

Gender Differences in Psychiatric Diagnosis, Pharmacotherapy and Psychotherapy across Consultation Liaison Psychiatry

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ABSTRACT

Background: There is scant literature from developing country on gender and psychiatric disorders across consultation liaison Psychiatry Services. The aim was to assess Gender Differences in Psychiatric diagnosis, Pharmacotherapy and psychotherapy and explore correlations among in patients referred for Consultation liaison Psychiatry Services.

Methods: It was a cross sectional survey conducted among inpatients referred for Consultation Liaison Psychiatry Services, over 3 months. All inpatients in various wards at MGM Hospital, Navi Mumbai. Cases referred for consultation liaison psychiatry were clinically interviewed by the Consultant and given appropriate clinical diagnosis and provided standard psychiatric and psychological care are included. Data collected after consent, on predesigned proforma and analyzed using SPSS 20. Institutional Ethics clearance was obtained. **Result :** A total of (n=73) were referred for Consultation Liaison Psychiatry over a period of 3 months. The most frequent reason for referral for men was substance use (50%), and that for women was sadness of mood (36.4%). Medicine department contributed to maximum referrals for both men (52.5%) and women (78.8%). The most common diagnosis in men was Alcohol use disorder and in women was Mood disorder. The most common pharmacotherapy advised in men was Benzodiazepine(43%), and in women was Antidepressant(63.6%)and the most common psychotherapy advised in men was Dead diction therapy and in women was Individual counselling. Significant differences emerged in gender across reason for referral, psychiatric diagnosis, pharmacotherapy and psychotherapy and stressors profile. **Conclusion:** Our study findings have relevant implications in the area of gender and psychiatry across consultation liaison psychiatry.

Keywords: Gender Differences, Consultation Liaison, Psychiatry

Consultation psychiatry has been defined as “a subspecialisation of psychiatry focusing on diagnosis, treatment, study and prevention of psychiatric morbidity in patients with organic pathologies and those with somatisation, Although there is research in this area, it is of limited quality.[1,2] The international literature reveals a wide variability in the comorbidity

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data: in fact, among hospitalized patients, the percentage of comorbidity ranges from 23% to 61% depending on the study and the research methodology[3,4] It remains unclear whether sexual differentiation at the neural level is related to that observed in daily behavior, cognitive function, and the risk of developing certain psychiatric and neurological disorders.[5] Women showed higher levels of internalizing symptoms, but lower levels of externalizing/ substance-abuse symptoms than men. For all types of trauma, women reported a stronger negative appraisal of the event than men.[6] Younger age, lack of employment, outside home, marital problems, and no death motives were more influential in female attempted suicide, while alcohol misuse and severe psychiatric morbidity were more frequently associated with male attempted suicide. The findings support gender-specific preventive and interventional strategies.[7] Women are more vulnerable to relapse and spend more time depressed compared to men. Identification of general and sex-specific risk factors for future depression may provide clinicians with useful tools to estimate need for ongoing pharmacotherapy[8]

METHODS AND MATERIALS

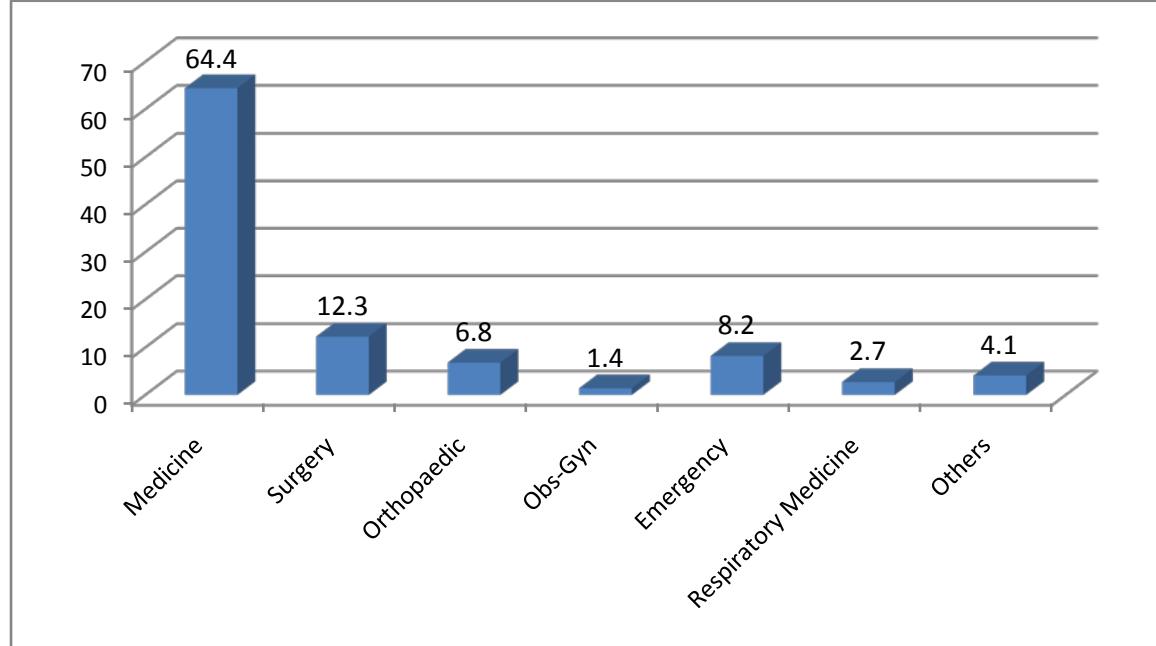
It was a cross sectional survey conducted to study the patterns of Gender Differences in Psychiatric diagnosis, Pharmacotherapy and psychotherapy among in patients referred for Consultation Liaison Psychiatry Services Data was collected over a period of 3 month and study setting was the Department of Psychiatry, MGM Medical College, Navi Mumbai. All in patients admitted in various wards and referred for psychiatry opinion were eligible to participate in the study. The inclusion criteria comprised of cases that were referred for consultation liaison psychiatry and were clinically interviewed by the Consultant and were given appropriate clinical diagnosis and provided standard psychiatric and psychological care. Cases with an inconclusive initial diagnosis or cases wherein differential diagnosis was given were excluded from the study sample. Data was analyzed for gender profile and demographic factors such as age, residence, occupation, marital status, and pattern of gender differences in psychiatric diagnosis, reason for referral, psychopharmacology, stressors profile and psychotherapy were recorded using a pre-designed data collection form. Data collected was analyzed using SPSS 20. Institutional Ethics clearance obtained.

