General practitioners' knowledge of their patients' psychosocial problems: multipractice questionnaire survey

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Abstract

Objectives: To evaluate general practitioners' knowledge of a range of psychosocial problems among their patients and to explore whether doctors' recognition of psychosocial problems depends on previous general knowledge about the patient or the type of problem or on certain characteristics of the doctor or the patient.

Design: Multipractice survey of consecutive adult patients consulting general practitioners. Doctors and patients answered written questions.

Setting: Buskerud county, Norway.

Subjects: 1401 adults attending 89 general practitioners during one regular working day in March 1995.

Main outcome measures: Doctors' knowledge of nine predefined psychosocial problems in patients; these problems were assessed by the patients as affecting their health on the day of consultation; odds ratios for the doctor's recognition of each problem, adjusted for characteristics of patients, doctors, and practices; and the doctor's assessment of previous general knowledge about the patient.

Results: Doctors' knowledge of the problems ranged from 53% (108/203) of "stressful working conditions' to 19% (12/63) of a history of "violence or threats." Good previous knowledge of the patient increased the odds for the doctor's recognition of "sorrow," "violence or threats," "substance misuse in close friend or relative," and "difficult conflict with close friend or relative." Age and sex of doctor and patient, patient's educational level and living situation, and location of practice influenced the doctor's awareness.

Conclusions: Variation in the patients' communication abilities, the need for confidence in the doctor-patient relationship before revealing intimate problems, and a tendency for the doctors to be entrapped by their expectations may explain these findings.

Introduction

The importance of a lasting relationship between general practitioners and their patients is well documented.[1 2] One aspect of such a relationship, considered to be an essential part of general practice, is accumulated knowledge of the patients' psychosocial problems.[3] This knowledge has been the focus of studies in Canada and Holland.[4-7] Three of these studies, conducted among highly motivated general practitioners or on selected patient groups, showed that general practitioners recognised 26% to 50% of their patients' psychosocial problems; one showed a recognition rate of 59%, but the design of the study had increased the doctors' attentiveness. That study found a positive correlation between the duration of the doctor-patient relationship and the level of the doctors' awareness.[5] From clinical experience we know that some problems are readily communicated by the patients, while others stay hidden. We do not know if the correlation described applies to problems of different natures. Previous studies have been too small to show if and how the accumulation of knowledge about different kinds of problems differs.

Pattern recognition and the hypothetico-deductive process are the diagnostic strategies most frequently used in clinical practice, and a possible pitfall of these ways of reasoning is the entrapment by prior expectation.[8] This could lead general practitioners to a selective awareness of psychosocial problems in patients in whom they expect to find such problems. If so, there is a potential for more vigilance in history taking, which in turn facilitates diagnosis and promotes care.[9] The possibility of selective awareness was not addressed in the studies mentioned above. General practitioners' recognition of psychosocial problems has to our knowledge not previously been studied in a large, unselected population of adult patients.

The aim of our study was twofold: to evaluate general practitioners' awareness of a range of predefined problems among adult patients in general practice and to explore whether doctors' recognition depends on previous general knowledge about the patient, the type of problem, or characteristics of the patient and the doctor.

Subjects and methods

Using a questionnaire, we conducted a multipractice survey in which general practitioners and their patients answered mirrored questions. The study included patients 16 years of age or older attending the practices during one regular working day. Patients in need of urgent admission to hospital or unable to participate due to serious mental illness were excluded.

The study was conducted in Buskerud county, Norway, after having been piloted in another part of the

country. All 144 general practitioners in the county were invited to join the study. Age, sex, being a specialist in general practice, and type of reimbursement were determined for all general practitioners. We asked about time spent in present practice, average number of patients seen per day, and (using a method developed by Grol *et al*[10]) the doctors' feelings about working with patients with psychosocial problems or psychosomatic symptoms. Eleven of the non-participant doctors did not supply this information. Each practice was classified according to the definitions of the classification committee of the World Organisation of National Colleges, Academies, and Academic Associations of General Practitioners/Family Physicians[11] as solo or group practice and as being urban, suburban, or rural. Eighty nine doctors (62%) agreed to participate in the study. Heavy work load (35) and planned study leave (7) were the reasons most often given for not participating. The participating doctors recorded all their consultations during a regular work day chosen within two weeks in March 1995.

