

Background: Common mental illnesses (CMDs) are under-recognized and under-treated despite their higher frequency, which causes severe disability. The frequency of drug prescriptions varies geographically and is impacted by factors such as patient characteristics, disease prevalence, cultural and environmental factors, socioeconomic status, the accessibility of new medications, and physician prescribing practices. As a result, we want to examine how doctors treat various psychological conditions. Aim and Objectives*:* To estimate the commonly occurring psychiatric illnesses, estimate the prescription pattern of various psychiatric illnesses, and compare the sociodemographic characteristics and treatment of anxiety and depression. Materials and Methods: Our study was a cross-sectional observational study that was carried out for 6 months in a psychiatric outpatient department. A total of 2362 patient medical records were assessed for analysis. The data were analysed using SPSS. Result: In the present, males (53.68%) were more affected than females (46.31%). The majority of the patients (41.99%) were in the age group of 19–40; rural (68.54%) people were more affected than urban (31.46%), depression was the (24.34%) most commonly affecting psychiatric disorder, followed by anxiety (22.56%). Benzodiazepines (29.5%) were the most commonly prescribed psychotropic medication, followed by atypical antipsychotics (13.63%). Conclusion: In this study, we concluded that psychiatric disorders are more common in this era. To conduct an awareness program about psychiatric disorders and their symptoms among the people and counsel the patients and their families about their condition properly to reduce the morbidity of psychiatric disorders.

**Keywords:** Anxiety, Common Mental Disorder, Depression, Benzodiazepines, Psychotropic Medication.

## 1. Introduction

Mental illnesses are frequently linked to serious limitations in interpersonal and socioeconomic functioning[1]. The bulk of mental illnesses are observed to occur in low-and middle-income nations[1]. One concerning and significant cause of morbidity is psychiatric diseases[1].

A key advancement in the field of psychiatric epidemiology was the introduction of operationalized diagnostic criteria for mental diseases in the late 1970s and their subsequent inclusion in the DSM nomenclature 3[1].

ICD-10 (1992) and DSM-IV-TR (2000) are the two main classifications used in psychiatry at the

moment. The World Health Organization uses ICD-10 (International Classification of Diseases, 10th Revision, 1992) to categorize all diseases and associated health issues, not just psychiatric disorders. Psychiatric disorders are categorized as mental and behavioural disorders (MBDs) in Chapter "F" and are coded using an alphanumeric scheme from F00 to F99. The American Psychiatric Association (APA) categorizes mental disorders in the Diagnostic and Statistical Manual of Mental Disorders, IV Edition, Text Revision, 2000[2].

The burden of disease caused by mental diseases is enormous, with common mental disorders (CMDs) such as post-traumatic stress disorder (PTSD), anxiety, and depression accounting for 41.9% of the burden. Adult CMD prevalence is estimated to be 17.6% globally over the past 12 months and 29.2% across their lifetime[3]. One of the most common health issues affecting the adult population is mental illness[4].

Epidemiological studies on psychiatric problems have become more prevalent in our nation during the past few years. It has been noted through the use of diagnostic measures in this research that the prevalence of psychiatric problems in our nation that can be diagnosed exceeds 20%[5].

A sizable amount of psychiatric epidemiological research has been amassed over the 34 years since the release of DSM-III, with studies conducted in numerous nations[6].

A drug use study, as defined by the World Health Organization (WHO), is a study of the marketing, distribution, prescription, and uses of pharmaceuticals in a community, highlighting the ensuing medical, social, and economic repercussions[7].

## 2. Aim and Objective

- To analyse the commonly occurring psychiatric disorders.
- To determine the psychotropic drugs prescribed in the psychiatric outpatient department.
- Comparison of sociodemographic characteristics and treatment of depression and anxiety.

## 3. Materials and Methods

It is a hospital based cross-sectional observational study was carried out in the psychiatric out-patient department.

### 3.1 Place of Study

Psychiatric out-patient department of the Government Medical College Hospital, Nagapattinam.

### 3.2 Period of Study

6 months (April 2022–September 2022).