RESULTS

A total of 73 inpatients(n=73) were referred for Consultation Liaison Psychiatry over a period of 3 months The mean age of our sample of was 39.11 years with minimum age of 18 years and maximum of 80 years. N=33(45.2%) were females and n=40(54.8%) were males. Thirty seven percent were residents of semi urban areas and thirty four percent were from rural areas, and twenty nine percent were from urban areas. Marital status shows majority around 70% were married, Education status of the study sample shows 52 % studied up to higher secondary, 26 % were illiterate, and 22 % were graduated. 41 % were employed, 40% were unemployed, and 19 % were student. Medicine Department contributed to maximum referrals (64.4%). The significant association emerged between gender and referring department by Chi square test, p value 0.056, indicating males were predominantly referred from medicine 52.5%, from surgery 22.5%, from emergency medicine 7.5% whereas females were from medicine78.8%, orthopedic 9.1%, emergency medicine 6.1%.

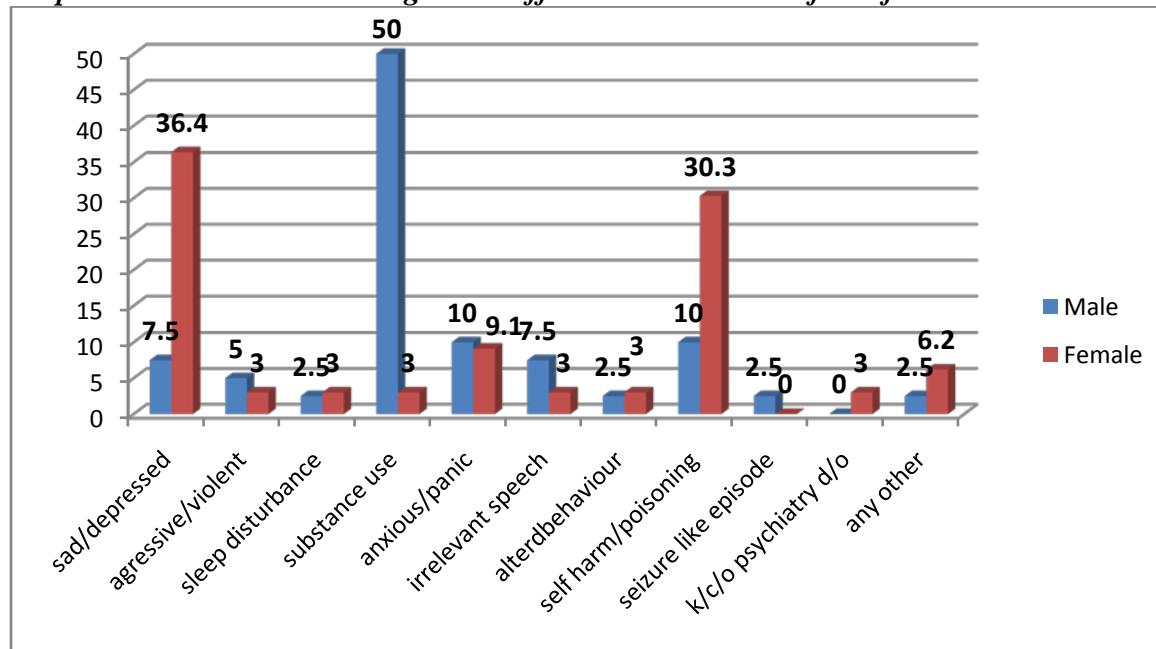
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Graph 1 Distribution of referring department



