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THE NONSPECIFIC SYMPTOM SCREENING METHOD A REPLICATION STUDY

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SUMMARY

Methods have been developed to screen non psychotic disorders in general health clinics based only on non-specific and somatic symptoms. One such method developed in India was applied in a heterogenous group of patients in a different clinical setting. The validity of nonspecific symptom screening method for non psychotic illness was replicated in this study. This method of screening is recommended for routine use in screening for minor psychiatric morbidity in medical and surgical clinics.

INTRODUCTION

One important area of Psychiatric research in family medicine or primary care Psychiatry is the identification of 'minor' nonpsychotic morbidity, which forms a significant proportion of patients attending non psychiatric clinical settings (Shepherd et al, 1966). It is now well established that somatic symptoms are a common manifestation of these disorders (Gater & Goldberg, 1991). When these symptoms are the main presenting complaints of a patient, the 'organically' oriented physician (Balint, 1964) is often misled into making a physical diagnosis and instituting investigations and medication, often with negative results.

Pointing out the practical difficulties of detecting non-psychotic illnesses in a busy primary care setting, Srinivasan and Suresh (1990, 1991) have shown that such cases can be detected easily by a method based upon the presence of certain types of nonspecific and somatic symptoms of at least 3 months duration; this avoided time consuming psychiatric screening for each and every case. This method was derived by comparing a low literate, rural, non-psychotic patient population with a physically ill group attending the outpatient clinic of a small rural based hospital with no inpatient facilities. They did not study the occurrence of these symptoms in psychotic patients, with the comment that these were not significant and that the specific psychotic symptoms predominated.

This study was carried out to assess whether a screening method as suggested by Srinivasan & Suresh (1990, 1991) could be applied in a city based general hospital outpatient clinic where the population is more urban based and literate. It was also planned to study the occurrence of nonspecific symptoms in functional psychoses and the degree to which symptoms differentiated the psychotic and non-psychotic patients.

MATERIALS & METHODS

The study was conducted in the medical and psychiatric out-patient departments of three postgraduate teaching hospitals in Madras city. One hundred and fifty newly registered outpatients, aged between 15 and 45 yrs, were selected by systematic sampling, 50 each from the psychotic, non-psychotic and physically ill categories. Psychiatric diagnosis was based on ICD-9 criteria (WHO, 1978) considering functional psychoses (three digit codes 295 to 298) and non-psychotic disorders (codes 300,308,309). The physically ill group consisted of those with only a physical disorder without any psychiatric co-morbidity. They were examined by a physician, who also examined the psychiatric group to exclude any physical illness. The Present State Examination (PSE, Wing et al, 1974) was used for purposes of psychiatric interview.

The study subjects were first examined to assess the nature and duration of presenting complaints. The eleven non-specific and somatic symptoms (not specifically indicative of a known diagnostic category) which should have been present during the preceding three months were specifically looked for (Appendix). These had been earlier identified to be the common symptoms presented by non-psychotic patients at their study centre (Srinivasan & Suresh, 1990). Secondly, the patients' score on the Primary care Psychiatric Questionnaire (PPQ, Srinivasan & Suresh, 1990), which consisted of the first seven of the eleven symptoms was measured blind to the clinical diagnosis of the patient (the 'blindness' may not have been complete as the interviewer was a professional). The validity coefficients of the nature and duration of the presenting complaints and the PPQ in differentiating the 3 groups of study subjects were measured.

RESULTS

Among the non psychotic patients, 47 had neurotic disorders and 3 had adjustments reaction. Twenty nine of the psychotic patients were diagnosed to have schizophrenia, fifteen had affective psychoses and six had paranoid and other non-organic psychosis. More than two thirds of each of the groups were below 30 years of age with no significant difference between the groups (means: psychotic 29.4 yrs; non psychotic 28.4 yrs; physical 27.6 yrs). There were nearly equal number of males and females in the psychotic and non-psychotic groups (52% & 48%), whereas males were more in the physically ill group (74%). Illiteracy was present in 34% of the psychotic, 42% of the non-psychotic and 44% of the physically ill; more than 70% from each group were from urban areas. The majority (84% to 88%) of each group were Hindus.

