CHARACTERISTICS OF NON-PSYCHOTIC MORBIDITY IN A PRIMARY CARE POPULATION

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SUMMARY

The prevalence of non-psychotic ‘minor’ mental morbidity in primary care setting is high. They often go undetected due to several factors in the patient and the clinician. Studying personal, social and clinical characteristics of non-psychotic patients attending a general hospital outpatient department several factors could be identified which might be helpful in screening of such patients. The factors are sex (female), age (≥ 40 years), marital status (married/widowed), education (less than primary school), occupation (unskilled labour) presenting complaint (somatic nature of ≥ 3 months duration), presence of 4 or more somatic complaints lasting ≥ 3 months, and presence of dyspeptic symptoms.

The high prevalence of psychiatric morbidity in a primary care setting, like the general hospital, has been well recorded (Shepherd et al., 1966; Nikapota et al., 1981; Bagadia et al., 1985). Majority of this morbidity is of a non-psychotic nature, as the psychotic disorders constitute only 1 to 2% of them (Wig, 1984). Often by their somatic symptom presentation (Shepherd et al., 1966), these non-psychotic patients escape detection at the primary care level. Instead they receive a non-specific physical diagnosis and undergo futile physical investigations and treatment. This tendency on the part of the doctor to give a physical rather than a psychiatric diagnosis has been variously explained (Balint, 1964; Shepherd et al., 1966; Goldberg & Blackwell, 1970; Goldberg, 1982). This problem is more so for a primary care physician, as most of the patients attending the general clinic do have a true physical illness. Hence his task is to identify psychiatric patients from the physically ill and not from a healthy population. This is more difficult when a patient has both physical and psychiatric problems.

As any primary general care clinic, especially in a country like India, will be overcrowded, any method of early detection of the non-psychotic patient should be easily applicable in terms of time and effort.

Based on the knowledge that somatic symptoms are very common among the non-psychotic patients, two studies conducted earlier by the authors on a general clinic outpatient population of a general hospital revealed the following findings:

1. A somatic complaint (e.g., headache, tiredness, chest pain, sleeplessness, shortness of breath, giddiness and weakness) which lasted for a period of at least 3 months as the reason for seeking medical consultation (the ‘presenting complaint’) had a high specificity of 90% when applied for detecting a probable non-psychotic patient (Srinivasan & Suresh, 1990).

2. A score of 4 or more on a symptom check-list of 7 somatic symptoms (each lasting for at least 3 months), (see appendix I) had showed a high sensitivity (89%) and specificity (87%), in its ability to detect a non-psychotic case (Srinivasan and Suresh, 1989).

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The present study was conducted with aim to identify those clinical and socio-demographic characteristics which can be used to identify non-psychotic morbidity.

MATERIALS AND METHOD

The study centre is a newly established teaching general hospital located on the outskirts of the city of Madras with its patient population coming mainly from the suburban townships and the villages surrounding the city. The general outpatient section has the general medical and surgical units, and allied specialist services.

The study group consisted of 347 adult patients, newly registering at the general outpatient services, selected by systematic random sampling. One of the authors first interviewed the patients recording the basic details like the age, sex, marital status, education, occupation, residence and religion. Clinical information like the presenting complaint and the score on the 7 item non-specific symptom check-list (Appendix 1) were also noted. The other investigator conducted a detailed clinical psychiatric interview, blind to the details recorded earlier and made the psychiatric diagnosis using the ICD-9 (WHO, 1978). The patient then underwent thorough physical examination by the physician who was not aware of the psychiatric diagnosis and diagnosis of physical disorder, if any, was recorded.

Among the 347 patients, there were more females (N-193) than males (N-154), though this difference was not statistically significant. There were 69 cases (19.9%) who had purely a psychiatric disorder (Group P), and 160 patients (46.1%) who had only physical illness (Group P). There were 118 cases (34.0%) who had both psychiatric and physical illness combined (Group Pp). Thus on the whole the number of patients receiving a psychiatric diagnosis (Pw) was 186 (53.9%). Neurotic depression was the commonest diagnosis made (91 cases, 48.6%) followed by adjustment disorders (43 cases, 22.9%). There were 36 cases of anxiety neurosis, 1 case of hypochondriacal neurosis, 19 cases of psychalgia and 5 cases of alcoholism. There was only one case of psychosis (Schizophrenia) who was in the group Pp. This case was excluded from further analysis as the study was aimed at studying the characteristics of non-psychotic morbidity.

