## Original Article

# CLINICAL PROFILE, TREATMENT RECEIVED, FOLLOW UP AND CURRENT STATUS OF INDIVIDUALS TREATED FOR DELUSIONAL DISORDER AT A TERTIARY CARE CENTRE

Megha A P<sup>1\*</sup>, James T Antony<sup>2</sup>, John Mathai P<sup>3</sup>, Saibunnisa Beevi K<sup>4</sup>, Praveenlal Kuttichira <sup>5</sup>

<sup>1</sup>Junior Resident, Department of Psychiatry, Jubilee Mission Medical College & Research Institute, Thrissur <sup>2</sup>Emeritus Professor Department of Psychiatry, Jubilee Mission Medical College & Research Institute, Thrissur <sup>3</sup>Professor Department of Psychiatry, Jubilee Mission Medical College & Research Institute, Thrissur <sup>4</sup>Professor & HOD Department of Psychiatry, Jubilee Mission Medical College & Research Institute, Thrissur <sup>5</sup>Principal & Professor Department of Psychiatry, Jubilee Mission Medical College & Research Institute, Thrissur \*Correspondence: meghapradip@gmail.com

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## ABSTRACT

Background: Delusional disorder presents with a stable and well-defined delusional system. Many are unwilling to accept that they have a mental disorder or that they require psychiatric treatment. The condition responds to treatment in most cases. This study aims to assess the clinical profile, treatment pattern and response to it, frequency of follow-up and current status of patients previously diagnosed as delusional disorder.

Method: The case records of all patients who had come to Psychiatry OPD for 3 years with a diagnosis of delusional disorder according to ICD-10 criteria were taken and data collected. 48 patients were enrolled in the study. The current status was assessed from relatives through telephone calls.

Results: The sample consisted more of males; the majority were married. The most common delusion was infidelity (72.9%) followed by persecution (22.9%). Co-morbidity was present in 43.8% of subjects. The best response was with risperidone. At follow up, all were reported to be doing a job or engaging in household work and the majority maintaining improvement. Eight had delusions and six were troublesome. Less than half of the responders were continuing their treatment.

Conclusion: Male preponderance and married status were noticeable. The delusion of infidelity was the most common. The delusional disorder has much co-morbidity. Non-compliance with treatment is common. But the level of functioning is found to be reasonably fair irrespective of the treatment status.

Keywords: clinical profile, current status, delusional disorder

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## INTRODUCTION

Delusional disorder (F297.1 of DSM 5 and F22 of ICD 10),<sup>1,2</sup> is a psychotic illness distinct from Schizophrenia, though it has superficial resemblances. It presents with a stable and welldefined delusional system, which is typically encapsulated within the personality, which retains many normal aspects unlike in schizophrenia where there is widespread personality disorganization.<sup>3</sup> Due to the nature of delusions, many patients deny the disease and refuse treatment. A positive response to treatment is observed in a high proportion of patients,<sup>3</sup> and many patients can maintain overtly normal activities.

Onset can be anytime from late adolescence to extreme old age, but usually restricted to the middle aged and elderly. The disease is equally distributed among both sexes, though higher incidence in females was reported.<sup>4</sup> Persecutory delusions were the most commonly observed. Indian studies also made a similar observation,<sup>5</sup> or reported delusions of infidelity as the most common.<sup>6</sup> A combination of organic brain disorders and/or alcohol abuse was observed in male subjects.7 High lifetime co-morbidity with affective disorders is reported.<sup>8</sup> Ten or more per cent of delusional disorder patients experienced significant degrees of mood disorder during recovery. Most patients remain diagnostically stable in the long term while approximately 10 per cent deteriorates into schizophrenia.<sup>3</sup> Some of those with an episodic course may prove to be bipolar illness later. Since 1980 pimozide was the drug of choice.<sup>5</sup> risperidone,<sup>9</sup> and clozapine<sup>10,11</sup> were reported to be beneficial. Indian authors reported good response have а to trifluoperazine, haloperidol, chlorpromazine, and electro convulsive therapy.<sup>5</sup>

Being a chronic illness the distress to the relatives especially the spouses is high; physical and verbal abuse occurs more frequently. It can be potentially dangerous as well and has been associated with violence, notably both suicide and homicide.<sup>12</sup>

Socio-demographic profiles, family history, clinical parameters, the effectiveness of antipsychotics and follow-up rates of delusional disorder patients were reported from different parts of India.<sup>5,6</sup> But literature search did not show any published research from Kerala and as such it is less well researched than schizophrenia. Due to this paucity of literature, the present study was undertaken.

#### **OBJECTIVES**

To study the clinical parameters like age of onset, the total duration of illness, family history; illness parameters like type of delusions, co-morbidity; type of antipsychotic received, response to it and the treatment adherence; follow up status and diagnostic stability and current status of patients with the delusional disorder.

