

The prevalence of psychiatric disorders at a primary care clinic in Soweto, Johannesburg

R. G. M. THOM, R. M. ZWI, S. G. REINACH

Abstract A pilot study to assess the prevalence of psychiatric disorders in a primary care clinic in Soweto was carried out at the Zola Community Health Centre in May 1991. Interviews were carried out by trained primary care clinic staff. The findings were reviewed and analysed by the authors. The prevalence of psychiatric disorders was found to be 14,38%. Methodological problems are listed and the results are discussed.

S Afr Med J 1993; 83: 653-655.

Many research studies have shown that psychiatrists treat about 5 - 10% of all people with psychiatric disorders.¹ These are mostly those patients with major disorders such as schizophrenia, major mood disorders and organic mental disorders. The remaining 90 - 95% have minor psychiatric disorders such as anxiety and depressive disorders and, if they present to health services at all, they present to general practitioners (GPs) or other primary care (PC) workers. A number of other studies have shown that 10 - 20% of patients in PC settings have diagnosable psychiatric disorders.^{2,3} In addition, it would appear that in many of these patients the psychiatric diagnosis is missed by the PC worker.^{2,5} Many of these conditions are treatable, and if left undetected result in inappropriate treatment, frequent consultations and considerable expense to the patient and the health service. In view of

the shortage of skilled mental health workers in South Africa, we felt this issue merited closer examination.

The aim of our study was to assess the prevalence of psychiatric disorders in a PC clinic in Soweto, Johannesburg and to determine how effective the clinic staff were in detecting such disorders.

Subjects and methods

The study was modelled on the World Health Organisation Collaborative Study on the extension of mental health care into PC.⁴ The same questionnaires were used, i.e. the Self-Reporting Questionnaire (SRQ) and the screening version of the Present State Examination (PSE). These have been standardised and validated in previous multinational studies.^{2,4} The SRQ is a 20-point questionnaire for the assessment of whether anxiety and depression are present. There is also an additional 5-point questionnaire which asks questions that probe for psychotic symptoms. It is a screening questionnaire. If patients score above a certain cut-off point on the SRQ they are referred for a more detailed and structured psychiatric interview to assess mental status. For this, the screening version of the PSE was used.⁶

The study population comprised patients presenting at the Zola Community Health Care Centre on 20 consecutive working days (excluding Saturdays) in May 1991. Zola Clinic is one of the busiest clinics in Soweto and is situated in a socio-economically deprived area. Our study was based in the general polyclinic. This is run mainly by trained nursing staff called primary health care nurses (PHCNs), all of whom have received post-basic training in the diagnosis and treatment of physical illness. Patients they see who have complex conditions are referred to the few GPs who also work in the clinic.

Every 10th patient between the ages of 16 and 60 years who presented at the clinic on the 20 days of the study was asked to participate in the study and, if agreeable, was interviewed with the SRQ before their consultation with the clinic staff. Basic demographic data were

Department of Psychiatry, University of the Witwatersrand, Johannesburg

R. G. M. THOM, M.B. CH.B., D.C.H., F.F. PSYCH.

R. M. ZWI, M.B. B.CH., M.MED. (PSYCH.)

Institute for Biostatistics of the South African Medical Research Council, Pretoria

S. G. REINACH, M.SC., M.A., D.SC. (AGRIC.)

collected on each patient participating in the study. A total of 15 patients per day was interviewed. Patients scoring 7 or more in this interview or who were found to have a positive psychotic symptom, were referred for a full mental status examination with the PSE. Research workers administered these questionnaires. They were all staff members employed in the Soweto Community Health Centres. There were two PHCNs trained to administer and score the SRQ; one psychiatrically-trained nursing tutor (also a PHCN) and a GP were trained to administer the PSE.⁶ Considerable care was taken with translation of the SRQ into the common locally spoken languages. The interviews were supervised by the first two authors during the first few days of the study and twice a week thereafter, to try to ensure consistency in the procedures.

The total sample was 299. In terms of time and resources available, this was a small enough sample to handle. The sample size was adequate, so that if the prevalence of disorder was 15%, a 95% confidence interval would range from 10,8% to 19,2% around the prevalence.

