Use of the Goldberg General Health Questionnaire (GHQ-28) to Detect Psychosocial Problems in the Family Physician's Office

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Objective. To analyze the usefulness of the 28-item Goldberg General Health Questionnaire (GHQ-28) in identifying psychosocial problems, and to determine how the questionnaire scores are related to stressful life events (SLE), use of health services, and individual variables (age, sex, employment status, socioeconomic group, and educational level).
Design. Cross-sectional study.
Setting. Almanjáyar Health Center in the city of Granada, Southern Spain.
Participants. 314 patients more than 18 years of age, selected by systematic sampling at an on-demand health center.
Main measures. Each patient completed the GHQ-28 during the course of a personal interview, and scores of 8 or higher were considered to indicate psychosocial problems. Score on the Social Readjustment Rating Scale of Holmes and Rahe (stressful life events during the previous year) was also recorded, as were socioeconomic group, educational level, employment status and use of services (number of visits to the doctor during the previous year). All variables were subjected to descriptive analysis and their associations with the GHQ-28 score were tested with the chi-squared test. Multivariate analysis was used to identify categories that showed an independent association with high scores on the GHQ-28.
Results. The variables associated with a greater likelihood of psychosocial problems were female sex (OR, 2.15; CI, 1.14–4.04) and high levels of stress (OR, 2.65; CI, 1.50-4.68). Both showed a statistically significant association with the GHQ-28 score after multivariate analysis.
Conclusions. The GHQ-28 is a potentially useful instrument to detect psychosocial problems in the family physician´s office, and can aid in the subsequent identification and qualitative evaluation of patients.

Key words: Psychosocial problem. Stressful life events. Service overuse. Goldberg General Health Questionnaire.

UTILIZACIÓN DEL CUESTIONARIO GENERAL DE SALUD DE GOLDBERG (GHQ-28) EN LA DETECCIÓN DE LOS PROBLEMAS PSICOSOCIALES EN LA CONSULTA DEL MÉDICO DE FAMILIA

Objetivo. Analizar el valor del Cuestionario General de Salud de Goldberg de 28 ítems (GHQ-28) para identificar problemas psicosociales (PPS), relacionándolo con los acontecimientos vitales estresantes (AVE), la utilización de servicios y las variables individuales (edad, sexo, actividad, nivel socioeconómico y cultural).
Diseño. Estudio transversal.
Emplazamiento. Centro de Salud de Almanjayar, Granada.
Participantes. Un total de 314 pacientes mayores de 18 años seleccionados por muestreo sistemático en consulta a demanda.
Mediciones principales. Cada paciente realizó una entrevista y cumplimentó el GHQ-28 (las puntuaciones ≥ 8 se consideraron indicativas de problemas psicosociales), y se valoraron la Escala de Reajuste Social de Holmes y Rahe (acontecimientos vitales estresantes en el último año), el nivel socioeconómico, el nivel cultural, la actividad y la utilización de los servicios sanitarios (número de consultas en el último año). Se realizó un análisis descriptivo de cada variable y su asociación con el GHQ-28 mediante el test de la χ^2. Para determinar qué categorías se asociaban de manera independiente con las puntuaciones altas de GHQ se hizo un análisis multivariable.
Resultados. Las variables estudiadas que se asocian con mayor probabilidad de presentar problemas psicosociales son el sexo femenino (*odds ratio* [OR] = 2,15; intervalo de confianza [IC] del 95%, 1,14-4,04) y la presencia de altos niveles de estrés (OR = 2,65; IC del 95%, 1,50-4,68), que mantendrían una relación estadísticamente significativa con las puntuaciones del GHQ una vez se han tenido en cuenta todas las variables.
Conclusiones. GHQ puede ser un buen detector de problemas psicosociales en la consulta del médico de familia y ayudar a la posterior identificación y estudio cualitativo de los pacientes.

Palabras clave: Problemas psicosociales. Acontecimientos vitales estresantes. Hiperutilización de servicios. Cuestionario General de Salud de Goldberg.