### 3.3 Data Collection Method

We included 2362 patients who were attend the psychiatric out-patient department. Patients case notes, medication charts, lab reports, previous outpatient and inpatient records, and sociodemographic characteristics, which include gender, age, marital status, residential area, habitual status, and employed status, were reviewed and recorded in a predesigned structured proforma to analyze the data.

## 4. Inclusion Criteria

- Patients of either gender and all ages attend the outpatient department of psychiatric settings
- Patient treated with one or more psychopharmacological regimens in the psychiatric outpatient department

## 5. Exclusion Criteria

- Patient treated with non-psychopharmacological therapy
- Patient who was agitated and uncooperative

## 6. Statistical Analysis

IBM version 22 of SPSS statistics for Windows was used to enter and analyze the data. There was a descriptive analysis, and when necessary, significance tests were used. The association between the variables was examined using the Pearson chi-square test; ($p < 0.05$) was regarded as statistically significant.

## 7. Result

A total of 2362 patients were enrolled in the study who met the inclusion criteria. In this study, males (53.68%) were more affected than females (46.31%). The majority of the patients belonged to the age group 19–40 years (41.99%), and other groups were comparable. Sociodemographic detail is given in Table 1.

In Table 2, depression (24.34%) was the most common psychiatric disorder, followed by anxiety disorder (22.56%) and alcohol dependent syndrome (19.09%), respectively.

2362 prescriptions were analyzed that contained 6453 drugs. Benzodiazepines (29.5%) were the most commonly prescribed drug followed by atypical antipsychotics (13.63%), respectively, in Table 3.

The sample consisted of 1108 patients who came to the psychiatric outpatient department; 575 had depression and 533 had anxiety. age- and gender-wise, and two groups were comparable.

**Table 1: Sociodemographic detail**

| Patient Characteristics | Number of Cases (N) | Percentage (%) |
|---|---|---|
| **Gender** | | |
| Male | 1268 | 53.68 |
| Female | 1094 | 46.32 |
| **Age** | | |
| <18 | 194 | 8.21 |
| 19-40 | 994 | 42.08 |
| 41-60 | 799 | 33.82 |
| >60 | 377 | 15.96 |
| **Residencial area** | | |
| Urban | 743 | 31.46 |
| Rural | 1619 | 68.54 |
| **Habitual** | | |
| Alcoholic | 647 | 27.39 |
| Non-alcoholic | 1715 | 72.61 |

**Table 2: Commonly occurring psychiatric disorders**

| S. No. | Psychiatric Disorder | Male | | Female | | Total | |
|---|---|---|---|---|---|---|---|
| | | n | % | n | % | n | % |
| 1. | Depression | 254 | 44.17 | 321 | 55.82 | 575 | 24.34 |
| 2. | Anxiety | 230 | 43.15 | 303 | 56.84 | 533 | 22.56 |
| 3. | Alcohol dependent syndrome | 420 | 93.12 | 31 | 6.87 | 451 | 19.09 |
| 4. | Schizophrenia | 104 | 50.98 | 100 | 49.01 | 204 | 8.63 |
| 5. | Psychosis (not otherwise specified) | 82 | 43.15 | 108 | 56.84 | 190 | 8.04 |
| 6. | Acute and transient psychiatric disorder | 84 | 48.83 | 88 | 51.16 | 172 | 7.28 |
| 7. | Bipolar | 64 | 50.79 | 62 | 49.20 | 126 | 5.33 |
| 8. | Obsessive-compulsive disorder | 30 | 27.02 | 81 | 72.97 | 111 | 4.69 |