The psychiatric group was compared with the physically ill group regarding the sex, age, marital status, education, occupation, nature and duration of the presenting complaint, the score on the 7-item somatic symptom check-list and the nature of physical illness present (in group Pp.). The 7 symptoms to be scored on the somatic symptom check-list were found to be the ones most commonly occurring in non-psychotic patients when compared to the physically ill (Srinivasan & Suresh, 1989).

RESULTS

The Results are summarised in Tables I and II.

1. Sex: The psychiatric group as a whole (Group Pw) consisted more of females (N=193) than males (N=154), though this difference was not statistically significant. There were 69 cases (19.9%) who had purely a psychiatric disorder (Group P), and 160 patients (46.1%) who had only physical illness (Group P). There were 118 cases (34.0%) who had both psychiatric and physical illness combined (Group Pp). Thus on the whole the number of patients receiving a psychiatric diagnosis (Pw) was 186 (53.9%). Neurotic depression was the commonest diagnosis made (91 cases, 48.6%) followed by adjustment disorders (43 cases, 22.9%). There were 36 cases of anxiety neurosis, 1 case of hypochondriacal neurosis, 19 cases of psychalgia and 5 cases of alcoholism. There was only one case of psychosis (Schizophrenia) who was in the group Pp. This case was excluded from further analysis as the study was aimed at studying the characteristics of non-psychotic morbidity.

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2. Age: The mean age of the psychiatric group (Pw) was 36.3 yrs. and S.D. = 10.9, which was significantly different (z test value 4.11, p < .001) whereas males predominated in the physically ill group (M:F=101 & 59). The female preponderance in the psychiatric patients was seen in both the groups of pure psychiatric ill and the combined illness group (33 & 16 and 80 & 37 respectively).

When the two subgroups P and Pp were individually compared with the group p, it was seen that combined illness group was significantly older (Mean = 37.5 yrs. ± 13.6, z=3.69, p<.01) than the physically ill.
## Table 1. A comparison of characteristic of different patient groups

| Characteristic                                          | Psychiatric Group | Physically Ill Group |
|---------------------------------------------------------|-------------------|----------------------|
|                                                         | P (N=69)          | Pp (N=118)          | Pw (N=186) |
| Female Sex                                              | 53                | 80                   | 133        | 54 |
| Age 40 yrs                                               | 23                | 54                   | 77         | 36 |
| Married                                                 | 49                | 93                   | 142        | 101 |
| Widowed                                                 | 10/49             | 16/93                | 26/142     | 9/101 |
| Less than primary school                                 | 51                | 77                   | 128        | 56 |
| Unskilled Labour                                        | 32                | 47                   | 79         | 48 |
| Presenting Complaints:                                   |                   |                      |            |    |
| (i) Somatic of any duration                             | 53                | 44                   | 97         | 19 |
| (ii) Somatic of 3 months                                | 40                | 31                   | 71         | 6  |
| 4 or more somatic complaints of 3 months                | 58                | 100                  | 158        | 24 |

P — Pure psychiatric illness.  
Pp — Combined psychiatric and physical illness.  
Pw — All psychiatric cases.  
p — Physical illness.

## Table 2. Nature of physical illness in psychiatric patients—a comparison

| Type of Physical Illness | No. of cases & Order of Frequency |
|--------------------------|-----------------------------------|
|                          | Psychiatric Group (N=117)         | Physically ill Group (N=160) |
| Dyspeptic                | 24 (1)                            | 10 (7)                     |
| Dermatological           | 18 (2)                            | 20 (2)                     |
| Internal Medicine        | 15 (3)                            | 33 (1)                     |
| Orthopaedic              | 12 (4)                            | 11 (6)                     |
| Obstetric/Gynaecology    | 11 (5)                            | 8 (8)                      |
| E. N. T.                 | 11 (5)                            | 15 (3)                     |
| Ophthalmic               | 9 (6)                             | 12 (5)                     |
| General Surgical         | 6 (7)                             | 14 (4)                     |
| Respiratory Medicine     | 4 (8)                             | 15 (3)                     |
| Neurological             | 3 (9)                             | 3 (10)                     |
| Trauma                   | 2 (10)                            | 15 (3)                     |
| Dental                   | 2 (10)                            | 4 (9)                      |