A commentary follow this article (pág. 423)

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Introduction

Family physicians see patients every day with a wide spectrum of health problems, and thus serve as the gateway to the health care system. It is often difficult to reach a diagnosis, and health professionals often face different degrees of uncertainty. As noted by Stephens,[1] the patient forms part of various social systems, and to really know the patient, his or her personal, familial and social circumstances need to be known as completely as possible.
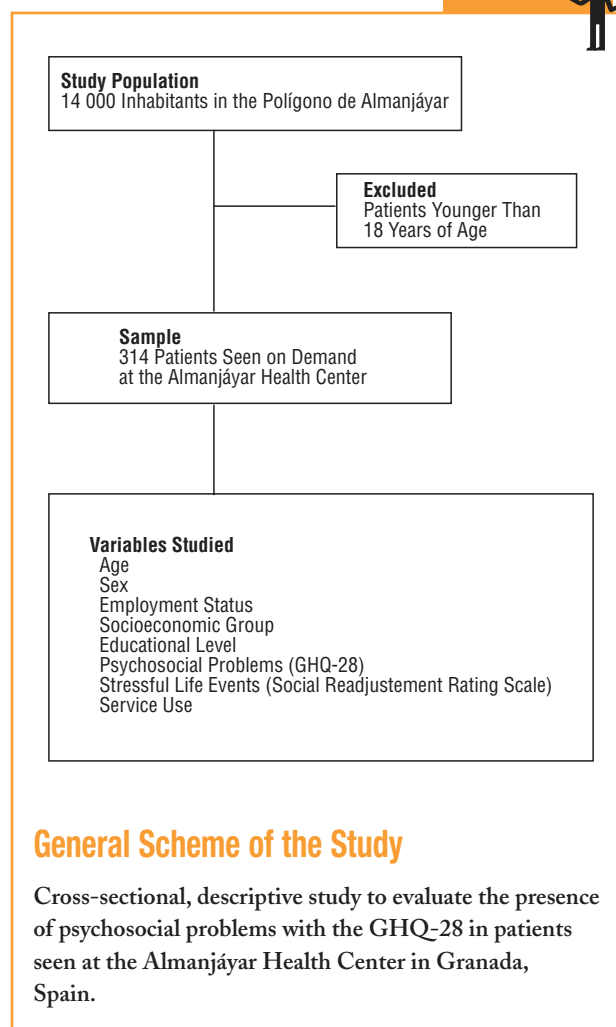
Psychosocial problems (PSP) are among the reasons for consulting, and are becoming increasingly important because of their frequency and implications for diagnosis and treatment. De la Revilla[2] defined PSP as "those situations of social stress that produce or facilitate the appearance, in affected individuals, of somatic, psychiatric or psychosomatic illness, giving rise to family crises and dysfunction with alterations in familial homeostasis capable of generating clinical manifestations in some of its members." If the defining feature of PSP is not their clinical expression but their cause—social stress—the problems family physicians have in detecting these patients during primary care consultations are understandable. Identifying these patients involves bringing to the foreground those motives that underlie the patient´s needs—in other words, the situations that alter family and social dynamics. Higgins[3] claimed that approximately half of all PSP remained undiscovered in primary care consultations. In daily practice, patients do not seek care directly for their PSP,[4] and this makes it difficult for physicians to find signs suggestive of PSP in the problems patients apparently seek help for. Improvements in diagnosis and treatment of PSP by general practitioners enhance the quality of care[5] and are more cost-effective than care based on specialized services.

The aim of the present study was to evaluate the 28-item Goldberg General Health Questionnaire (GHQ-28) as a detector of PSP, and the relationship between questionnaire scores and causal factors of PSP (stressful life events), one of their consequences (use of services) and some individual variables (age, sex, employment status, socioeconomic group and educational level).

Material and methods

Three physician's offices at the Almanjáyar Health Center in Granada (Southern Spain) were selected for the present study. Most patients seen at this health center are of middle-lower socioeconomic status. Systematic sampling based on the list of patients with scheduled appointments was used to obtain data for 314 patients who agreed to participate in the study. The percent level of participation was 85%. At the end of the scheduled consultation, each patient was invited to be interviewed in a different office during approximately 10 to 15 minutes so that they could respond to items on the GHQ-28[6] and the Social Readjustment Rating Scale of Holmes and Rahe.[7] The demographic variables recorded were age, sex, employment status, socioeconomic group[8] and educational level.[9] Persons younger than 18 years were excluded.

Goldberg GHQ-28
During the interview patients responded to the GHQ-28, which was divided into four subscales of 7 items each. These sections dealt with somatic symptoms, anguish/anxiety, social dysfunction and depression. Suspected PSP was recorded when the number of responses in the two right-hand columns was 8 or higher.