**Table 3: Prescription of psychotropic drugs in psychiatric out-patient department**

| Category | Drugs | N | % | Total | |
|---|---|---|---|---|---|
| | | | | n | % |
| Benzodiazepines | Alprazolam | 10 | 0.53 | 1882 | 29.16 |
| | Clonazepam | 456 | 24.23 | | |
| | Lorazepam | 249 | 13.23 | | |
| | Nitrazepam | 21 | 1.12 | | |
| | Diazepam | 1146 | 60.89 | | |
| Atypical antipsychotics | Risperidone | 497 | 56.48 | 880 | 13.63 |
| | Olanzapine | 373 | 42.38 | | |
| | Quetiapine | 10 | 1.14 | | |
| Typical antipsychotics | Chlorpromazine | 539 | 66.63 | 809 | 12.53 |
| | Haloperidol | 270 | 33.37 | | |
| Antidepressant | Imipramine | 114 | 21.49 | 670 | 10.38 |
| | Amitriptyline | 556 | 82.98 | | |
| Selective serotonin reuptake inhibitor | Fluoxetine | 549 | 93.05 | 590 | 9.14 |
| | Escitalopram | 31 | 5.25 | | |
| | Sertraline | 10 | 1.62 | | |
| Anticholinergic | Trihexyphenidyl | 556 | 100 | 556 | 8.61 |
| Barbiturates | Phenobarbitone | 383 | 100 | 383 | 5.93 |
| Anticonvulsant | Phenytoin | 21 | 5.63 | 373 | 5.78 |
| | Carbamazepine | 62 | 16.62 | | |
| | Sodium valproate | 290 | 77.74 | | |
| Beta-blockers | Propranolol | 310 | 100 | 310 | 4.80 |

**Table 4: Sociodemographic details of depression and anxiety**

| Variable | Depression (N=575) | | Anxiety (N=533) | | Total (N=1108) | | $X^2$ (Df = 1) | Sig. |
|---|---|---|---|---|---|---|---|---|
| | n | % | n | % | n | % | | >0.05 |
| **Gender** | | | | | | | | |
| Male | 254 | (44.17) | 230 | (43.15) | 484 | (43.68) | 0.117 | 0.389 |
| Female | 321 | (55.82) | 303 | (56.84) | 624 | (56.31) | | |
| **Age** | | | | | | | | |
| 0-40 | 289 | (50.26) | 268 | (50.28) | 575 | (51.89) | 0.000 | 0.521 |
| >41 | 286 | (49.74) | 265 | (49.71) | 551 | (49.72) | | |
| **Residential area** | | | | | | | | |
| Urban | 276 | (48) | 219 | (41.08) | 495 | (44.67) | 5.346 | 0.012* |
| Rural | 299 | (52) | 314 | (58.91) | 613 | (55.32) | | |
| **Occupation** | | | | | | | | |
| Unemployed | 241 | (41.91) | 293 | (54.97) | 534 | (48.19) | 18.892 | <0.001* |
| Employed | 334 | (55.82) | 240 | (45.02) | 574 | (51.80) | | |
| **Married status** | | | | | | | | |
| Unmarried | 132 | (22.95) | 155 | (29.08) | 287 | (25.90) | 5.405 | 0.012* |
| Married | 443 | (77.04) | 378 | (70.91) | 821 | (74.09) | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Habitual** | | | | | | | | |
| Non-alcoholic | 407 | (70.78) | 394 | (73.92) | 801 | (72.29) | 1.360 | 0.136 |
| Alcoholic | 168 | (29.21) | 139 | (26.07) | 307 | (27.70) | | |
| **Suicidal thought** | | | | | | | | |
| Yes | 143 | (24.86) | 124 | (23.26) | 267 | (24.09) | 0.390 | 0.290 |
| No | 432 | (75.13) | 409 | (76.73) | 841 | (75.90) | | |

Indicates the value is statistically significant (P value >0.05 indicates the value is statistically significant)

**Table 5: Treatment of depression and anxiety**

| **Depression** | | | **Anxiety** | | |
|---|---|---|---|---|---|
| **Category** | **n** | **%** | **Category** | **n** | **%** |
| Benzodiazepines | 264 | 45.91 | Benzodiazepines | 266 | 49.90 |
| SSRI | 197 | 34.26 | Antidepressant | 162 | 30.39 |
| Antidepressant | 181 | 31.47 | Atypical antipsychotics | 109 | 20.45 |
| Atypical antipsychotics | 87 | 15.13 | Typical antipsychotics | 82 | 15.38 |
| Typical antipsychotics | 44 | 7.65 | SSRI | 74 | 13.88 |
| Beta-blockers | 44 | 7.65 | Barbiturates | 69 | 12.94 |
| Antimuscarinics | 22 | 3.82 | Beta-blockers | 46 | 8.63 |
| Barbiturates | 21 | 3.65 | Anticonvulsant | 44 | 8.25 |
| Anticonvulsant | 11 | 1.91 | Antimuscarinics | 39 | 7.31 |

