



Letter to the Editor

Profile and outcome of dissociative disorders presenting as psychiatric emergencies to a tertiary hospital setting in India



Sir,

Dissociative disorders are not uncommon in India with reported inpatient and outpatient prevalence rates of 1.5 to 11.6 per 1000 and 1.5 to 15 respectively (Chaturvedi et al., 2010). However, emergency department General Hospital (GH) rates at 1/10000 have been reported, commonly mimicking neurologic symptoms. (Dula and DeNaples, 1995). Emergency presentations pose significant challenges, including time, resource constraints, high rates of misdiagnosis and hospital revisit rates (Stone et al., 2005; Merkler et al., 2016). Common presentations in hospital and community settings in India have been conversion disorders and possession syndromes whilst multiple personality disorders are rarely reported (Chaturvedi et al., 2010). Studies from India have also reported distinct presentations such as brief dissociative stupor and other atypical presentations (Saxena and Prasad, 1989) (Alexander et al., 1997). Given limited information on emergency-based presentations of dissociative disorders in India, this study explores the same at a large neuropsychiatry institute.

1. Methods

The study was conducted at the National Institute of Mental Health and Neurosciences, Bangalore, India (550 beds for Psychiatry) having a 20 bedded emergency psychiatric and acute care (EPAC) service. Patients who utilize EPAC services for the first time and are discharged from the service will be scheduled for a detailed evaluation (ICD-10 diagnosis confirmed by a consultant psychiatrist) in the out-patient clinic within 1–2 weeks. Charts of adult patients with dissociative disorder (ICD 10) presenting to EPAC between October 2015 and September 2017 were reviewed. The study was permitted by the institutional ethics committee.

2. Results

Of the 16,256 patients who presented to EPAC, 187 patients were diagnosed with dissociative disorder (proportion: 11.5 per 1000) having a mean age of 30.45 years (SD of 9.67) with three fourths being women. Slightly more than half came from urban areas (105; 56.14%) with 134 (71.6%) being married and nearly three fourths (137; 73.2%) only primary school educated. Dissociative motor disorders (31.6%), dissociative convulsions (23.5%) and mixed dissociative disorders (18.2%) formed major presentations amongst the diagnostic categories as illustrated in Table 1. Female preponderance was noted across all diagnostic categories with no significant difference in the proportions of various diagnostic categories between genders. Stressors were identified in 121 (64.7%) of patients, most common being interpersonal stressor (33.7%). Almost two thirds of patients had symptoms of less than one day duration. Three fourths of patients had no documented

comorbid illness. Commonest comorbid diagnosis being depressive disorder (21; 11.2%) and adjustment disorder (6; 3.1%). Cluster B and C traits were noted in 17 (9%) and 5 (2.7%) patients respectively. Self-harm risk was documented in 15 (8%) patients. CT scan of the brain was done in a third (34.8%) of patients. 80 (42.8%) patients were given injectable benzodiazepines and 63 (33.6%) were treated with oral benzodiazepines. 39 (20.9%) patients were not given any pharmacological treatment. Psychological interventions were (psychoeducation, reducing reinforcing behaviors, secondary gain) documented in 43 (23%) of the case records. Inpatient care was required for 23 (12.3%) patients. Whilst 95 (50.8%) patients did not have a subsequent follow up at the institute, two thirds, 61 (66.3%), of the 92 patients who did, underwent detailed evaluations on follow up. 38 (62.3%) of them had an unchanged diagnosis after detailed evaluation. Amongst the patients with a changed diagnosis, 7 were diagnosed to have mood disorders, 4 with psychosis, 2 with adjustment disorders and 1 each were diagnosed to have OCD and alcohol dependence syndrome. The remaining 7 (7.60%) had a neurological diagnosis. The revisit rate to emergency was (10%) over two-year period.

3. Discussion

Whilst, prevalence, age distribution, female preponderance noted compare to available literature in Indian non-emergency settings (Chaturvedi et al., 2010; Nandi et al., 2000; Deka et al., 2007; Nandi et al., 1992), findings of gender, prevalence differ from emergency settings in developed countries (Dula and DeNaples, 1995). The one case of dissociative amnesia and no cases of dissociative fugue, Ganser's syndrome or multiple personality disorder reaffirm previous cultural explanations (Somasundaram et al., 2008; Chaturvedi et al., 2010). Patients also did not present with dissociative anesthesia or sensory loss (including deafness and low vision) which were reported in GH emergencies (Dula and DeNaples, 1995), possibly because of their rarity and exclusive neuropsychiatric setting of our emergency. However, diagnostic profile of "Conversion disorders" in this study is consistent with the study from GH emergency in a developed country (Dula and DeNaples, 1995), indicating cultural factors may be less important in determining the diagnostic profile in emergency settings.