Social Readjustment Rating Scale
To evaluate stressful live events (SLE) we used the Social Readjustment Rating Scale (SRRS) of Holmes and Rahe.[7] Readjustment was defined by these authors as "the amount and duration of change in the subject's accustomed pattern of life." Only those SLE during the previous year were recorded. The SRRS consists of 43 items ranked from greatest to least stressfulness; each event is scored in life-change units (LCU) from 100 (most serious) to

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Material and methods

Study Population
14 000 Inhabitants in the Polígono de Almanjáyar

Excluded
Patients Younger Than 18 Years of Age

Sample
314 Patients Seen on Demand at the Almanjáyar Health Center

Variables Studied
Age
Sex
Employment Status
Socioeconomic Group
Educational Level
Psychosocial Problems (GHQ-28)
Stressful Life Events (Social Readjustement Rating Scale)
Service Use

General Scheme of the Study

Cross-sectional, descriptive study to evaluate the presence of psychosocial problems with the GHQ-28 in patients seen at the Almanjáyar Health Center in Granada, Spain.

11 (least serious). A total score of 150 LCU or higher is considered to indicate a level of stress that may affect individual or family health.

Employment Status
This was recorded as actively employed, unemployed, student or retired.

Socioeconomic Group Indicator
The National Occupational Classification was used to assign the individual's professional qualifications to one of 6 socioeconomic groups: I: executive and high-level technical directors; II: managerial and technical; III: mid-level management; IV: skilled and semiskilled workers in industry; commerce and services, self-employed; V: unskilled workers; or VI: other unspecified.

Educational Level Indicator
This indicator was used to classify patients in seven levels according to the highest level of education completed: 1: illiterate; 2: no formal education, able to read and write; 3: primary school; 4: secondary school; 5: secondary school, university track; 6: three-year (or less) university certification; or 7: university.

Use of Services
The number of visits to the health center requested by the patient during the previous year was determined from the medical record. Individuals were classified as normal user or overusers depending on the frequency of visits to the health center. On the basis of an earlier study of health service usage patterns at the Cartuja Health Center (in the same city as the health center studied here),[10] we identified patients who had 8 consultations or fewer during the preceding year as normal users, and patients who came to the health center more than 8 times during that period as overusers.

Statistical Methods
Descriptive analysis was used for each variable to report the frequency distribution and summary measures such as the mean, median and standard deviation. The variable "total GHQ score" was categorized as <8 or ≥8 to study the associations between this and other variables. The chi-squared test was used for all contingency tables, and when appropriate Fisher's exact test was used with 2×2 tables, and a generalization of Fisher's exact test was used for R×C comparisons. To identify which factors were independently associated with high GHQ scores, we used logistic regression with a model that considered all variables. Checking the goodness of fit of the model with the Hosmer-Lemeshow test showed that the results were not significant. The findings with the goodness of fit model are expressed as odds ratios (OR) with 95% confidence intervals (CI).

Results

GHQ Scores
Mean score on the GHQ was 9.25 (SD, 6.71). Slightly more than half (56%) of the patients interviewed scored 8 or higher, and were therefore considered to have a possible PSP.

TABLE 1 — Relationship Between GHQ Score and Social Readjustment Rating Scale Score: Stressful Life Events (SLE)*

| | GHQ | | | | |
| | <8 | | ≥8 | | |
SLE	No.	%	No.	%	Total
≤149 LCU	95	57	72	43	167
≥150 LCU	41	28	106	72	147
Total	136		172		314

$P=.0001$; $\chi^2=26.77$.
*LCU indicates life-change units

Stressful Life Events
Of the 314 patients interviewed, 147 (47%) reported a number of SLE during the year preceding the interview that yielded a score of 150 LCU or more on the SRRS.

Use of Services
We detected 151 (48%) individuals who were classified as overusers (more than 8 consultations during the previous year).

Age and Sex
Distribution of the participants according to age group was as follows: 29 years or younger: 63 patients (20%); 30 to 59 years: 202 (64.3%); older than 60 years: 49 patients (15.6%). The youngest participant was 20 years old, and the oldest was 78. Mean age was 42.3 years (SD, 13.85 years). Less than one third (30.6%) were men, and 69.4% were women.

Employment
Employed persons made up 44.3% of the participants, unemployed persons made up 36.7%, and the remaining 18.8% of the patients were retired.