The cut-off score of 7 or more on the SRQ was determined by means of tests for the highest sensitivity and specificity for various cut-off points on a pilot group of people with known psychiatric disorders and normal controls. This was done by the first two authors before starting data collection at Zola.^{2,5}

In addition, 11 patients (5%) who scored below the cut-off on the SRQ were referred for a PSE to assess the reliability of the cut-off point on the SRQ.^{2,5}

Results

The total number of patients seen at Zola Clinic over the 20 days of our study was 6 530 (all ages), and we interviewed 299 patients between 16 and 60 years of age (4,6% of the total).

Of the 299 patients screened, 68 (22,7%) scored enough on the SRQ to warrant a PSE. Of these 68, 16 did not participate further in the study. Therefore 52 patients were interviewed with the PSE.

It is assumed that the 16 patients who failed to submit themselves to the PSE did so for a number of reasons. Firstly, patients wait hours in long queues to be seen by a PC worker. The PSE takes approximately 1 hour to administer, and despite reassurance that patients would be returned to their original places in the queues, patients were anxious that their already time-consuming wait would be extended. Secondly, as only one team of interviewers was administering the PSE, it sometimes happened that patients would have to wait for their interview. Some promised to return the following day and did, but many of the 16 did not. Others simply refused to wait or to return later.

There was no correlation between age or level of education and the presence or absence of a psychiatric disorder.

The female/male ratio of the sample screened was 2,8:1 (Fig. 1). The female/male ratio in those who scored positively on the SRQ was 5,18:1. Compared to the sex ratio of the total sample screened, this was a highly significant result ($P = 0,00293$). The female/male ratio in those found to have a psychiatric disorder was 4,38:1 ($P = 1$).

The diagnoses made by the first 2 authors on reviewing the completed questionnaires are shown in Fig. 2.

The total percentage of psychiatric disorders in the sample was 43/299 (14,38%). We assumed here, however, that all 16 patients who did not have a PSE were normal. It is therefore possible that the above prevalence rate for psychiatric disorders in this clinic is an underestimate.

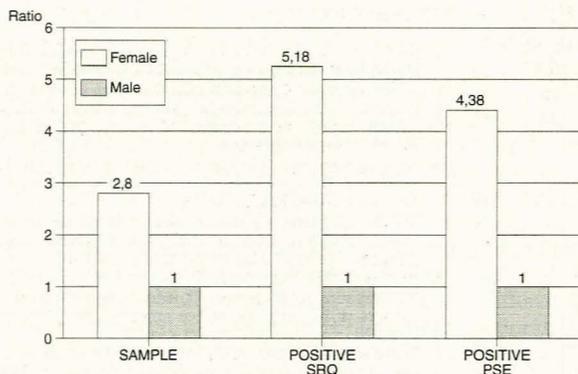


FIG. 1.
 Female/male ratio in sample ($N = 299$); positive SRQ ($N = 68$) and positive PSE ($N = 52$).

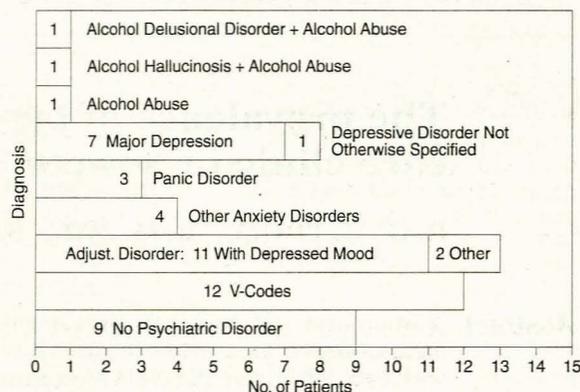


FIG. 2.
 Number of patients in various diagnostic groups.

None of the 11 patients who scored less than 7 on the SRQ and were also referred for a PSE had a psychiatric disorder. Our results show a statistically significant relationship between a cut-off score of 7 or more on the SRQ and the presence of a psychiatric disorder. This, however, requires further discussion regarding the 'psychotic' questions on the SRQ (see Discussion).