The presentation of one of the eleven symptoms as the main presenting complaint was seen only in the non-

psychotic group, among whom 42 (84%) came to the outpatient clinic with such a complaint. All the others had complaints which were considered to be specifically physical or psychiatric in nature. The validity of a method which considers a non-specific and somatic symptom as a presenting complaint is high [Specificity (SP): 100%; Sensitivity (SN): 84%; Positive Predictive Value (PPV): 100% and Negative Predictive Value (NPV): 93%] when it is used to differentiate non psychotic from the psychotic and the physically ill. The validity described above is irrespective of the duration of the presenting complaint.

None of the physically ill scored on any of the items of the PPQ. The validity of using PPQ in differentiating non-psychotics from the physically ill was high at all cut off scores (Table). The specificity and PPV were 100% at all cut off points. The sensitivity and NPV of 92% and 93% at a cut off score of 1 fell to 26% and 58% at a cut off score of 7. At a cut off of 2, the misclassification was minimal (4%) with good predictive values (PPV 100%, NPV: 93%).

Comparing the non psychotic with the psychotic group on the PPQ, the frequency of occurrence of all seven nonspecific symptoms was significantly high (at p values less than 0.01) in the non-psychotic group, except for the complaint of sleeplessness. On measuring the validity of PPQ-7 in differentiating non psychotics from psychotics, the coefficients varied with the cut-off point used, showing ideal values at a cut off point of 3 (SP: 60%, SN: 88%, PPV: 69%, NPV: 83%). The nonspecific symptom method

VALIDITY OF PPQ

Clinical groups	Cut off Score	Specificity (%)	Sensitivity (%)	PPV (%)	NPV (%)	Mis classification (%)
Non-psychotic vs physical	1	100	92	100	93	4
	2	100	92	100	93	4
	7	100	26	100	58	37
Non-psychotic vs Psychotic	1	40	92	61	83	17
	3	60	88	69	83	13
	7	88	26	68	54	22

PPQ - Primary Care Psychiatric Questionnaire; PPV - Positive Predictive Value; NPV - Negative Predictive Value

was highly sensitive for non psychotic disorders at a low cut off score of 1 or 2 (92%) whereas it was highly specific in excluding psychotic disorders at a high cut off score of 7 (88%).

DISCUSSION

These findings reiterate the point that the presence of a number of certain nonspecific and somatic symptoms and sufficient duration could help in identifying non-psychotic morbidity in a heterogenous patient population with different socio-demographic characteristics. It can thus be assumed that a method of screening non-psychotic morbidity using nonspecific and somatic symptoms has validity. Though nonspecific symptoms were seen to occur in psychoses, they were never as frequent as in the non-psychotic disorders.

In view of the commonness of nonpsychotic morbidity in the general population, especially in patients in primary health care settings who undergo expensive physical investigations and treatment (Kellner, 1990), several screening questionnaires towards this purpose have been evolved. Some of the well known instruments are the General Health Questionnaire (GHQ: Goldberg, 1972) and Self Report Questionnaire (SRQ: Harding et al, 1980). Questionnaires like these tap the presence of both somatic and specific psychiatric symptoms, and it has been found that nonspecific and somatic symptoms in these instruments differentiate between cases and noncases to a higher degree than the specific psychiatric symptoms (Sen, 1987). In addition, the length of the available screening instruments preclude their routine use in an overcrowded primary care facility.

Since nonspecific and somatic symptoms are easily and more commonly reported by the nonpsychotic patient and are easily queried and identified by the physician, a screening based on purely non-specific symptoms could well be practically viable (Srinivasan & Suresh, 1991). The Bradford Somatic Inventory (BSI, Mumford et al, 1991) is one such instrument, identifying cases based only upon the somatic symptoms. The 7-item PPQ retested here and its modification - the nonspecific symptom screening method containing only 6 items described by Srinivasan & Suresh (1991) are shorter and comparable to methods of screening like the BSI (Kirmayer, 1992).

This method of identifying 'silent' psychiatric morbidity by enquiring only about nonspecific and somatic symptoms could be of help in screening patients with chronic physical illnesses such as diabetics, hypertensive and cancer patients. A direct enquiry into the presence of psychiatric problems such as anxiety and depression might make these patients defensive and deny the problems; this makes it difficult for the physician as well, who is usually not well oriented towards handling emotional issues during routine clinical examinations (Katon et al, 1984). It's use by lay workers like hospital aides and primary care workers would be simple and easy as enquiry into somatic symptoms does not require as much training as identifying emotional symptoms. Further clinical trials such as those suggested above need to be done to demonstrate wider applicability of the nonspecific somatic symptom screening method.

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