ill, whereas the pure psychiatric group’s mean age (34.4 yrs. ± S.D. = 13.2) was not significantly older than the group p (z = 1.38). Grouping the patients as 40 years and above and below 40, the psychiatric group (Pw) had more of the older patients (101/186, z = 3.75). It was observed that there were significantly more patients of 40 years and above in the group Pp than group p (z = 4.13, p < .001). Such a difference was not seen between groups P and p. There were however no significant difference between the two subgroups of psychiatric patients, P and pp as regards age distribution.
3. **Marital Status**: There were significantly more people who were married in the psychiatric group (142/186) than the physically ill group (101/160, z = 2.73, p < .01). There were more widowed in the psychiatric group (26/142) than the group p (9/101, z = 2.05, p < .05), majority of them being females.

4. **Education**: The number of patients who had less than primary school education was significantly more (z = 6.33, p < .0001) in the psychiatric group as a whole (128/816) than the group p (56/160).

5. **Occupation**: Excluding the housewives from the analysis, it was observed that the psychiatric patients were more often engaged in unskilled labour (79/108) than the physically ill patients (48/113), being different at a level of significance of < .001 (z = 4.67). The physically ill group p were more often skilled workers, self-employed or in white-collar jobs.

6. **Residence and religion**: No difference between the psychiatry group Pw and the physically ill group p could be found on these two factors. 85% of the Pw-group and 90% of the p group were from the rural and semi-urban areas around the city. 95% were hindus, almost equally distributed between the two groups.

7. **Presenting complaint**: The main symptom for which medical consultation was being sought (the presenting complaint) was analysed for its nature and duration, giving the following findings:

   a. **Nature**: The presenting complaint of the psychiatric patients was more often somatic in nature than the group p patients (z = 7.69). The group P more often presented in such a manner, being significantly different from the group p (z = 9.65, p < .0001) as well as group Pp (z = 5.17, p < .001). Group Pp was significantly different from group p (z = 5.01, p < .001). On further examination it was seen than the proportion of females psychiatric patients presenting with such complaints is more than the males (39% and 35%).

   b. **Duration**: The above somatic presenting complaint lasting for 3 months or more, similarly differentiated the psychiatric and physically ill groups, with the pure psychiatric group most often presenting with such complaints (z values P vs. p: 9.33; Pp vs. p: 5.45; P vs. Pp: 4.27), it was seen that this longer duration of presenting complaint differentiated the psychiatric case with more specificity with only 4% of non cases having such presenting complaint. Once again the proportion of female psychiatric patients with the 3 month complaint was more than the males (0.44 vs 0.22, z = 2.56, p < .01).

8. **Scores on the somatic symptom check-list**: The psychiatric patient more often had 4 or more somatic symptoms of 3 month duration than physically ill patients (z = 13.01) A high proportion of both the psychiatric sub-groups scored 4 or more on the check-list (compared to the physically ill patients). This difference was highly significant (z values P vs. p: 9.94; Pp vs p: 11.5). There was however no significant difference between groups P and Pp (z = 0.26). Among the psychiatric patients, the proportion of females scoring high on the check-list was more than the males (89% vs 69%).

9. **Nature of physical illness present**: A comparison was made between the pure physically ill and those who had combined physical and psychiatric illnesses as to the nature of their physical problem. The problems were categorised according to the body system involved and were arranged in order of frequency (See Table II). The dyspeptic problems defined by Tally et al. (1985) quoted by Magni et al. (1987) as any pain, nausea, or discomfort referred to upper alimentary tract that is either intermittent or continuous being present for a month or more not precipitated by exertion and not
relieved within 5 minutes of rest, and with no jaundice, dysphagia or bleeding ranked the highest for the combined illness group, whereas it ranked the 7th for the pure physically ill. Dermatological problems were equally common in both the groups. Respiratory problems and trauma were more common in the physically ill (3rd) than the combined ill (8th and 10th respectively). Occurrence of other physical problems were not much different between the two groups.