The most common reasons for referral were substance use (28.8%) and followed by sadness of mood was (20.5%), self harm (19.2%). Highly significant association emerged between gender and reason for referral half of the male patients were referred for substance use followed by Anxious and self-harm 10 % each. Wherein more than one third of females were referred for sadness of mood, followed by 30.3% for self harm (Graph 2) for that chi square test value $p=0.001$ which is highly significant.

Graph 2 Association Between gender differences and reason for referral.

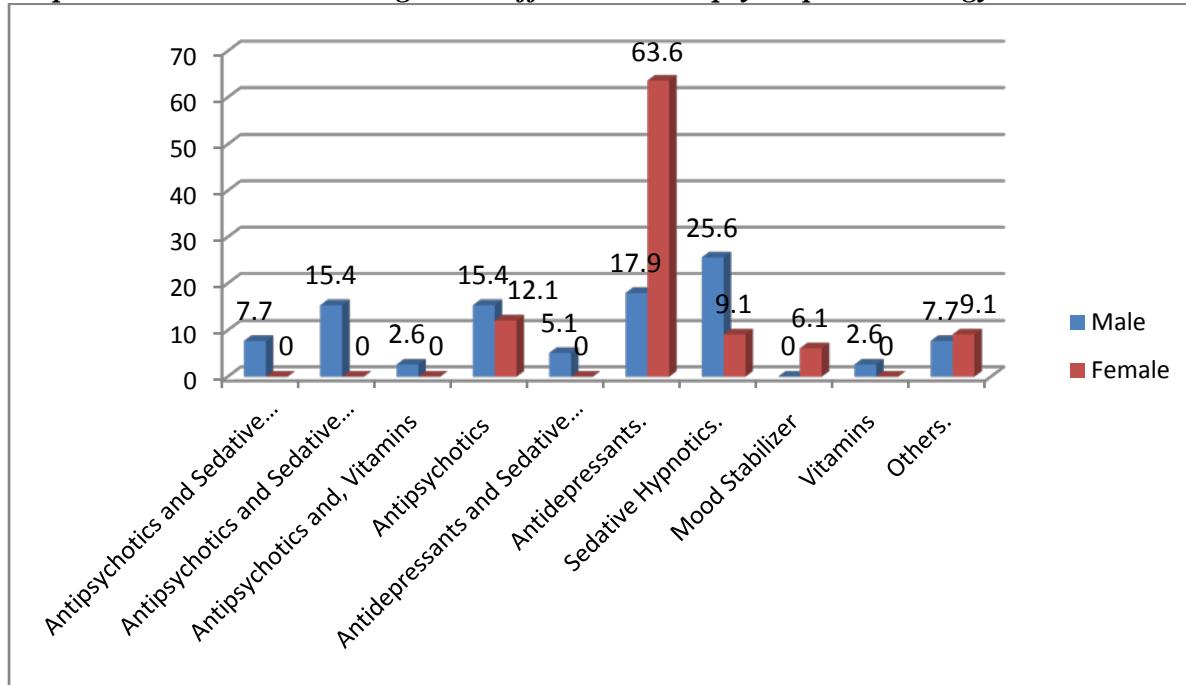


Amongst the referred patients 27.4 % were having interpersonal relationship as stressor, followed by 12.3% financial burden as stressor, majority 34.2% were not having any stressor

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at the time of presentation. In our study association between stressor and gender shows half of the males denied any kind of stressor at the time of presentation, 15% were having financial stressor and 12.5% having familial stressor, while in females 48.5% were having interpersonal relationship issues as major stressor, and 18.2% other stressors related to day to day life which is statistically highly significant with $p=0.001$. Most common Psychiatric diagnosis seen was Substance use disorder and Mood disorder (30.1%) each, followed by schizophrenia spectrum and psychotic disorder(9.6%), trauma and stress related disorder(8.2%), anxiety and organic disorder were (6.8%) each, somatoform disorder (4.1%), dissociative disorder(2.7%), and least common diagnosis was personality disorder(1.4%). Association between Gender and Psychiatric diagnosis according to ICD 10 shows, 52.5% male Substance use disorder most commonly alcohol use disorder, 12.5% were mood disorder and schizophrenia spectrum and psychotic disorders each, and females 51.5 % were having mood disorder, 12.5% anxiety disorder, 9.1 % organic disorder, which is statistically highly significant with Pearson chi square test $p=0.000$. Psychiatric medications prescribed 68.5% were oral only, 30.1% were oral and injectable both and 1.4 % were injectable only. In oral medication 38.9% were given Antidepressant and among them 79.3% were given SSRI, 18.1% were given benzodiazepine kind of sedative and hypnotics, 13.9% were given antipsychotic medication consisting of 65.2% atypical, and 34.8% typical antipsychotic. In some instances use of antipsychotic medications were used in combination therapy amounting to 13%. In injectable medication 69.6% route of administration was IM and IV, 21.7% only IV, and 8.7% only IM. Haloperidol and lorazepam used highest in injectable form for acute control of patients. In our study, association between gender and pharmacotherapy, showed male patients were given antipsychotics and sedative hypnotics as major pharmacotherapy, while female patients were given antidepressants predominantly, which is statistically significant.

