

A PSYCHOSOCIAL STUDY OF DELUSIONAL PARASITOSIS

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SUMMARY

Forty eight patients of delusional parasitosis seen during a short span of five years were studied and underlying psychosocial factors were analysed. The findings revealed that elderly, married, and illiterate persons of rural area from lower socio-economic stratum were distinctly more affected. The incidence of the disease was greater during the months of May to August. Majority of them had abnormal personality traits and definite psychiatric illness was present in about one third of the patients. The psychosocial factors associated with the disorders are discussed.

Delusional parasitosis in which patients have an erroneous but unshakeable belief that their skin is infested by parasites (Gould and Gragg, 1966), is a uncommon disease (Lyell, 1983) and is usually monosymptomatic in nature. These patients have been diagnosed to be suffering from different psychiatric illnesses by different authors i. e. schizophrenia, depressive or involuntional melancholia (Linn, 1975), monosymptomatic hypochondriacal psychosis (Munro, 1978, 1980, 1982) and obsessional neurosis (Tullet, 1965). A few of these have been described to be having organic psychosis like pellagra (Aleshire, 1954) Vitamin B-12 deficiency (Pope, 1970), temporal lobe epilepsy and delerium tremens (Linn, 1953). Various psychosocial factors associated with this disease have been well identified in western countries. Females of middle age or older are commonly affected (Skott, 1978; Sheppard et al., 1986). There is higher frequency of non-marriage, separation, divorce (especially

among the men), below average reproduction rate in married patients, and problems in initiating and sustaining interpersonal relationship (Munro, 1980). The involvement of close family members is also a striking feature (Skott, 1978; Munro, 1980). Reports on this disease from India are strikingly lacking and there is no study on psychosocial aspect of this illness. The present authors observed a surprisingly large number of cases during a span of 5 years and studied the psychosocial aspects of this illness.

Material and Methods

The patients attending the psychiatric and dermatology clinics of the department of medicine, M. L. N. Medical College, Allahabad during, 1983-1988 were assessed. A complete medical, dermatological and psychiatric assessment was made in each case. Evidence of physical disease was specially looked for and all attempts were made to exclude any genuine infestation in every patient.

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Only those cases with an immutable major complaint of worms crawling under the skin or from body orifices in the absence of any parasitic infestation were included in the study. If there was doubt of organic disease, patients were dropped from the study. D. S. M. III criteria were used to identify the underlying psychiatric disorders in these patients. The socio-economic status scale (rural) of Pareek and Trivedi (1964) was used to identify the socio-economic status of the patients as majority of them belonged to the rural area.

Observations

Forty eight patients fulfilling the criteria of delusional parasitosis were taken up for the study. The socio-demographic characteristics of these patients appear in Table 1. The majority of the patients were over 50 years of age (31.3%). Male-Female ratio was 5:7. Most striking observation was that this illness was predominantly present in married, rural dwellers with per capita income less than Rs. 69 per month. Majority of the patients were Hindus (85.47%). The illness was predominantly present in farmers (39.6%) and labourers (16.6%) Ten of them were not engaged in any occupation because of old age. Out of 46 patients of rural area, 30 belonged to lower class and remaining 16 to lower middle class. Also the disease was distinctly more common in the illiterate (81.2%). Most of the patients had very low level of education.

The total duration of the illness varied from a few days to more than 3 years but the largest number of cases had been suffering from 4-12 months. Another striking observation was that the cases with onset of illness in the months of May to October (75%) were significantly greater than remaining six months (25%, Table-2).

TABLE I—Sociodemographic Characteristics

Characteristics	N	%
<i>Age (in years)</i>		
20-29	1	2.08
30-39	1	2.08
40-49	7	14.58
50-59	11	22.92
60-69	17	35.42
70 and above	11	22.92
<i>Sex</i>		
Male	20	41.7
Female	28	58.3
<i>Domicile</i>		
Rural	46	95.8
Urban	2	4.2
<i>Marital status</i>		
Single	1	2.0
Married	41	85.5
Others	6	12.5
<i>Per capita income (in Rs.)</i>		
Less than 30	26	54.2
30-69	21	43.8
70-149	1	2.0
<i>Religion</i>		
Hindu	41	85.4
Muslim	4	8.3
Others	3	6.3
<i>Educational status</i>		
Illiterate	39	81.2
Primary	6	12.5
Upto High School	3	6.3
<i>Occupation</i>		
Farmer	19	39.6
Labourer	8	16.7
House wife	8	16.7
Service (Peon, LDG)	3	6.2
Unemployed	10	20.8

History was suggestive of alcohol abuse in six male patients. However, they were not taking alcohol regularly.

