Stress in schools: prevalence of hidden psychiatric illnesses among Jeddah school workers

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ABSTRACT

Objectives: To determine the prevalence and risk factors of hidden psychiatric illnesses (HPI) among Jeddah school teachers and administrators using general health questionnaire (GHQ) Subjects and methods: A sample of 676 workers from 38 randomly selected governmental and private schools filled out an Arabic version of GHQ. Answers were used to divide them into cases of HPI and normals. Personal and work environment factors were asked and analyzed to measure significant differences between cases and non cases and determine risk factors affecting these illnesses. Results: Prevalence of HPI was 38.2% among school workers and association was significant with young ages, female sex and singles. Frequency of somatization of complaints was also high such as headache, body ache and sleeping problems. Conclusion and recommendations: The study documented a high rate of HPI and discussed underlying factors of stress among school workers in relation to personal factors of workers and the work situation. The findings stressed the importance of social support strategies for those at risk and the need for further research in this occupational stress.

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Hidden psychiatric illnesses (HPI) stands for unrecognized psychiatric morbidities which are easily missed by general practitioners and primary health care doctors.1 These illnesses are on the increase and their magnitude was estimated to reach as much as one third of morbidities in many communities.24 The occurrence of these illnesses as an occupational hazard has been documented in other studies5 and it is expected to be higher among teachers and workers in the stressful school environment.6 This information prompted the search among school workers in Jeddah.

Subjects and methods Teachers and other school workers from 38 selected governmental and private schools were asked to answer, the self administered, 30 question general health questionnaire (GHQ30). Schools from all those registered in Jeddah were randomly chosen in a multistage sampling technique to represent all geographical areas of Jeddah and workers in these schools were included in the study. This was part of a student training survey conducted in Jeddah by the medical school. The questionnaire used is a modified version of the known GHQ used in many studies. This specific version has been translated into Arabic, scientifically validated and used in a primary health center setting in the Eastern province of Saudi Arabia.7 Answers from the GHQ30 were added to a total score which is used to divide school workers, at an already tested cut off point, to cases of hidden psychiatric illness (HPI) and normals. Personal and work environment factors thought to affect the presence of these illnesses were included in the questionnaire. All these factors were analyzed in order to measure significant differences between cases and non cases individually using chi square test and collectively in a regression analysis model to determine risk factors affecting these illnesses.

Results A total of 867 school workers and teachers were included in the study. A group of 191 questionnaires were not fully completed and were excluded from the analysis reducing the sample to 676 subjects (response rate = 78%). Mean age of the group was 33.3 years (SD=7) and the mean of their monthly income was SR10006.2 (SD = 4718.4).

Table 1 shows their personal and work characteristics. Prevalence of HPI was found to

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be 38.2% among school workers and associations with personal and work factors are seen in Table 2. After controlling for all factors, the regression analyses showed that sex and marital status of the school worker were associated with the occurrence of these illnesses (Table 3). School workers varied in their response to question items in the GHQ. High rates of physical symptoms (psychosomatic presentation) such as headache, body ache and sleeping problems were reported. Table 4 shows the frequency of workers who scored higher (worse) than usual in the highest 15 question items with their rank.

**Discussion** Prevalence of hidden psychiatric illnesses in developing countries and in Saudi Arabia is on the increase. However, determination of their prevalence in the community will need a valid and reliable screening instrument where case finding is dependent on symptoms to overcome under estimation of their morbidities. The general health questionnaire (GHQ) as a psychiatric screening instrument was developed during 1960 for this purpose and was first published in 1972 by Goldberg. The questionnaire is a popular psychiatric tool which has been translated and used in more than 38 different languages and has undergone many validation studies in various community settings at the primary health care (PHC) level including those in Saudi Arabia. It focuses on a break in normal function and tests new distressing natural phenomena. This particular tool was used to measure HPI among general practice attendants as well as people in specific occupations such as teaching.

Psychiatric illness as an occupational hazard, on the other hand, has been documented in many studies which reported higher rates of mental symptoms in those exposed to stresses of modern life particularly those with stable but rather unsatisfactory work. Prevalence of HPI found among Jeddah school workers is higher than that estimated in the adult population in Sudan (28%) using a self rating questionnaire and much higher than the 13.9% general frequency rate in four developing countries at community level, using the same GHQ. A Saudi study in a PHC center in Riyadh by Al-Fares reported an alarming 46% prevalence rate in a sample of 114 clinic attendants using the same questionnaire. This high rate was related to a bias of over representation of morbid population in the sample and the expected high somatization of psychiatric cases in the Arab population. Our finding of higher prevalence among school workers, on the other hand, can be ascribed to the stress encountered in the occupation of teaching. Teachers being under continuous stress has been documented in many studies. Pithers and Fogarty reported that approximately one third of teachers surveyed in UK considered their work to be stressful or extremely stressful. Another Australian study documented twice the general
population rate of psychological distress among secondary school teachers. In the present study a high percentage of Jeddah school workers (64%) reported that they take things hard and a high rate of psychosomatic symptoms such as headache, bodyaches and sleep disturbances were noted.

The study, on the other hand, could not relate HPI with the type of work as administrator or teacher. This can be explained by the similarly stressing working environment for both groups. This point can be considered true if we note, also, the negative association of HPI with the income or the nationality group of the school worker. Females and singles, on the other hand, were showing higher association with occurrence of these illnesses. These findings have been noted in other studies in the general population. Rahim found loneliness to be associated with higher mental symptoms, while females in the Arab cultures are known to somatize their worries more and show higher rates of HPI in the form of somatic medical complaints.

Literature on underlying factors for teachers stress are still being compiled and conclusions from different studies are far from complete. Cooper blamed teachers work overload and difficulties in handling relationships with colleagues to be the most significant stressors in the school environment for all types of school workers. In our study we do not have a detailed description of the work environment of school workers in Jeddah but it is not expected to be much different from those encountered in similar studies. Borg, on the other hand, stressed that certain personality characteristics of the school teacher such as extroversion and neuroticism are more important determinants of school stress than his or her biographical factors. Nevertheless, other studies in this area considered teacher’s stress as a multifactorial problem in which both internal factors such as personality type as well as external social and environmental factors play equal roles. These studies also emphasized the importance of social support in preventing morbid effects of stress in schools. Cooper, in his excellent review of various studies, noted the diversity of tools used to measure teachers’ stress and the problems of their interpretation. He emphasized the need for further studies in linking coping to occupational stress and teachers personality, suggesting that social support strategies are effective in elevating stress in some of these stressful situations. These support strategies are expected to vary greatly in different cultures and will be affected by the social norms of the society. This can be an interesting area of cross cultural studies of coping with stress.

Conclusion The present study showed a high prevalence of HPI among school workers in Jeddah and managed to identify the effect of some personal characteristics as risk factors suggesting a great need for social support strategies for school workers at risk in coping with stress in schools. Further studies using other measurement tools are recommended to quantify all factors in school environment and colleagues inter-relation and the search in the area of school workers sickness, absence rate and job dissatisfaction is also recommended.

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