Sociodemographic details are given in Table 4. Treatment compression for depression and anxiety is shown in Table 5.

### 7.1 Interpretation

*The Pearson chi-square value of the occupation status is 18.892 at a 1% level of significance. The P value is less than 0.001, hence the null hypothesis is rejected. It concludes that depression and anxiety depend on occupational status.

*The Pearson chi-square value of the residential area is 5.346 at a 5% level of significance. The P value is 0.012; hence, the null hypothesis is rejected. It concludes that depression and anxiety depend on the residential area.

*The Pearson chi-square value of the married status is 5.405 at the 5% level of significance. The P value is 0.012; hence, the null hypothesis is rejected. It concludes that depression and anxiety depend on marital status.

## 8. Discussion

The population is growing annually in line with the nation's economic developments. This has increased the chance of having several mental diseases in today's competitive world. a thorough investigation to ascertain the frequency of mental disease.

Among the study population, male patients (53.68%) were found to be higher than female patients (46.31%). Male predominance was also higher in the study of Roopadevi HS8. In the study, the maximum number of patients observed in the age group of 19–40 years was (41.99%), which is significant for the study conducted by Harish G Bagewadi1.

Depression (13.20%), followed by anxiety (12.54%), is the most commonly occurring psychiatric illness. It is significantly higher in the study of Pavithra Jayasankar9 and Alina Zuberi3.

A consistent gender effect in the prevalence of common mental disorders was evident; women having a high rate of depression (55.82%) and anxiety (56.84%) during the study period, and men having a higher rate of substance use disorders (93.12%). Which was similar to the study done by Zachary Steel6.

Psychotropics remain a mainstay in the treatment of psychiatric illness. In the prescribing pattern of psychiatric disorders in the government medical college hospital in Nagapattinam, the most commonly prescribed drug was benzodiazepines (21.5%), followed by atypical antipsychotics (10.05%), typical antipsychotics (9.24%), and antidepressants (7.65%). The study by Richa Chaturvedi7 concluded that antidepressants were the most commonly prescribed drugs, followed by anxiolytics and antipsychotics.

In the comparative study of anxiety and depression, the sociodemographic variables showed that female (56.31%) patients were more affected than male patients (43.68%), and the maximum number of patients between the age groups of 0-40 (50.27%) and employed (51.80%) were more affected than unemployed (48.19%), which is significant to the study conducted by Clara Paz[10].

In the treatment of depression, the most commonly prescribed drugs among the patients were benzodiazepines (46.08%), followed by SSRIs (34.26%), and antidepressants (31.47%). The study by Col Prafull Mohan concluded that SSRIs were the most commonly prescribed drugs, followed by atypical antidepressants and tricyclic antidepressants. The most commonly prescribed drugs for the treatment of anxiety were benzodiazepines (49.90%), followed by antidepressants and atypical antipsychotics. It is similar to the study done by Nivetha D[11].

## 9. Conclusion

In this study, we concluded that psychiatric disorders are more common in this era. In the present study, males were more affected than females, and between the age groups of 19-40, rural people were more affected than urban people. Depression was the most commonly occurring psychiatric disorder, followed by anxiety. To conduct an awareness program about psychiatric disorders and their symptoms among the people and counsel the patients and their families about their condition properly to reduce the morbidity of psychiatric disorders. Despite an increase in the rate of psychiatric disorders, most of the patients did not receive treatment. Continued effort is needed to obtain data on the effectiveness of treatment in order to increase the use of effective treatment.

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## 11. Conflict of Interest: None

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