In a study that evaluated the utilization of emergency psychiatric services in a tertiary general hospital setting, it was reported that 43.5% of the patients had stress-related and somatoform disorders (Naskar et al., 2019). In an older study from a similar setting in Chandigarh, 34% patients had a diagnosis of hysteria (Kelkar et al., 1982). Another study from the same decade reported that 22.5% of the emergency referrals to psychiatry had hysterical fits (Bhatia et al., 1988). All of these studies are from a general hospital setting, whereas the current study is to our knowledge the first to report data from an emergency service in an exclusive neuropsychiatric setting. In addition, the

<https://doi.org/10.1016/j.ajp.2019.07.051>

Received 23 May 2019

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Table 1
Presentations of dissociative disorders in the psychiatric emergency.

| Diagnosis (ICD-10) | Number of patients (%) [Female, Male ^a] |
|-------------------------------------------------|-----------------------------------------------------|
| Dissociative amnesia (44.0) | 1 (0.53) [1 F, 0 M] |
| Dissociative fugue (44.1) | 0 (0) |
| Dissociative stupor (44.2) | 21 (11.23) [17 F, 4 M] |
| Trance and possession disorders (44.3) | 10 (5.35) [10 F, 0 M] |
| Dissociative motor disorders (44.4) | 59 (31.55) [46 F, 13 M] |
| Dissociative convulsions (44.5) | 44 (23.53) [34 F, 10 M] |
| Dissociative anesthesia and sensory loss (44.6) | 0 (0) |
| Mixed dissociative disorders (44.7) | 34 (13.9) [26 F, 8 M] |
| Other dissociative disorders (44.8) | 0 (0) |
| Dissociative disorders, unspecified (44.9) | 18 (9.63) [10 F, 8 M] |
| Total | (100) |

* No significant difference in the proportions of various diagnostic categories between males and females ($p = .164$).

existing studies have not reported the diagnostic breakup, profile and presentations amongst dissociative disorders.

The change in diagnosis from dissociative disorders in 37.7% of patients who underwent evaluation is considerably higher than previously reported (Stone et al., 2005), possibly because of the emergency study setting. Based on our study findings, it becomes important to carefully examine for mental and physical conditions comorbid or masquerading as dissociative disorders. One in two patients had past episodes of dissociation, attesting to the recurring nature of the condition.

Suicide risk assessment becomes pertinent since 8% of patients in this sample had self-harm risk. It is also recommended that CT brain be judiciously used. Emergency settings provide insufficient opportunities for psychological interventions.

The limitations of this report are those of a retrospective chart review and the setting precluding extensive evaluation and documentation.

Financial disclosure

None.

Declaration of Competing Interest

None.

All authors have made substantial contributions to all of the following: (1) the conception and design of the study, acquisition of data, analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content, (3) final approval of the version to be submitted.

Data Sharing Statement

Deidentified individual participant data will not be made available.

Acknowledgement

None.

References

- Alexander, P.J., Joseph, S., Das, A., 1997. Limited utility of ICD-10 and DSM-IV classification of dissociative and conversion disorders in India. *Acta Psychiatr. Scand.* 95, 177–182.
- Bhatia, M.S., Agrawal, P., Khastbir, U., Rai, S., Bhatia, A., Bohra, N., Malik, S.C., 1988. A study of emergency psychiatric referrals in a government hospital. *Indian J. Psychiatry* 30, 363–368.
- Chaturvedi, S.K., Desai, G., Shaligram, D., 2010. Dissociative disorders in a psychiatric institute in India – a selected review and patterns over a decade. *Int. J. Soc. Psychiatry* 56, 533–539. <https://doi.org/10.1177/0020764009347335>.
- Deka, K., Chaudhury, P.K., Bora, K., Kalita, P., 2007. A study of clinical correlates and socio-demographic profile in conversion disorder. *Indian J. Psychiatry* 49, 205. <https://doi.org/10.4103/0019-5545.37323>.
- Dula, D.J., DeNaples, L., 1995. Emergency department presentation of patients with conversion disorder. *Acad. Emerg. Med.* 2, 120–123.
- Kelkar, D.K., Chaturvedi, S.K., Malhotra, S., 1982. A study of emergency psychiatric referrals in a teaching general hospital. *Indian J. Psychiatry* 24, 366–369.
- Merkler, A.E., Parikh, N.S., Chaudhry, S., Chait, A., Allen, N.C., Navi, B.B., Kamel, H., 2016. Hospital revisit rate after a diagnosis of conversion disorder. *J. Neurol. Neurosurg. Psychiatry* 87, 363–366. <https://doi.org/10.1136/jnnp-2014-310181>.
- Nandi, D.N., Banerjee, G., Nandi, S., Nandi, P., 1992. Is hysteria on the wane? A community survey in West Bengal, India. *Br. J. Psychiatry* 160, 87–91.
- Nandi, D.N., Banerjee, G., Mukherjee, S.P., Ghosh, A., Nandi, P.S., Nandi, S., 2000. Psychiatric morbidity of a rural Indian community. Changes over a 20-year interval. *Br. J. Psychiatry* 176, 351–356.
- Naskar, S., Nath, K., Victor, R., Saxena, K., 2019. Utilization of emergency psychiatry service in a tertiary care centre in North Eastern India: a retrospective study. *Indian J. Psychol. Med.* 41, 167–172. https://doi.org/10.4103/IJPSYM.IJPSYM_55_18.
- Saxena, S., Prasad, K.V., 1989. DSM-III subclassification of dissociative disorders applied to psychiatric outpatients in India. *Am. J. Psychiatry* 146, 261–262. <https://doi.org/10.1176/ajp.146.2.261>.
- Somasundaram, D., Thivakaran, T., Bhugra, D., 2008. Possession states in Northern Sri Lanka. *Psychopathology* 41, 245–253. <https://doi.org/10.1159/000125558>.
- Stone, J., Smyth, R., Carson, A., Lewis, S., Prescott, R., Warlow, C., Sharpe, M., 2005. Systematic review of misdiagnosis of conversion symptoms and “hysteria”. *BMJ* 331, 989. <https://doi.org/10.1136/bmj.38628.466898.55>.

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