PSYCHIATRIC MORBIDITY IN GENERAL PRACTICE—A PRELIMINARY REPORT[1]

S. KRISHNA MURTHY[2], M.B.B.S.

C. SHAMASUNDAR[3], M.B.B.S., M.R.C.Psych., D.P.M.

OM PRAKASH[4], M.B.B.S., M.D., DABIM.

N. PRABHAKAR[5], M.B.B.S.

SUMMARY

No study of psychiatric morbidity in general practices is reported in India. A three phase study of psychiatric morbidity in General practice is nearing completion in a group general practice in Bangalore. This preliminary report covering the available data from the first phase indicates a psychiatric morbidity of about 36% in general practice.

It is a common enough knowledge of most psychiatrists in India, that a considerable proportion of patients attending general medical services have treatable psychiatric conditions.

So far no report is available about the psychiatric morbidity in general practice in India, whereas many such reports are available in the west. The notable among them, Kessel (1970) and Shepherd *et al.* (1966) report 14% and 35% respectively. Kessel used the general practitioner's (G.P's) assessment on point scale of conspicuous psychiatric morbidity (C.P.M.) for his study, whereas Shepherd *et al.* used psychiatric section of the C.M.I. for their study. During his study to develop a survey questionnaire to identify psychiatric illness, among 200 patients of general practice, Goldberg (1972) identified 89 true psychiatric cases, i.e. 44%.

In March 1977 prior to the launching of a pilot training programme for GPs in psychiatry, the GPs in Malleswaram area of Bangalore were asked by a questionnaire what percentage of their clients have a psychiatric disorder. Of the 52 responders 65% reported "less than 10%", and another 24% reported "less than 20%".

In October 1979, among 30 GPs who registered for a orientation course in psychiatry 76% reported having identified less than 5 psychiatric patients in the previous month. On personal enquiry, it was found that they had no difficulty in identifying grossly psychotic patients, and those patients who themselves reported as having pscyhological problems. Otherwise they used the following criteria to identify a psychiatric patient :—

(a) More chronic complaints

(b) Resistance of symptoms to conventional treatment

(c) Greater number of previous specialist consultations.

While this state of affairs reflect on the inadequacy of undergraduate training in psychiatry, it also implies that a considerable proportion of psychiatric patients attending a GP do not get identified and appropriately managed. There is thus an urgent need to more accurately estimate the psychiatric morbidity in general practice. Such figures when published may also serve to motivate the GPs and the psychiatrists alike to undertake adequate measures to deal effectively with this problem.

An investigation to study the psychiatric

morbidity in general practice was started in Bangalore in May 1980. The investigation is still in progress.

METHODOLOGY

Study is being conducted in a group general practice consisting of three doctors, one of whom is a medical specialist. All three of them had regularly attended the once a month 2 years' seminars on psychiatry for GPs, conducted in 1977-78. An average of 80 patients per day attended this practice. Availability of 3 doctors facilitated this study as they were able to use the tools of study themselves amidst a busy practice.

Two tools are used for this study. One of them is the 12 item short version of Goldberg's General Health Questionnaire for identifying psychiatric morbidity. A vernacular version of the questionnaire was prepared after a few repeated trial administrations to ensure that appropriate meaning is conveyed. Though the questionnaire was originally designed by Goldberg for self-administration, in this study it was administered by the GP to the patient by asking the question, explaining the question where necessary, offering four degrees of possible answer, and recording the patient's answer. This became necessary as nearly one third of the clinic patients were illiterate. A psychiatrist sat through the administration of the questionnaire to 5 random patients and satisfied himself that the answers were not being suggested to the patient, and that they were being recorded correctly.

The second tool is the Indian Psychiatric Survey schedule (IPSS) for validating the Goldberg scores. The IPSS was developed by Kapur et al. (1974) and was successfully used in his Kota population survey (Carstairs and Kapur, 1976). It is available in vernacular also, and it is designed to be used even by trained non-professionals. It is also capable of yielding a diagnosis. The GPs were taught how to administer the IPSS. The psychiatrist sat through a random of 3 such administrations and satisfied himself that the administrations were done correctly. The GPs' assessment of health-illness status and of the diagnosis was in agreement with that of the psychiatrist.

Every tenth patient attending the clinic was administered the Goldberg questionnaire with patient's consent after briefly explaining about the survey (please see note below). Such patients will for convenience be called Goldberg-subjects. Every tenth Goldberg-subject was administered the IPSS by another GP, who did not know the patient's Goldberg score. Patient's consent after a brief explanation was always obtained.

This study is divided into three phases of 300 Goldberg-subjects each for convenience. Collection of some socio-demographic data like age, sex, occupation are common to all 3 phases. The first phase was devoted mainly for the investigators to become familiar with the tools and methodology. In the second phase additional data about the details of presenting symptoms were collected. The first two phases are now complete. The third phase that has now begun is devoted to the collection of data about the identified psychiatric patient's behavioural response pattern to :—

(a) the feed-back information from the GP that he seems to have psychiatric problems.