#### MATERIAL AND METHODS

This was a retrospective and a cross sectional study conducted during April-July 2017. Register numbers of all patients diagnosed as delusional disorder according to the ICD-10,<sup>2</sup> were identified from the computerised register of the Medical Records Department (MRD) of Jubilee Mission Medical College and Research Institute, Thrissur. All the case records of three years for the period between 1<sup>st</sup> January 2014 and 31st December 2016 were retrieved and relevant details were gathered. All consecutive cases were included. The study received approval from the Institutional Ethics Committee (IEC Study Ref. No: 9/18/IEC/JMMC&RI). Following operational definitions were made;

1. Duration of illness was defined as the time between the onset of illness and the age at first consultation in our OPD.

2. The total duration of contact was the total duration for which the patient was followed up.

3. Treatment response was assessed for patients antipsychotics who received ≥ 300mg chlorpromazine equivalents for at least 12 weeks. Initial assessment of the patient in the OPD was done by the postgraduate resident after conducting a formal mental status examination which was then verified by the consultant psychiatrist. On further follow up the patients were assessed by the consultant psychiatrist. Treatment response in follow up was taken as good based on the consultant psychiatrist's recording in the case sheet as having an improvement in the clinical status and 50% and more reduction of symptoms, after conducting a mental status examination and/or sustained dose reduction. Treatment response was taken as poor if the patient has <50% reduction of symptoms and/or has no sustained dose reduction. Those who did not meet the above criteria were put under not sure group.

4. Follow-Up status was divided into regular, irregular and drop out. Those who kept >50% of their scheduled visits during their period of contact were considered to be regular. Those who kept <50% of such scheduled visits were classified as irregular. Those who did not report for follow-up even once or had less than two visits after initial consultation were categorised as dropouts.

The current status of the patients was assessed by the primary investigator using telephone call mostly to the spouses of the patients after getting oral informed consent. The telephone number is stored as part of the required data at the time of OP/Casualty registration. The assessment parameters included whether the patient was working/doing household activities, whether there was improvement in his/her clinical condition/not as per the spouse's subjective assessment, was the patient expressing delusions, whether the patient was creating any sort of issues in the family and was he/she currently taking treatment or has quit taking it.

Analyses of data were performed using the Statistical Package for Social Sciences (SPSS) version 20. Categorical variables were assessed using frequency and percentages. Mean and standard deviation or median and interquartile range (IQR) were calculated for continuous variables.

## RESULTS

2268 patients attended the OPD services of the Department of Psychiatry of our hospital during the disorder and out of them 40 case records were excluded from the study due to lack of all the information required for the study. Thus 48 case records were taken up for the study. Out of 48 patients, 26 (54.2%) were males and 22 (45.8%) were females; 44 (91.7%) were married and 3 (6.2%) were unmarried while 1(2.1%) was a widow. Details of the age of onset, age at first consultation and the total duration of illness are given in table 1. Twenty (41.7%) had positive family history while 28 (58.3%) had no family history of any related illness. Among patients the common delusions were infidelity and persecution with a frequency of 35 (72.9%) and 11(22.9%) respectively (table 2).

Details about the average number of visits and the total duration of contact in the hospital are given in Table 4. Of the total 48 patients, 15(31.2%) had regular follow up, 6 (12.5%) had irregular and 27 (56.2%) dropped out (Table 5). During the follow up 5 (10.4%) had to a change of diagnosis while 43 (89.6%) had diagnostic stability. Two had a change of diagnosis to bipolar affective disorder and three to schizophrenia. Out of 48 patients, 21 patients could not be contacted through a telephone call and hence could not be included in the study. Thus, the current status of 27 patients was obtained. The details are given in Table 6. All were reported to be doing a job or engaging in household work and the majority were maintaining improvement. Eight expressed delusions and six caused troubles in the family. Only less than half of responders were continuing their treatment.

TABLE 1. Age of onset and first	consultation and the tota	al duration of illness in	patients with Delusional disorder
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	n	Minimum	Maximum	Mean ± SD	Median (IQR)
Age of onset	48	18.00	54.00	37.04±9.41	36.50 (30.00, 44.00)
Age at first consultation	30	24.00	63.00	42.43±9.54	44.00 (36.00, 49.25)
Total duration of illness (years)	48	0.50	32.00	7.68±7.18	5.00 (2.25, 10.00)

#### TABLE 2. Illness profile

Variables	Frequency(n)	Percentage (%)
Delusions of infidelity	35	72.9
Delusions of persecution	11	22.9
Delusions of grandeur	2	4.2
Delusions of reference	1	2.1
Delusions of hypochondriasis	1	2.1

\*Others- amisulpride, aripiprazole, quetiapine, olanzapine, blonaserin

TABLE 3. Response to antipsychotic treatment in patients presenting with Delusional disorder (n=48)