Of the patients screened by our research workers, only 3 were found to have a psychiatric problem by clinic staff, i.e. 7%. This implies that 93% of the patients diagnosed by us as having a psychiatric disorder were missed by the clinic staff. Of the total 6 530 patients seen in the clinic, 35 (0,5%) seen by the nursing staff were found to have 'psychiatric' problems (this includes patients outside the age range we were concerned with). Most of these problems were diagnosed as 'stress'. None of the patients was referred for psychiatric evaluation and it is not known how they were handled by the clinic staff.

Discussion

This study revealed that there is a significant incidence of undiagnosed psychiatric disorder in patients attending the polyclinic of the Zola Community Health Centre. This figure is in keeping with studies done in similar settings in other developing countries/communities.⁷⁻⁹ The types of disorder found also match those found in other studies carried out in general practice/PC settings, in that 40 patients (77%) who had a PSE had so-called 'minor psychiatric disorders' (anxiety, depressive disorders and V-codes).^{2,3,7,9}

Of the patients who had a PSE, 12 (23%) had a V-code diagnosis and 28 (54%) had either an anxiety or depressive disorder (adjustment disorders were included in this group). Only 2 (4%) were psychotic and both these patients admitted alcohol abuse. One other patient admitted alcohol abuse but had no other psychiatric diagnosis. (Only 3 patients (6%) interviewed admitted substance abuse.) Of the patients who had a PSE, 9 (17%) had no psychiatric disorder.

Methodological problems encountered in this study include the following:

1. How to differentiate between a 'case' of psychiatric disorder and a normal response to stress. The week we began the study, Soweto erupted in an unpredicted wave of violence and many people were killed. The security forces were present in the township in large numbers and the atmosphere was very tense. This created two problems: (i) the increased tension could have influenced the types of disorders and numbers of patients presenting at the clinic; and (ii) it was necessary to determine what was a pathological response to a severe psychosocial stressor, e.g. the fear of being killed when this was a very real possibility. We defined a 'case' as a person who met DSM-III-R criteria for a psychiatric disorder or who required a psychiatric/psychological, as opposed to a social work, intervention.

2. The use of non-psychiatrically trained health care workers in epidemiological psychiatric research. Lack of experience in the eliciting and interpreting of psychiatric symptoms is a problem. The first two authors trained 2 PHCNs to administer and score the SRQ over three 2-hour sessions. As mentioned previously, considerable care was taken in the translation of the SRQ into the locally spoken languages. As far as we were able to ascertain the questions were translated correctly and the context and meaning behind the questions were clear. Notwithstanding the fact that a cut-off point of 7 or more on the 'neurotic' section of the SRQ correlated well with the presence of a psychiatric disorder, there was no correlation between the presence of psychotic symptoms found on the SRQ and those found on the PSE. During the training sessions the authors and interviewers had discussed a cultural context for the various questions and we had requested that the interviewers record positive responses to the 'psychotic' questions on the SRQ only if they felt that the person's responses to these questions were clearly abnormal, and not a culturally determined response. (A similar issue had arisen in a study in Kangwane in 1990, and we tried to clarify this issue in our training.) The PSE is structured to examine these symptoms in more detail, and here the interviewers recorded patients' responses to these questions verbatim; these answers were probed further if any abnormality was found. Notwithstanding the above, there was no correlation between the presence of psychotic symptoms on the SRQ and psychotic symptoms on the PSE.

Although the SRQ and PSE have been validated for use in contexts such as those found in a PC clinic in Soweto, the problems of using non-psychiatrically trained staff for these studies are evident.

3. The extremely low prevalence of substance abuse-related psychiatric disorders and reported substance abuse in the study population. The fact that substance abuse required self-reporting, together with the presence of a community psychiatric clinic at the Zola Health Centre, where many patients with substance-induced psychiatric disorders are seen, may account for this low prevalence.

4. Most patients had a concurrent physical illness. The significance of the relationship between physical and psychiatric illness was not examined and should be in future studies.

Conclusions

Despite the above limitations, we concluded from our study that there is a significant incidence of undetected psychiatric disorders in patients attending this polyclinic. Many of these patients may be subjected to needless investigations and their symptoms are unlikely to improve. On the other hand, there is evidence to suggest that if mental health problems are recognised and treated by PC workers, the duration of the illness can be shortened.^{10,11}

In view of the critical shortage of trained mental health workers in this country, we believe that the training of PC workers in the diagnosis and treatment of such disorders is essential.

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