Socioeconomic Group and Educational Level
Three fourths (75%) of the participants were considered to belong to group IV (skilled or semiskilled workers in industry or services, or self-employed persons). At the lowest end of the scale, unskilled workers (group V) made up 15% of the sample. About half of the participants (155, 49.4%) had completed primary school, 104 (33.1%) had received no formal schooling but were able to read and write, and 22 persons (7%) stated that they were illiterate.

Univariate Analysis
Relationship between level of stress (stressful life events) and GHQ-28 score. High GHQ scores were associated with higher numbers of SLE during the previous year. Almost three fourths (72%) of the patients who had a cumulative score of 150 or more LCU had a high GHQ score, whe-

TABLE 2 — Relationship Between GHQ Scores and Stressful Life Events (SLE) Grouped According to Life-Change Units (LCU)*

| | GHQ | | | | | |
| | ≥8 | | <8 | | | |
LCU	No.	%	No.	%	Total	
100-50	210	73	78	27	288	21
47-40	230	68	107	32	337	25
39-30	150	67	72	33	222	16
29-23	144	68	68	32	212	15,5
20-11	175	58	128	42	304	22,5
Total	910	67	453	33	1363	100

P=.0023; χ^2=16.52.
*N indicates cumulative number of LCU; LCU, life-change units.

TABLE 4 — Relationship Between GHQ Scores and Individual's Sex and Age

| | GHQ | | | | | |
| | <8 | | ≥8 | | | |
	No.	%	No.	%	Total	
Sex						
Men	50	52	46	48	96	P=.0379
Women	86	39	132	61	218	χ^2=4.33
Total	136		178		314	
Age						
18 to 29 years	35	55,6	28	44,4	63	
30 to 59 years	80	39,6	122	60,4	202	P=.0828
>60 years	21	43	28	57	49	χ^2=4.98
Total	136		178		314	

TABLE 3 — Relationship Between GHQ Score and Use of Health Services

| | GHQ | | | | |
| | <8 | | >8 | | |
Use of Services	No.	%	No.	%	Total
Normal user	100	61	63	39	163
Overuser	36	24	115	76	151
Total	136		178		314

GHQ: indicates Cuestionario General de Salud de Goldberg.
P=0,001; χ^2=44.9

TABLE 5 — Relationship Between GHQ Scores and Employment Status, Socioeconomic Group and Level of Education of the Individuals Interviewed*

| | GHQ | | | | | |
| | <8 | | ≥8 | | | |
	No.	%	No.	%	Total	
Employment status						
Employed	63	45	76	55	139	P=.9631
Unemployed	49	42.6	66	57.4	115	χ^2=1.271
Student	–	–	1	–	1	
Retired	24	41	35	59	59	
Socioeconomic group						
I	–	–	–	–	–	P=.0364
II	3	75	1	25	4	χ^2=8.971
III	14	58	10	42	24	
IV	105	44.5	131	55.5	236	
V	14	28	36	72	50	
Educational level						
1. Illiterate	3	13.6	19	86,4	22	
2. Able to read and write	40	38. 5	64	61.5	104	P=.0011
3. Primary school	74	47	82	53	156	χ^2=22.860
4. Secondary school	17	68	8	32	25	
5. University track	1	20	4	80	5	
6. University	2	–	–	–	2	

*Socioeconomic group: I: executive and high-level technical directors; II: managerial and technical; III: mid-level management; IV: skilled and semiskilled workers in industry, commerce and services, self-employed; V: unskilled workers; VI: other unspecified.

reas only 43% of the patients with a cumulative score of 149 LCU or less also had a high GHQ score (Table 1). When the results were stratified into 5 groups according to GH Q score, differences between groups emerged (Table 2). Individuals with a high GHQ score more often had very high SLE results (items 1 to 7, for a total of 100 to 50 LCU). In contrast, in the group with the lowest SLE results (items 32 to 43, for a total of 20 to 11 LCU) a GHQ score greater than 8 was less frequent.

Relationship between use of services and GHQ score. As shown in Table 3, overusers had higher GHQ scores than normal users (P<.001).

Relationship between demographic variables and GHQ scores. Age and sex: the percentage of individuals between 30 and 59 years of age with a high GHQ score was slightly higher than in other age groups, although the difference was not statistically significant. Female sex was associated with higher GHQ scores (Table 4).

Employment status. We found no statistically significant differences between different groups based on employment status (Table 5).

