Psychiatric Morbidity in Primary Care

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ABSTARCT

The aim of the study was to identify the prevalence of hidden psychiatric morbidity among patients attending primary care settings in Bahrain using two available instruments - General Health Questionnaire (GHQ) and Hospital Anxiety Depression Scale (HAD), and to compare the results of both instruments.
The study was conducted on 149 subjects aged 16 years and above, selected randomly from Bahraini patients attending primary care health centres for any problem other than psychiatric illness.
The response rate was 95.5%. The age group of the sample ranged between 16 and 78 years with a mean age 32.2 $\pm$ 13.5. The prevalence of psychiatric morbidity when using GHQ was 45.1% at cut off point of $\geq$ 5 and 27.1% at cut off point of $\geq$ 9. When using HAD scale the prevalence was 44.4% at cut off point of $\geq$ 8 and 23.6% at cut off point of $\geq$ 11. It was also noticed that psychiatric morbidity was more common among the groups of women 50-55 years old, divorced, widowed or of law educational status.
The similarity in results between the two instruments gives the treating doctor the liberty of using either instrument.

INTRODUCTION

Psychological disorders are among the commonest reasons for seeking consultation in general practice (1). It is estimated that nearly 77% of all psychiatric consultations are actually carried out by primary care physicians (2). It was also found that general practitioners with a positive orientation to mental health spend more time on their consultations (3).
The GHQ 28 version has been widely used to estimate the psychiatric morbidity among patients attending primary care in many countries. Its usefulness has been best illustrated in the United Kingdom studies of Goldberg and Brides who have shown that general practitioners using GHQ have improved their abilities to recognize hidden psychiatric morbidity in their subjects (4,7). Published literature both in Europe and the Arab World on the GHQ and HAD scale have shown that both have a sensitivity and specificity more than 85% (6-8). It has, also, been shown that raising the cut off point from 5 to the level of 9 can increase the specificity of the GHQ (9).
The accompanied physical symptoms with psychiatric disorders often make a psychiatric diagnosis difficult (10). Doctors differ in their perception of what constitutes a psychiatric illness; however, this can be alleviated by the use of self-reporting questionnaires (6). Moreover, the use of self-reporting instruments such as the General Health Questionnaire (GHQ) and Hospital Anxiety Depression Scale (HAD) can raise the sensitivity from 50% to 95% (6).
Estimates of the prevalence of psychiatric disorders in general practice worldwide range from 25-75% (8,9,11). The GHQ was used in the study of psychiatric morbidity among general hospital out-patients in Bahrain and was reported to be 19.4% (12). No similar studies were conducted in primary care. Hence, it was thought worthwhile to conduct this study in order to find out the psychiatric morbidity among Bahraini patients attending health centers using both GHQ and HAD scale. Also, the validity and reliability of HAD scale against the GHQ was tested.
The primary care setup in Bahrain is the first provider for the psychiatric care for all population. Referral to the Psychiatry Hospital is usually made through a well-established referral system, although self-referral to psychiatrist is accepted.

METHODOLOGY

To estimate the psychiatric morbidity among Bahraini patients attending primary care setting, two famous self reporting questionnaires were used, the GHQ version 28 and HAD scale. Regarding the GHQ, a score of 5 or above was considered as positive. For the same cases of this study, a high cut off point was used to increase the specificity of the GHQ of version 28. Score of 9 will increase the specificity to 95%. The HAD positive scoring of 8 to 10 was considered possible presence, and a score of 11 or more was considered probable presence. This in turn increases the specificity of the HAD instrument.

The study was done in late 1997. Two health centers - (Naim Health Center and Kuwait Health Center) - out of 18 health centres in Bahrain were chosen for conducting the study. Both of the health centres were of the same size and class (class A - covers a catchment area of about 35,000 population and provides all the support facilities such as, laboratory, x-ray, MCH and dental services). General Health Questionnaire (GHQ) version 28 self administered screening test and Hospital Anxiety Depression (HAD) scale were distributed over to every fifth adult Bahraini patient attending the two health centers. They were asked to tick or cross the answers with the help of secondary school students who were trained to help patients to complete the answers of the questionnaire for both instruments. During the interview they were not allowed to be accompanied by any one. The collected data was later analyzed in a dBase and SPSS software programmes. Specificity and reliability for both the GHQ and HAD were calculated. At two points-5,9 and 8,11 respectively.
The total agreement between the two instruments was measured by Kappa test. Also age, sex, marital status, work and education level were studied.

