Regional update

Prevalence of dual diagnosis among clinic attending patients in a de-addiction centre of a tertiary care hospital

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ABSTRACT

Background & aims: Indian research on dual diagnosis is mostly on prevalence of co-morbidity in a particular type of substance use disorder or psychiatric disorder. They were not on overall prevalence of dual diagnosis in a clinical sample. The study aims to assess prevalence of dual diagnosis among first time visitors to a tertiary care deaddiction centre.
Methodology: The study participants were recruited using computer-generated random number table from 10th Apr 2013 to 28 June 2013 from a deaddiction centre in North India. Psychiatric diagnosis was done by qualified psychiatrist and confirmed by Mini International Neuropsychiatric Interview (M.I.N.I.).
Results: One seventy nine participants were recruited during the study period. The prevalence of dual diagnosis was 58 (32.4%). Affective disorder group 22 (12.3%) is the most common group followed by anxiety disorders group 20 (11.2%) and psychotic disorder group 9 (5.0%). Duration of use and dependence (in months) of alcohol, opioids, and nicotine was shorter and of cannabis and benzodiazepines was longer in dual diagnosis group compared to non dual diagnosis group.
Conclusions: This study screened the largest number of substance use disorders patients visiting a tertiary care centre in India using a sound methodology. The study reported that nearly one third of substance use disorder patients are cases of dual diagnosis. The prevalence reported in our study is lower than reported in some western hospital based and community based studies.

1. Introduction

Dual diagnosis is broadly defined as the concurrent existence in an individual of substance misuse and mental disorder (Franey and Quirk, 1996; Phillips et al., 2009). The nature of the relationship between these two conditions is complex and it does not merely denote the presence of two disorders. Substance use has been implicated in the genesis of psychiatric illnesses, a consequence of psychiatric illness as self medication or a co-occurrence with psychiatric illness due to common vulnerability factors (Mueser et al., 1998). Dual diagnosis patients are seen to have higher rates of morbidity and mortality (Franey and Quirk, 1996; Mueser et al., 1998; Rassool, 2002). The western research has reported the prevalence of dual diagnosis between 20–70% in clinical populations (Dube and Handa, 1971; Menezes et al., 1996; Miller et al., 1997; Weaver et al., 2003; Chiang et al., 2007; Katz et al., 2011; Mortlock et al., 2011; Hapangama et al., 2013).

The research on prevalence of dual diagnosis in India is sparse. There are few studies of dual diagnosis in general hospital set up and fewer still in de-addiction setup. Two general hospital based studies reported the prevalence of 76.6% and 92% among 30 and 100 alcohol dependent patients (Vohra et al., 2003; Singh et al., 2005). Another study on 139 first episode cases of psychosis, current use of any substance (except nicotine) was reported in 21.6% (Chand et al., 2014). Kishore et al. reported a prevalence of 60.5% dual diagnosis cases among 88 Alcohol dependent and opioid dependent subjects in de-addiction OPD (Kisore et al., 1994). A retrospective chart review of 5116 patients in our de-addiction centre reported a prevalence of 13.2% (Basu et al., 2013). As can be seen the main focuses in most studies were not overall prevalence of dual diagnosis in a clinical sample; rather the prevalence of the co-morbidity in a particular type of substance use disorder or psychiatric disorder. Prompted by this scarcity of data the current study is aimed at studying the prevalence, socio-demographic and clinical characteristics of dual diagnosis among first time visitors to a tertiary care deaddiction centre.

2. Materials and methods

The participants in this prevalence study were outpatients visiting the Drug De-addiction and Treatment Centre (DDTC) at the

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Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India. DDTC PGIMER caters to 20 inpatients and yearly average of 2000–2500 new outpatients. Among them complete file will be made for yearly average of 700–1000 patients. Thus around 50% of patients lost to follow-up after one or two follow-up. Thus most of the patients are managed as outpatients. In outpatient we follow two tier system, all the cases visiting for the first time will be evaluated by a qualified psychiatrist. He will make the diagnosis as per as per the International Classification of Diseases, 10th Revision [ICD-10], (World Health Organization, 1992) and initiate the treatment and monitor the cases in a structured format. During this time a Central Registration Number (CR no.) is given to the patients. After an average 2–3 follow-up the cases will be worked up in detail by the trainee psychiatrist in a prescribed structured format under the supervision of the qualified psychiatrist and will be reviewed by the consultant. During this time a DDTC No will be given to the patients.