DISCUSSION

Yager and Wells (1984) commented that it is not known how the primary care physician is able to identify and manage psychiatric morbidity, especially the 'minor' ones as they feel that this knowledge is important because such patients are frequent users of non-psychiatric medical care facilities. It is well known that primary care physicians like the general practitioners miss a significant proportion of these patients (Goldberg and Blackwell, 1970). This failure to recognise patients stems largely from inadequacies in the practitioner's interviewing skills (Goldberg and Huxley, 1980). A similar situation has been observed in the general hospitals with regard to physically ill patients who develop psychiatric problems. The pressure of work and the time a general practitioner could afford to devote to an individual consultation has been observed to influence the rate of reporting of psychiatric cases by them (Shepherd et al., 1966). Hence any clinical procedure which attempts to screen the probable cases with minor psychiatric morbidity has to be very simple and short and can be easily incorporated into the general routine enquiry conducted by the physician. Basic personal and social data like the age sex, education, occupation and clinical data like the complaints form a part of even the most simple clinical interview. This present study was conducted to find out whether such information could provide a means of identifying the probable psychiatric cases in a patient population attending a general hospital outpatient services.

The results of the study show that 7 of the personal, social and clinical data (sex, age, education, occupation, nature and duration of the presenting complaint, the number of somatic symptoms present, and the nature of physical illness present) differentiate the psychiatric group from others at a high level of significance. The predominance of females in the patient group was observed in other studies (Nikapota et al., 1981; de Jesus Mari, 1987; Sen, 1987). The other characteristics associated with the female patient, in contrast to the male patient, were a) widowhood, b) presenting complaint of a somatic nature which was present for more than months, and c) presence of 4 or more somatic symptoms of similar duration. The finding of a higher age group population among the patient group is seen to be differing from the findings of an younger age group patients in the samples of Bhatia et al. (1987) (21-30 Years) and Sen (1987) (15-35 Years). However, Nikapota et al. (1981) found that the psychiatric patient population attending a general hospital outpatient department in Sri Lanka to be older (Mean 34 yrs.) than the physically ill patients (Mean 28 yrs).

The presence of more of married persons in the patient group, observed also by Varma et al. (1972) and Nikapota et al. (1981), suggests that it could be one of the factors related to minor non-psychotic morbidity. But in this sample it is more likely that it is due to the higher mean age of the patient group.

In studying the socio-economic status of the study group, the exact income of the patients was not estimated for reasons of low reliability of such estimates especially in a highly illiterate labour population. There-
fore the level of education and the nature of occupation which are measures of socio-economic status and which can be more reliably elicited were studied. It was seen that more psychiatric patients were of low socio-economic status by being more often less educated and engaged in unskilled labour work. de Jesus Mari (1987) studying psychiatric morbidity in primary medical care clinics in a large city of a developing country found higher risk of minor psychiatric morbidity in patients of low family income.

The somatic nature of the presenting complaint and the presence of several somatic symptoms in non-psychotic patients is an oft-observed finding (Shepherd et al., 1966; Bagadia et al., 1985, 1986; Srinivasan and Suresh, 1989, 1990). This study goes further to say that these symptoms have to be of sufficient duration (3 months and more) as same symptoms of a shorter duration are found to be common among the physically ill and hence are less specific. It was seen that in those patients who had both psychiatric and physical illnesses, dyspepsia was the commonest physical problem encountered. Dyspepsia of unknown origin was associated with a higher prevalence of psychiatric diagnosis particularly anxiety disturbances in a patient group attending a gastroenterology clinic for essential dyspepsia (Magni et al., 1987).

In summary this study describes a typical case of non-psychotic morbidity, attending a general primary care clinic like the general hospital outpatient service as ; a female, married or widowed, 40 years and above in age who had undergone less than primary education and is engaged in unskilled labour. Her clinical presentation is one of a somatic complaint which had lasted more than 3 months and the presence of 4 or more somatic symptoms of similar duration. If there is a physical problem, it is more probably a dyspeptic problem.

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Appendix

Somatic Symptom Check-List

1. Generalised body aches and pains.
2. Tiresomeness & easy fatiguability.
3. Feeling giddy, dizzy.
4. Feeling of bodily weakness.
5. Inability to work as before.
6. Sleeplessness.
7. Forgetfulness.