(b) offer of psychiatric treatment either by the GP himself or by the psychia-

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trist according to the patient's wish.

The analysis of the results of the first phase are available and will be presented.

RESULTS AND DISCUSSION

Administration of the Goldberg's 12 item questionnaire including the initial explanation took 3 to 6 minutes. The IPSS took an average of 20 minutes. Of the 300 prospective Goldberg-subjects *all* co-operated and undertook the questionnaire. Of the 30 prospective IPSS subjects, one subject who had scored 5 out of 12 on Goldberg's refused to take the IPSS—adminis-tration ; and the other who had scored zero on Goldberg was accidently missed out from IPSS administration in the rush hours of the clinic.

The sample of 300 Goldberg subjects representing 3000 consecutive clinic popu-lation consisted of 182 (60.66%) males and 118 (39.34%) females. There was *no* identifiable pattern in age distribution (Table I).

TABLE 1—*Age and sex distribution of the sample (Goldberg subjects)*

Age (in years)	Males (N=182)	Females (N=118)	Total (N=300)
25 or less	43 (23.6)	36 (30.5)	79 (26.3)
26-35	49 (26.9)	34 (28.8)	83 (27.7)
36-45	40 (22.0)	18 (15.3)	58 (19.3)
46 or over	50 (27.5)	30 (25.4)	80 (26.7)

Figures in parenthesis indicate percentages
x^2=3.17, d.f.=3, N.S.

Age, sex, or occupation did not corre-late with Goldberg score, irrespective of whether 1/2 or 6/7 is used as an arbitrary cut-off score. As an example Goldberg

score-ranges for the two sexes is shown in Table II.

TABLE II—*Relation between sex and the Gold-berg score for two different cut-off score values (No statistical significance for both)*

Goldberg score range	Males (N=182)	Females (N=118)	Total (N=300)
A. 1/2 as the cut-off score. 0-1	104 (57.1)	65 (55.1)	169 (56.3)
2-12	78 (42.8)	53 (44.9)	131 (43.7)
B. 6/7 as the cut-off score 0-6	168 (92.3)	105 (88.9)	273 (91.0)
7-12	14 (7.7)	13 (11.1)	27 (9.0)

Figures in parenthesis indicate percentage.

Goldberg had found that for his 12 item questionnaire a cut-off score of 1/2 discriminated the normals and psychiatric patients with a misclassification rate of only 14.5%. That is, the assumption that those scoring one or zero are normals, and those scoring 2 or more are psychiatrically ill will be correct for 85.5% of the subjects so classified.

Thus, if we adopt 1/2 as the cut-off score for our first phase subjects, 43.6% of them are psychiatrically ill with a possi-bility of 14.5% error. This still yields a high corrected figure of 36.1% psychiatric morbidity in general practice.

Table III shows the degree of com-parison between Goldberg scores and IPSS assessment. The GPs and the psychiatrist independently assessed the IPSS protocol to determine the health-illness status and the diagnosis. There was complete agree-ment for all the 28 IPSS subjects. It is seen that *only one* "normal" subject scored 3 on Goldberg ; *none* of the "ill" subjects scored zero ; and *only one* "ill" subject, a patient with anxiety state scored one on Goldberg. This suggests that the cut-off

TABLE III—*Goldberg score and IPSS assessment for 28 IPSS subjects*

Goldberg score	IPSS assessment (N=28)			
	Normals (N=18)	Anx. state (N=3)	Neu. Dep. (N=6)	Para. schizo. (N=1)
0	12	..	..	..
1	5	1*	..	..
2	..	1	..	..
3	1*	1	1	..
4 and above	..	..	5	1

*Indicates "error" or misclassification by Goldberg scores.

score of 1/2 yields a mis-calculation rate of only 10% or less, though the figures availabe now are too small for statistical verification.

It was found that of the total of 12 Goldberg's questions, certain questions are more likely to be answered by high scorers than low scorers. This is shown in Table IV. It can be seen that certain questions 5, 7, 8, 9 and 12 appear as better discriminators between those who score 1 and those who score 2 or more, especially questions 8, 9 and 12. Thus it might eventually become possible for the 'lay' GPs to quickly identify the probable psychiatric cases with the help of a set of 4 to 5 questions.

TABLE IV—*Percentage of subjects positivly answering the different Goldberg questions. Arranged in decreasing order of chi-square value. All the questions have significance level of less than 0.001 (df=2).*

Question No.	Percentage of subjects			
	Scoring 1 (N=37)	Scoring 2-6 (N=104)	Scoring 7-12 (N=27)	x^2
12	2.7	70.2	96.3	81.75
9	10.8	78.8	92.6	81.01
8	0.0	6.7	66.7	74.22
7	2.7	27.9	81.5	52.47
5	32.4	76.9	85.2	46.40
4	5.4	11.6	55.5	38.30
10	0.0	14.4	51.8	34.45
3	0.0	11.5	48.1	34.23
11	2.7	15.4	51.8	30.29
6	8.1	18.3	59.3	30.28
1	8.1	23.1	63.0	30.14
2	27.0	44.2	66.7	17.64

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