The inclusion criteria were: those who are visiting the deaddiction centre for the first time with current or lifetime substance use/harmful use/dependence and age more than 18 years is included. The exclusion criteria were: refusal to give consent, subjects with psychiatric symptoms due to substance withdrawal or intoxication, or those having psychiatric symptoms and not using any substances. During the study period 516 patients visited the clinic for the first time. Subjects were selected using computer-generated random number table and selected subjects were approached for consent. Those patients who provided written informed consent were evaluated for inclusion and exclusion criteria. Socio-demographic and clinical profile of the consenting patients was recorded. In clinical profile specifically developed for the study substance use have been classified as main substance, second substance, third substance as per the priority given by the patient and family members for visiting our treatment centre for substance use disorders.

Psychiatric diagnosis was confirmed by two stage method. The psychiatric diagnosis (both substance use and psychiatric diagnosis) was made clinically by the qualified psychiatrist as ICD-10, and it was later confirmed by Mini International Neuropsychiatric Interview for DSM – IV [MINI] (Sheehan et al., 1998). Past dependence was established clinically by a qualified psychiatrist as per ICD-10.

The study protocol and the text of informed consent were approved by the Institute Ethical Review Board of the Institute. All the patients were recruited after obtaining a written informed consent.

2.1. Statistical analysis

Analysis was done by using SPSS-14 (Statistical Package for the Social Sciences, 2005, Chicago, IL, USA). Frequencies and percentages were computed for discontinuous socio-demographic and clinical variables. Mean and standard deviation with range for continuous variables were calculated. Chi-square test, *t*-test, and Fisher exact test were used for comparisons as per the requirement.

3. Results

3.1. Sample

The study was conducted from 10th Apr 2013 to 28 June 2013. During this period 516 patients visited as outpatient to our centre. Among them 200 patients were selected using computer-generated random number table. Among them 16 patients refused to consent, 2 patients did not use any substance, 3 patients were

below 18 yrs of age. Finally we had a sample of 179 patients who were included in study.

3.2. Prevalence of the dual diagnosis disorders (Table 1)

Among 179 patients interviewed 58 (32.4%) were diagnosed as cases of dual diagnosis. Majority of the cases had single co-morbid psychiatric diagnosis and only 14 (7.8%) had more than one diagnosis (excluding substance use disorder diagnosis). Predominant psychiatric diagnosis group was affective disorders (n = 22; 12.3%), followed by anxiety disorders (n = 20; 11.2%), and psychotic disorders (n = 9; 5.0%). Current Major depressive disorder (n = 8; 4.5%) is the single most common psychiatric disorder, followed by psychosis NOS (n = 6; 3.3%) and Generalized anxiety disorder (n = 5; 2.8%). Among 179 patients 10 patients (05.6%) had more than one psychiatric diagnosis (excluding suicidality) apart from substance use disorder.

Table 1
Prevalence of psychiatric diagnosis.

	Whole group N = 179
Co-morbid psychiatric illness	
Psychotic disorders	
Current	
Paranoid Schizophrenia F 20.0	02 (01.1%)
Persistent delusional disorder F 20.5	01 (00.6%)
Psychosis NOS F 29.0	04 (02.2%)
Lifetime	
Psychosis NOS F 29.0	02 (01.1%)
Total	09 (05.0%)
Affective disorders	
Moderate depressive disorder (MDD)	
Current	05 (02.8%)
With low suicidality	03 (01.7%)
Past	03 (01.7%)
Recurrent	02 (01.1%)
Bipolar affective disorder (BPAD)	
BPAD 1 current Mania	03 (01.7%)
BPAD 1 past	
Mania	01 (00.6%)
Depression	01 (00.6%)
BPAD NOS Past	01 (00.6%)
Combinations	
MDD current + generalised anxiety disorder + low suicidality	02 (01.1%)
MDD past + panic disorder current	01 (00.6%)
Total	22 (12.3%)
Anxiety disorders	
Generalised anxiety disorder (GAD) current	05 (02.8%)
Panic disorder (PD)	
Current	02 (01.1%)
Lifetime	01 (00.6%)
Agoraphobia current	02 (01.1%)
Obsessive Compulsive disorder	02 (01.1%)
Combinations	
Agoraphobia current + GAD current	01 (00.6%)
Agoraphobia current + PD lifetime	02 (01.1%)
Agoraphobia current + PD current	01 (00.6%)
PD current + GAD current	01 (00.6%)
PD lifetime + ASPD + low suicidality	01 (00.6%)
PD lifetime + Agoraphobia current + GAD current	01 (00.6%)
PD lifetime + GAD current + ASPD	01 (00.6%)
Total	20 (11.2%)
Personality disorder	
Antisocial Personality disorder	03 (01.7%)
Others	
Suicidality low	04 (02.2%)
Total	58 (32.4%)