TABLE 6	Odds Ratio (OR) for the Variables Analyzed, Results of Multiple Logistic Regression Analysis			
Variable	**Reference Categories**	**Risk Categories**	**OR**	**CI**
Age	<30 year	30-59 years	1.92	0.93-3.98
		> 59	0.70	0.21-2.36
Sex	Men	Women	2.15	1.14-4.04
Employment	Employed	Unemployed	0.98	0.54-1.78
Socioeconomic group	III-II	IV	1.52	0.51-4.53
		V	2.17	0.57-8.36
Educational level		2	0.59	0.18-1.92
	> 3	3	0.70	0.20-2.46
SLE	<150 LCU	≥150 LCU	2.65	1.50-4.68
Use of services	Normal user	Overuser	1.71	0.79-3.69

*OR indicates *odds ratio*; CI, confidence interval; SLE, stressful life events; LCU, life-change units.

Socioeconomic group and educational level. There appeared to be a relationship between low socioeconomic group (groups IV and especially V) and high GHQ scores (Table 5). We noted that as level of education increased, the risk of a high GHQ score decreased (Table 5). A higher level of education was thus considered a protective variable.

Multivariate Analysis

Two risk categories for the variables related with the appearance of high GHQ-28 scores (Table 6) were suggestive of the presence of PSP: high cumulative SLE results (≥150 LCU), associated with a 2.65-fold higher risk (CI, 1.50-4.68), and female sex (OR, 2.15; CI: 1.14-4.04). Less significant associations were also found for lowest socioeconomic group (level V), with an OR of 2.17 (CI, 0.57-8.36), age group 30 to 59 years (OR, 1.92; CI, 0.93-3.98), and health care service overuser status (OR, 1.71; CI, 0.79-3.69).

Discussion

The difficulties in rapidly detecting requests for health care that may have their origin in a PSP make it necessary to search for systems that enable us to discover which patients are subjected to social stress. According to Hoeper et al,[11] using a simple questionnaire that explores somatic, psychological and behavioral processes is potentially useful for discovering psychosocial distress. Goldberg's GHQ-28, validated for the Spanish population by Lobo et al,[13] has been shown to be a good instrument for detecting problems of social dysfunction, psychosomatic problems, anxiety and depression.[12] Our choice of this test as an instrument to detect PSP was based on three reasons. Firstly, the GHQ is shorter than similar instruments and yet is si-

milar to them in validity and discriminatory power, and is therefore considered more appropriate for use in primary care settings.[14] Secondly, for a cut-off score of 7/8, the sensitivity (77%) and specificity (90%) of the GHQ-28 are acceptable for instruments of this type and similar to those reported in other countries that have tested questionnaires that take longer to administer and interpret. Thirdly, the GHQ comprises, in addition to the overall evaluation, four subscales that provide additional information on psychosomatic symptoms, anguish/anxiety, social dysfunction, and depression.

The relationship between SLE and GHQ scores is of considerable importance. In our study we found that persons with an SLE score of 150 LCU or higher also had high GHQ scores. Likewise, persons with a suspected PSP (high GHQ score) reported more serious SLE (items 1 to 7 in the SRRS). This relationship between SLE and PSP has been observed by other researchers. Chen et al[20] found that 66% of their patients who had experienced an SLE had PSP. In addition, Aro et al[21] reported, in a study of SLE in adolescents, that there was a clear relationship between these events and PSP. De la Revilla et al[22] documented that 65% of the patients with a large number of SLE also had PSP.

In a study of service usage, García Lavandera et al[23] found an association between overuse and psychiatric distress measured with the GHQ. We also noted this association: 76% of the overusers in our series of patients had high GHQ scores. This may reflect, as suggested by Berwick et al,[24] that individuals with PSP need more frequent care from the health system, and that this in turn leads to increased use. However, we believe another plausible explanation (as noted by Garfield et al[25]) may be that patients with PSP generally have more illnesses and consequently seek care more often.

The fact that PSP can lead to an increase in health care service use has been noted by others. De la Revilla and de los Ríos[26] found that 77% of the patients who were overusers had a PSP, and Tessler et al[27] and Liptzin et al[28] found that subjects diagnosed as having a PSP had higher rates of consultation then the rest of the patients.