A total of 1407 patients were approached, of whom 1401 were included (four did not want to participate and two questionnaires were not adequately completed by the doctors).

The questionnaire was not seen by the doctor until the end of the first consultation on the recording day. At the end of each consultation the doctor handed patients their copy of the questionnaire. Doctors completed their questionnaires after the last patient that day, before leaving the surgery. Patients filled in their copy at home and returned it directly to us.

The questionnaires explored patients' sociodemographic data, the main reason for the encounter, and the doctor's assessment of his or her previous general knowledge of the patient on a four point scale (very good, good, some, not at all).

The term "psychosocial problems" covers a wide and ill defined set of situations and events. Among 15 studies found in the literature related to psychosocial aspects of clinical work we identified more than 200 such problems ranging from children's bedwetting to religious problems.[4-7 12-22] We excluded psychological and existential problems (such as "nervousness" and "religious problem") as we wanted also the "social" aspect to be present, leaving 114 relevant problems. It was possible to classify 70% of these problems into three broad categories (problems related to bereavement, interpersonal problems, and problems related to work or finance), and another 20% could be classified as a combination of these three categories. The remaining problems were too diverse to be classified. To map a range of psychosocial problems, we selected nine indicator problems satisfying three conditions: all three major categories should be represented; the problem should be common in general practice; and some of the indicators should readily be revealed and discussed by patients, others not. The pilot study indicated that patients experienced an average of 2.2 problems, and that 1.1 problems affected their health on the day they were questioned; this showed that the chosen indicators were commonly seen in general practice.

The box lists the questions used to detect whether patients had any of the nine indicator problems. If they had, they were asked to assess whether the problem affected their health that day. Patients who answered "yes" to this question were considered to have a problem of possible clinical relevance. In the evaluation of "unemployment" and "stressful working conditions," only patients aged 16-67 were included.

Questions for patients and doctors

Questions mapping exposure to nine indicator psychosocial problems, as experienced by patients. Questions for doctors were mirrors of these: "Does/Is/Has this patient..."

- Have you ever been weighed down by sorrow?
- Do you have a demanding caregiving task in your private life?
- Have you ever been subject to threats or violence from someone you know very well?
- Is anyone that you feel close to subject to substance abuse?
- Are you having a difficult conflict with someone that you feel close to?
- Do you usually feel lonely?
- Have you yourself been through family splitting?
- Have you been unemployed for more than six months?
- Do you feel that your job is a strain, physically or mentally?

The percentage of problems present that was known by the doctor was calculated for each of the nine problems. Whether the doctor knew of a problem or not was the dichotomous outcome variable used in a logistic regression analysis performed for each problem. Age and sex of the doctor and the patient, and previous knowledge dichotomised into scant (some, not at all) or good (very good, good) were included in the first step together with independent variables with P values <0.15 in the bivariate analyses. Interactions between the main effect variables were tested.

The study was approved by the regional ethics committee for medical research.

Results

Non-participating doctors did not differ significantly from participating doctors. A total of 1217 (87%) of the 1401 patients returned their questionnaire, of whom 64% were women. Judging by the doctors' notes on the patients, respondents were representative as to sex, living situation, income level, educational level, and source of income, but patients of middle age (40-59 years) replied more often ($\chi^2=12.2$, df$=2$, $P<0.01$) than younger or older patients. The most common reasons for encounter (as classified by the international classification of primary care[23]) were hypertension, pregnancy, diabetes mellitus, back pain, and depression—or, if grouped, symptoms and disorders of the musculoskeletal system, the cardiovascular system, and the respiratory system; all were equally distributed between responders and non-responders. The doctors' previous general knowledge of the patients was lacking or scant in 412 (34%) consultations and good in 797 (66%) consultations.