Graph 3 Association between gender differences with psychopharmacology.



In our study 87.7% patients were advised psychological reference, and most common reason for reference was counseling(48.4%) followed by specific psychotherapy and psychological

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testing,(40.6%),(10.9%)respectively. Among psychological testing 62.5% were advised Rorschach test. Individual counseling(70.6%) was the most common type of counseling advised. and Dead diction therapy 82.1% most common specific psychotherapy advised. Association of gender and reason for clinical psychologist reference were assessed and results shows that the most common reason among males were specific psychotherapy advised 65.7% which was aimed at dead diction therapy 95.7%, and in females were counseling advised which was mainly for individual counseling 70.8%, which is highly statistically significant $p=0.001$. Additional clinical scales administered and gender association were found to be statistically significant showing 55.6% male were assessed by Alcohol Use Disorder Identification Test and 83.3% were assessed by HAM D.

DISCUSSION

Risal A et al found that the mean age of the subjects was 37.26 most of them were females (56.4%), married (74.5%) which was similar to our study findings[9] Ramdurg S et al found that referred patients were mostly from urban background (78%) compared to our study which had most patients from semi urban area. [10]. Dhavale HS et al found that the main source of reference was Medicine Department similar to our study findings.[11]. Alaja R et al found psychoactive substance use disorder (ICD-10) as most common diagnosis in psychiatric referrals in the age group 35 to 50 years, 53% of men and 29% of women had a substance use disorder. [12] Kucharska J et al found that Women showed higher levels of internalizing symptoms, but lower levels of externalizing/substance-abuse symptoms than men[13]. Bogren M et al findings support that females are more prone than males to develop depression with medium severity,[14] Slavney PR et al found that somatoform disorders, and conversion disorder tended to be more common in young women[15].Pigott TA found that gender differences occur particularly in the rates of depression, anxiety, and somatic complaints wherein women predominate.[16]Parry BL suggests that hormonal factors related to the reproductive cycle may play a role in women's increased vulnerability to depression.[17] Shidhaye R et al found that other factors include excessive partner alcohol use, sexual, and physical violence by the husband, being widowed or separated, having low autonomy in decision making, and having low levels of support from one's family.[18] Biswas S et al found that large degree of self harm attempt in women occur as a response to failures in life, difficulties in interpersonal relationships, and dowry-related harassment.[19]Men may develop alternative disorders in response to stress, such as antisocial behaviour and alcohol abuse whereas women may be more likely to have been socialised to express dysphoria in response to stress. In support of this, studies have shown that expected gender differences in depressive disorders were balanced out by higher male rates of alcohol abuse and drug dependency.[20]Baum C et al found that about two thirds of antidepressants and tranquilizers dispensed in the United States are prescribed to women[21] Kornstein SG et al found that in patients with chronic depression, premenopausal women were significantly more likely to respond to sertraline (SSRI) than to imipramine (TCA)[22]. Jones EE et al studied that female patients tended to derive more benefit from therapy than male patients.[23] Ogrodniczuk J et al found that the gender of the patient, therapist, or their interaction has minimal impact on treatment outcome. However, when gender was compared with the form of therapy, the success of the therapy differs between men and women[24]. Ogrodniczuk J et al findings indicated that male patients improved more in interpretive therapy than in supportive therapy. Conversely, female patients improved more in supportive therapy than in interpretive therapy.[25] Stiver et al has suggested that the very factors involved in rearing men for independence may lead to an underdevelopment of affective awareness and expressiveness[26]. Allen JA et al found that, Male patients typically use

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coping strategies that involve suppression or denial of their emotions. Thus, interventions that enable them to examine their emotions may be more beneficial in facilitating change[27]

CONCLUSION

We conclude that gender differences exist across domains of reason for referral, psychiatric diagnosis and pharmacotherapy and psychotherapy profile. The findings of our study provide useful information to understand trends in gender and mental health. Further research is recommended in the arena of gender and mental health across consultation liaison psychiatry with better longitudinal study designs for gender specific service development models.

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