Turning to the relationship between individual variables and the GHQ, we found that persons between the ages of 30 and 59 years, and to a lesser degree persons older than 60 years, had higher GHQ scores. During certain periods of life, persons may be exposed to more social or familial stress, or their sensitivity to these factors may vary. This would be consistent with the tendency, described by Verhaak and Wennik,[29] to perceive somatic processes when patients are younger, and PSP in middle-aged patients.

Our analysis of the relationship between PSP and sex showed that women generally had higher GHQ scores than men. This was also noted in a study by Vázquez-Barquero et al,[30] and may be a reflection, as Kessler et al[31] suggested, of the tendency for women to be less reticent than men in asking for help with psychological problems.

With regard to the relationship between employment status and PSP, Deniel et al[32] claimed that unemployment and occupational disability were the two events with the greatest impact on the genesis of these problems. In the present study we found no significant differences in PSP between persons of different employment status.

Our analysis of socioeconomic group showed that patients in the most disadvantaged groups (IV and V) clearly tended to have higher GHQ scores. We may therefore consider persons in these socioeconomic strata as a risk group for PSP. As noted by Sinn and Berman,[33] worse living conditions make persons in lower social classes more likely to become ill and to have SLE.

When we examined the influence of educational level on the appearance of PSP, we found that the risk of a high GHQ score decreased as level of education increased. This may be a result of the fact that the relationship between health status and social class is not static, but is mediated by cultural factors. In other words, within every society there are cultural elements that can alter the effect of social class on the process of becoming ill.

To conclude, we note that the GHQ-28 is a good instrument for detecting PSP, and the GHQ score is related in a statistically significant manner with the presence of recent SLE and with female sex. Although certain trends were noted for the other variables studied here, none of them attained statistical significance.

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COMMENTARY

Usefulness of Questionnaires in Preventing Psychological-Social Problems in the Primary Care Consulting-Room

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The General Health Questionnaire (GHQ) developed by Goldberg was initially intended to help general practitioners in England to detect cases of nonpsychotic psychiatric illness among their patients. Goldberg himself emphasized that the questionnaire was not designed to detect stable dimensions of personality or character, but nonpsychotic states that might involve relapse, remission or intense transitory changes. The potential uses for this instrument have subsequently grown to include epidemiological studies in the general population, and this has made the GHQ a reference standard among questionnaires used to screen for psychopathological problems in the general population and in nonpsychiatric patients.[1]

The GHQ is a self-administered instrument with items that deal with subjective symptoms of psychological distress, somatic manifestations frequently associated with anxiety, depression, problems with relationships, and compliance with social, family and professional roles.

Inequalities in health attributable to socioeconomic factors are well known. Clear differences in mortality and mor-

Key Points

- Many patients with psychological and social problems are identified in primary care. The Goldberg General Health Questionnaire (GHQ) is a useful tool for identifying such patients.

- For the early detection of anxiety disorders and depression, the Preventive and Health Promotion Activities Program (PAPPS) recommends using the clinical interview as the basic diagnostic tool, although at the health professional´s discretion, the Goldberg Anxiety and Depression Scale (GADS) can also be used.

- Routine administration of questionnaires such as the GHQ during primary care consultations improves the diagnosis, but does not improve treatment or the outcome of depression.

- A substantial increase in the role of nurses, and greater integration of primary and specialized care, will be required for interventions to lead to documented improvements in the management and outcome of depression in primary care.

bidity have been found between social classes, and these differences have continued to widen in recent years as social conditions for more disadvantaged populations worsen, especially with regard to economic and employment security. The GHQ also detects these influences in a number of health indicators. For example, the Whitehall II study,[2] begun in 1985, involved a cohort of civil servants in London. Participants with a higher job status scored better on health indicators (self-perceived health, long-term illnesses, GHQ, depression, blood pressure, body mass index) than those with a worse job status. These differences were statistically significant in both men and women, with the sole exception of blood pressure in women. The only indicator that was less favorable in higher-status employees was total cholesterol, which was higher in men. The differences in self-perceived health items (SF-36) and the GHQ results were even greater in unemployed persons than in employed persons. Because these comparisons took the degree of economic insecurity into account, the differences in self-perceived health, GHQ score and depression were attenuated in unemployed women. The authors concluded that economic insecurity is even more important than unemployment as a factor that determines health inequalities.