A total of 962 (79%) patients answered affirmatively to at least one of the nine questions, and 422 (34%) reported that at least one problem affected their present health. The mean number of psychosocial

Table 1 Prevalence of psychosocial problems assessed by patients as affecting their health on the day of consultation, according to sex and age

Type of problem	No of cases/No of patients	% Of cases (95% CI)	No (%) of men			No (%) of women		
			16-39	40-59	⩾60	16-39	40-59	⩾60
Sorrow	168/1136	14.8 (12.7 to 16.9)	13/104 (12.5)	18/142 (12.7)	17/160 (10.6)	27/240 (10.8)*	53/265 (20.0)	40/215 (18.6)
Caregiving task	102/1134	9.0 (7.3 to 10.7)	9/105 (8.6)	18/144 (12.5)	6/167 (3.6)*	28/247 (11.3)	30/265 (11.3)	11/206 (5.3)*
Violence or threats	63/1171	5.4 (4.1 to 6.7)	6/107 (5.6)	7/148 (4.7)	5/177 (2.8)	16/252 (6.3)	25/270 (9.3)*	4/217 (1.8)**
Substance misuse in close friend or relative	31/1176	2.6 (1.7 to 3.6)	4/104 (3.8)	3/149 (2.0)	2/178 (1.1)	8/254 (3.1)	12/268 (4.5)	2/223 (0.9)
Difficult conflict	92/1170	7.9 (6.3 to 9.4)	10/107 (9.3)	12/146 (8.2)	8/176 (4.5)	24/253 (9.5)	33/266 (12.4)**	5/222 (2.3)***
Loneliness	85/1168	7.3 (5.8 to 8.8)	7/105 (6.7)	13/146 (8.9)	12/176 (6.8)	14/254 (5.5)	21/267 (7.9)	18/220 (8.2)
Family splitting	85/1170	7.3 (5.8 to 8.8)	9/107 (8.4)	13/149 (8.7)	8/174 (4.6)	18/256 (7.0)	31/267 (11.6)**	6/217 (2.8)**
Unemployment >6 months†	42/778	5.4 (3.8 to 7.0)	9/99 (9.1)	11/135 (8.1)	3/63 (4.8)	9/222 (4.1)	8/228 (3.5)	2/31 (6.5)
Stressful working conditions†	203/775	26.2 (23.1 to 29.3)	26/100 (26.0)	48/133 (36.1)	16/57 (28.1)	50/225 (22.2)	56/229 (24.5)	7/31 (22.6)

*P<0.05, **P<0.01, ***P<0.001, χ^2 test of proportion of patients in this age group compared to proportion of patients in the other two age groups combined.
†Calculated for patients 16-67 years of age.

problems reported per patient was 1.9, or 0.7 if restricted to those perceived to affect health at the moment. Stressful working conditions and sorrow were the most common psychosocial problems (table 1). The only significant sex difference was the higher prevalence of stressful working conditions among middle aged men (P = 0.03).

A demanding caregiving task was significantly less common in older than younger men. Among women, a demanding caregiving task, violence or threats, a difficult conflict, and family splitting were significantly less prevalent in the older age group, and sorrow less prevalent in the younger age group. Violence or threats, a difficult conflict, and family splitting were more common in middle aged women.

Doctors' knowledge of the nine problems ranged from 53% (108/203) awareness of stressful working conditions to 19% (12/63) for history of violence or threats (table 2). Violence or threats, a demanding caregiving task, and loneliness were less frequently recognised than stressful working conditions. If patients did not indicate that they were affected by one of the nine problems, or did not indicate that the problem affected their health that day, the general practitioners noted the presence of that problem among fewer than 10% of the patients, except for stressful working conditions, which the doctors stated were present among 22% of the patients who did not report this problem (data not shown).