		Number	Response			
			Good	Bad	Not sure	
	Risperidone	11(100%)	8(72.7%)	0(0%)	3(27.3%)	
Atypical	Clozapine	26(100%)	9(34.6%)	4(15.4%)	13(50.0%)	
	Others*	4(100%)	3(75%.0%)	0(0%)	1(25.5%)	
Typical	Trifluoperazine, chlorpromazine, haloperidol	7(100%)	3(42.9%)	2(28.6%)	2(28.6%)	
Any		48(100%)	23(47.9%)	6(12.5))	19(39.6%)	

**TABLE 4.** Treatment adherence (degree of contact with our hospital)

	Minimum	Maximum	Mean $\pm$ SD	Median (IQR)
Average number of visits	48 1.00	21.00	7.31±6.07	4.50 (2.25,12.00)
Total duration of contact in hospital (months)	48 0.50	53.00	9.68±10.92	3.25 (1.00,18.25)

TABLE 5. Number of patients according to follow up pattern and status of diagnosis at follow up

Variables		Frequency	Percentage
	Regular	15	31.2
Follow up status	Irregular	6	12.5
	Drop out	27	56.2
Change of	Yes	5	10.4
diagnosis	No	43	89.6

**Table 6.** Current status of patients

Variables (N=27)	Frequency (%)
Doing any job/ household activities	27 (100)
Improvement	23 (85.2)
Expressing delusions	8 (29.6)
Any issues in the family	6 (22.2)
Currently taking treatment	13 (48.1)

#### DISCUSSION

There was a male preponderance in our study. This may be following the general pattern of more male patients getting the benefit of inpatient care because of socio-cultural factors favouring it like male dominance in the family, male being earning member and head of household; getting the privilege of treatment is more for males. All earlier Indian studies mention about varying sex ratio in hospital and community settings which may be another explanation. There were contrary observations in other studies.<sup>14,15</sup>

There were reports that delusional disorder patients were married, self-supporting and working.<sup>5</sup> Our observation was also the same. Mean age of onset and the first presentation for treatment were similar to other studies.<sup>5,16</sup> There was a time lag of 5.39 years before treatment was Non-recognition sought. of abnormal behaviour as a symptom of illness may be a reason. Further studies are needed to explore this area to encourage early treatment. Marneros et al reported 23.3 % had a positive family history of psychiatric disorder;<sup>17</sup> whereas Sandeep et. al.'s study showed 35.2%.<sup>5</sup> In our study it was 41.7%. The reason for the difference is not explainable and needs specific exploration.

Sandeep et al,<sup>5</sup> reported persecutory delusions as the most common delusion whereas Kulkarni et al,<sup>6</sup> reported delusion of infidelity. Our study goes in line with the latter. Grandiose, hypochondriac and referential delusions were rare. A few subjects had more than one delusion but within the same delusional system. In males an association of infidelity delusions and comorbid alcohol dependence syndrome was observed. Evidence for the association with alcohol and substance use disorders was reported elsewhere also;<sup>3,4</sup> and in a meta-analysis by Munro et al.<sup>7</sup> Co-morbidity with other psychiatric conditions were high elsewhere,<sup>8,18</sup> but was comparably less in our sample. Unlike other reports our sample had alcohol use disorder as the most frequent co-morbidity. This is explainable based on the male preponderance in the study sample.

Clozapine and risperidone were the most commonly used antipsychotics. Risperidone had the best response among all the antipsychotics used. Earlier studies had shown a good response to antipsychotic treatments using trifluoperazine, haloperidol, chlorpromazine, and electroconvulsive therapy, <sup>19</sup> but a recent study showed risperidone is effective in persecutory delusions.<sup>20</sup>

More than half of patients dropped off from follow up. This is likely due to lack of insight or due to self-appreciated improvement. The diagnostic stability is established in this study too as in other reports.<sup>5,17</sup>

Approximately half of the patients were not on any treatment at the time of the study. Their compliance to treatment was poor in the long run. However, relatives reported improvement in about 85% of cases. Recovery rate, surprisingly high and fast was reported earlier also.<sup>3</sup> About one-third had delusions but all were doing some job or household activities, and most were not creating issues in the family. The current investigation supports the fact that they can return to a considerable degree of adequate intra psychic, interpersonal and occupational functioning.<sup>3</sup>

#### LIMITATIONS

Our sample size was small. It was a hospital-

based study limiting generalisation to the population. The study was retrospective and information gathering was limited to data available in case records. The current status was assessed only with a single phone call. No standard clinical examination was hence possible.

#### CONCLUSION

Our study showed male preponderance, the delusion of infidelity as the most common delusion and most of them were married. The delusional disorder has much co-morbidity. Non-compliance with the treatment must be addressed meticulously. But the level of functioning is found to be reasonably fair irrespective of the treatment status. Though the information gathering was through telephone call it was found to be working well.

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