The likelihood that common mental health problems measured by the GHQ will arise, and the chances of recovery, are also determined by social factors. A recent article by Pevalin and Goldberg[3] showed that poor social sup-

port increases the likelihood of onset of mental health problems and diminishes the chances of recovery. Other social factors such as divorce, losing ones job, remaining unemployed, limitations in daily living activities because of poor health, or caring for a relative also decrease the chances of recovery.

The relationship between psychosocial problems and health service overuse has also been well studied. A report on overuse[4] published by members of the Family and Community Medicine Teaching Unit in Jaén (Southern Spain) found significantly more mental disorders among overusers (60%) than among normal users (34%), despite the similarities between the two groups in demographic and family characteristics.

The family physician's ability to identify patients with psychological and social problems in the course of the clinical interview is logically lower than that of a specific instrument such as the Goldberg GHQ. Thus the argument that use of the GHQ increases the number of patients identified with emotional distress is reasonable. In a clinical trial that examined routine inclusion of the GHQ in primary care consultation,[5] 1589 patients were asked to complete the GHQ in the waiting room, and were then randomly divided into two groups. In the "clinical assessment" group (the physician was not aware of the GHQ results), physicians detected 8.1% of the patients with emotional distress, versus 13.9% who were identified by the group of physicians who had access to the questionnaire results at the start of consultation.

It is interesting to consider which factors aid the physician in detecting psychosocial problems. A Canadian study of the determinants of diagnosis of psychological problems by primary care physicians[6] found that psychological problems were detected in 330 (57.7%) of the patients who had a high GHQ score, versus 177 (40.3%) of the patients with a normal GHQ score. In the former group, among patients with a high GHQ score, physicians detected more problems (any sign or symptom of anxiety, depression, somatization or other psychological disorder) if the patient felt that there was a psychological component to his or her problem, and if the physician considered that the reason for consulting was important. In the latter group, i.e., patients who did not have a high GHQ score and whose physician detected a problem, physicians detected more problems (as in the first group) when the reason for consulting included a psychological component according to the patient, or when the physician considered the reason for consulting to be important. In the second group, physicians detected more problems when the patient lived with a partner, the physician knew the patient well, the physician was male, the appointment was scheduled or recommended by the physician, or the problem was familiar from earlier consultations. The authors concluded that for the 50 patients with a normal GHQ score who perceived a psychological component to

their problem, detection by the physician seemed to be appropriate. However, in patients with a normal GHQ score who did not perceive any psychological problems, detection by the physician was unlikely to be of any benefit.

The high rate of detection of psychosocial problems (50%) by physicians may lead them to place too much trust in their ability to identify patients with mental disorders. Thus some doctors may be spending unnecessary time and effort on healthy persons, while failing to detect 43% of the patients with high GHQ scores.

The article by de la Revilla et al[7] attempts to analyze the usefulness of the GHQ as a method to detect psychosocial problems, in view of the difficulties family physicians face in detecting these patients during primary care visits. These authors show, once again, that psychosocial problems are frequent especially in care settings where patients belong predominantly to the middle-lower class. The relationship between GHQ scores and the results on the Social Readjustment Rating Scale (stressful life events, SLE) shows that recent SLE imply a greater likelihood of high GHQ scores. The GHQ scores were also related with service use. Although the differences after correction for these factors were not significant, the findings nonetheless suggest that problems are more likely in patients such as those studied by de la Revilla et al.

The issue should not be reduced to a question of whether the GHQ helps to detect problems. One of the recommendations of the working group on mental health disorders of the Preventive and Health Promotion Activities Program (PAPPS) for the early detection of anxiety disorders and depression is to use the clinical interview as a basic diagnostic tool. However, at the health professional's discretion, the Goldberg Anxiety and Depression Scale (the GADS, rather than the GHQ) can also be used as a script to help structure the clinical interview[8].

As is always the case with early detection measures, it is of fundamental importance to know whether an appropriate response is available for the problems we may detect. Are primary care centers generally equipped to respond to these problems? Most interventions, particularly for anxiety and depression, take the form of pharmacological

treatment or brief support psychotherapy. A full report from the Centre for Reviews and Dissemination at the University of York (UK) regarding improvements in the recognition and treatment of depression in primary care[9] concluded that the routine administration of questionnaires such as the GHQ improved the diagnosis, but did not improve treatment or the outcome of depression. Their analysis of two systematic reviews concluded that substantial increases would be needed in the role of nurses and in the integration with specialized care for primary care interventions to lead to improvements in the management and outcome of depression.

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