RESULTS

Of the 149 patients who entered the study, five failed to complete the questionnaire, giving response rate of 96.5%. The age of the study group (n=144) ranged from 16 to 78 years, with a mean age of 32.2 $\pm$ 13.5 SD, of which 54.9% (n=79) were female (mean age 35.1 $\pm$ 14.7 SD) and 45.1% (n=65) were males (mean age 28.7 $\pm$ 10.9 SD).
Using a cut off point of five for GHQ, psychiatric morbidity is estimated to be 45.1%. This result was lowered to 27.1% on using cut off point of nine in order to increase the specificity. Using the HAD scale, "possible presence" which is a positive score of 8 up to or equal 10 was 20.8%, while the probable presence with a positive score of 11 or more was 23.6%. The total of possible and probable presence was 44.4%. Although the total male population is higher than female population in Bahrain, the psychiatric morbidity was shown to be higher among the females. The ratio of female to male having psychiatric morbidity was 1.7:1 in both cut off points in the two instruments.
The sensitivity of HAD to GHQ at the low cut off point was 69.23% at a specificity of 75.95%. The positive predictive value for the low cut off point was 70.31% and the negative predictive value was 75%.
While the sensitivity of HAD to GHQ at the high cut off point was 61.54% at a specificity of 90.48%. The positive predictive value for the high cut off point was 70.59% and the negative predictive value was 86.36%.
The interrater reliability was measured by Kappa test and was found to be 0.4525 and 0.5421 for the low and high cut off point respectively.
The number of non-workers in the study was more than workers. Non workers were also more than workers at all cut off points in the two instruments as shown in table 1, which was statistically significant.
Although four subjects who entered the study were divorced, an average of 50% of them had psychiatric morbidity in all cut off points as shown in table 1. People who finished Primary level of education and/or illiterate showed a higher psychiatric morbidity as shown in table 1. Psychiatric morbidity was shown to be higher among the age group of less than 30 years as shown in table 2. It was observed that 100% of the females between 50-59 suffered from psychiatric morbidity at cut off point 5 of the General Health Questionnaire. It was also, observed that non of the studied cases admitted having a psychiatric illness.

DISCUSSION

Using the cut-off point of five, prevalence was 45.1%. This is similar to the results published by Boardman which were 42.9% (13). Nine and above cut off points were found in 23% of male and 30.4% of female. This is similar to the results of Wright and Perini which are found in 25% of men and 29% of women (9). Goldberg and Wright and Perini showed and advised to increase the cut off point from 5 to 9 for GHQ to increase the specificity. It is best used for general practice (7,9).
The Psychiatric morbidity is more among females, although in Bahrain there are more males than females. This result is acceptable as general psychiatric morbidity occurs more in females than in males. Also females attend the health center in the mornings more than males, as males are busy with their jobs; and the study was conducted among morning attendees (annual report) (14).
At the age of 50 most of the women in Bahrain have to look after their extended families, which may consist of the grandmothers and the grandfathers besides the children of the siblings. That is why they are more stressed by the role of caregivers. This in turn leads to the increase of psychiatric morbidity.

Non-workers are of high risk to psychiatric morbidity and are more frequent attendees. They constitute the highest percentage among those who are suffering from psychiatric morbidity.
In this study psychiatric morbidity was clear among those with low education level, perhaps because of their inability to express their feelings and less cope mechanism with their problems. Experience from this study suggests that the general health questionnaire (GHQ) and Hospital Anxiety Depression scale (HAD) are simple to use in primary health care and may help the physicians in their assessment of patients with physical symptoms not conforming to any recognizable clinical pattern or for frequent attendees. They may uncover hidden psychiatric illness, particularly in-patients with chronic physical disease.

CONCLUSION

The high prevalence of psychiatric morbidity in general practice necessitates the use of an easy tool for screening and picking up cases with hidden psychiatric morbidity, especially in a busy primary care setting. Such tool can be either the GHQ or the HAD scale. Use of a tool is strongly recommended in order to increase the sensitivity of picking up hidden psychiatric morbidity.
The higher specificity and sensitivity of both tests will give the physician the freedom to use either HAD or GHQ according to his/her wish with acceptable and confident results.
The Psychiatric morbidity in primary care occurs more among females age 50-59 years, unemployed, with low education level and divorcees or widows.
The higher specificity and sensitivity of both tests will give the physician the freedom to use either HAD or GHQ with an acceptable and confident results.
Because doctors are looked at as case finding instruments and good detectors of psychiatric morbidity, they should be emphatic and interested in psychiatry. They also should ask questions and clarify complaints if they want to have accurate psychiatric knowledge and get higher academic ability.

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