Psychiatric assessment revealed obsessional personality traits in more than one third of the patients though surprisingly none of them ever had frank

TABLE 2—Duration and time of the onset of Delusional Parasitosis

Duration and Onset	Frequency	Percentage
<i>Duration of illness</i>		
3 months	8	16.6
4-12 months	23	48.1
1-3 years	10	20.8
3 years and above	7	14.6
<i>Time of onset</i>		
Jan. & Feb.	4	8.3
March & April	6	12.5
May & June	12	25.0
July & August	15	31.2
Sept. & Oct.	9	18.8
Nov. & Dec.	2	4.2

obsessive compulsive neurosis. Another third had hysterical personality traits (16.6%) while the remaining had paranoid (12.5%), cyclothymic (8.3%), intermittent explosive (6.5%) and passive aggressive (2.1%) personality traits. According to DSM III criteria, nineteen cases could be diagnosed as having psychiatric disorders i.e. major depression (N=10, 20.8%) hypochondriasis (N=6, 12.5%) and schizophrenia (N=3, 6.3%) (Table 3). Out of 39 patients of more than 50 years of age, 20 had dry skin and other nine had both dry and flaky skin. In patients below 50 years of age, these skin changes were not present.

Discussion

We had an unusually large number of cases within a short span of 5 years. The previous incidence quoted as varying from once in a life time to 3 cases in a year (Lyell, 1983). There is also a mention of an almost similar incidence of 50 patients in 5 years in the correspondence section of a reputed journal (Reilly and Batchelor, 1984).

TABLE 3—Personality traits and psychiatric disorders present in the patients of Delusional Parasitosis

Personality	N	%
<i>Personality Traits</i>		
<i>(A) Abnormal Traits</i>		
Intermittent and Explosive	3	6.3
Aggressive	1	2.1
Cyclothymic	4	8.3
Paranoid	6	12.5
Hysterical	8	16.6
Obsessional	18	37.5
<i>(B) Normal</i>	8	16.6
<i>Diagnostic category</i>		
Schizophrenia	3	6.3
Hypochondriasis	6	12.5
Depression	10	20.8
Primary MHP	29	64.4

Almost selective involvement of the elderly patients supports similar observation of other workers (Skott, 1975; Munro, 1980). The theory, that senescent sensory system together with a dry and flaky skin which pricks and itches more in the older age group, may contribute to the development of this abnormality is supported by the findings of this study.

According to Cameron (1974) a delusional system in MHP develops logically out of some misinterpretation of an actual event. Lyell (1983) has also stressed the possible role of a real infestation in triggering the illness. In this study, the predominant involvement of rural population of lower and lower-middle socio-economic class, who are more prone to skin manifestation owing to poor hygienic and living conditions and continuous exposure in field, favours the possibility of involvement of these factors in the initiation of this illness. This is further substantiated by the fact that almost 75% of

the cases presented to us had onset of illness in the months of May to October and even among these the maximum patients had onset of illness during July-August alone. At this time of the year the skin infections are most common in hot humid environment and hence may have some role to play in the initiation of this illness in predisposed persons. However, whether the triggering factor is a real infestation or only psychological impact of such a living condition or both, could not be established.

Majority of the patients had abnormal personality traits (83.4%) which is similar to those reported by Munro (1980) and Lyell (1983). It, thus, appears that abnormal personality traits in these individuals act as predisposing/precipitating factors for delusional parasitosis. A definite psychiatric illness was present only in 39.6% in the form of depression (20.8%), hypochondriasis (12.5%) and schizophrenia (6.3%). Hence the presentation of delusional parasitosis remained an independent prominent illness in the majority (60.4%). In Lyell's report only 23 out of 282 patients had psychosis.

The presence of delusional symptoms in the patients of psychiatric illness may be related to underlying psychiatric disorder and it is known as secondary MHP.

Other predisposing factors i. e. separation, divorce, non-marriage and strained interpersonal relationship highlighted by Munro (1980) were not observed in this study. The involvement of close family members as reported by Skott (1978) and Munro (1980) was also not observed. These variations may be related to cultural differences.

The results of present study, however, should be considered as preliminary since specific investigation (e. g. Blood sugar, EEG, etc.) were not done to rule out the presence of organic disease as they were difficult to carry out on out-door

basis. Secondly, a control group was not taken.

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