Table 2 Doctor's knowledge of psychosocial problems influencing patients' health

Type of problem	No known/No of patients with problem (%; 95% CI)
Sorrow	64/168 (38.1; 30.8 to 45.4)
Caregiving task	25/102 (24.5; 16.2 to 32.8)
Violence or threats	12/63 (19.0; 9.3 to 28.7)
Substance abuse in close friend or relative	14/31 (45.2; 27.7 to 62.7)
Difficult conflict	43/92 (46.7; 36.5 to 56.9)
Loneliness	26/85 (30.6; 20.8 to 40.4)
Family splitting	41/85 (48.2; 37.6 to 58.8)
Unemployment >6 months	20/42 (47.6; 32.5 to 62.7)
Stressful working conditions	108/203 (53.2; 46.3 to 60.1)

Doctor's variables except for sex and age group, and the practice variable "solo or group practice," were eliminated in the multivariate analyses (table 3. The general practitioner's assessment of prior general knowledge of the patient correlated with knowledge of sorrow, violence or threats, substance misuse in a close friend or relative, and a difficult conflict. The doctors' recognition of sorrow, a demanding caregiving task, and loneliness increased with the patient's age. A demanding caregiving task was less frequently recognised among male patients. Female and older doctors were more often aware of a patient's difficult conflict. Among patients with less than 10 years of education, the doctors were more often aware of sorrow but less often aware of a difficult conflict. Violence or threats were more often recognised among patients who were the only adult in their household. Doctors in rural practices were more often informed of their patients' difficult conflicts or stressful working conditions than were their urban or suburban counterparts.

Discussion

In Norway patients are free to change their general practitioner, but in some rural areas the alternatives are few. In 1987, 90% of the general practitioners claimed they tried to maintain a personal list system.[24] Buskerud county, which has 5.1% of the Norwegian population and 4.9% of Norway's area, has previously been shown to be representative of the country as a whole.[25] The representativeness of our study is supported by three measures: participant and non-participant doctors did not differ significantly as to their feelings towards working with psychosocial problems; the patients' reasons for consultation were similar to the ones reported in earlier large Norwegian surveys of general practice[24]; and the doctors' assessment of previous knowledge of their patients was similar to that reported in Hjortdahl's national study.[2]

Discussing psychosocial problems

The importance of assessing the patient's own evaluations has been widely recognised,[26] but it could be argued that the psychosocial problems we have used in this study need not be relevant to the patient's reason for the current consultation. We tried to ensure clinical relevance by restricting analysis to the problems that patients assessed as affecting their present health. Patients could avoid discussing such problems because they do not expect the doctor to be able to help them, because they fear being invaded by emotionally disturbing questions, or because they are already reconciled with their situation. Even so, awareness of such a problem could sometimes explain symptoms to the doctor and prevent unnecessary diagnostic procedures.[2]

Patients' reluctance to reveal intimate information could explain the findings that only a fifth to a half of the psychosocial problems perceived by the patients as affecting their health that day were recognised by the general practitioners, and that awareness depends on the type of problem present. This could reflect a deficiency in the doctor-patient relationships of many general practitioners, as proposed by Yaffe,[6] or it could show that knowledge of psychosocial problems is not as important in general practice as is claimed by leading proponents.[3] The doctors' awareness of psychosocial problems was lower in our study than that reported by Rosenberg and Pless, whose study design could have increased the participants' vigilance.[5] The study of Yaffe *et al*, performed on middle aged patients, found an overall awareness of 26% of the known psychosocial problems.[6]

The question concerning violence or threats was phrased so as to include possible experiences from childhood or in relation to friends as well as conjugal violence; it showed no significant sex differences in prevalence. The low prevalence in comparison to other studies[27 28] is largely explained by the fact that only 39% of those with experience of violence or threats said that it affected their health on the day of consultation. The result indicates that although conjugal violence mainly affects women,[29] the proportion of men affected is not negligible.

Previous knowledge of the patient

The impact of previous general knowledge of the patient was different for different kinds of problems. For some of the problems the odds ratios were large, although not always significant at the 5% level. As these correlations support clinical experience, it would be wrong to dismiss them.

The doctors' awareness of work related problems and family splitting was not directly related to prior general knowledge, probably because this information is exchanged early in the doctor-patient relationship. Carrying sorrow, being in a difficult conflict with a close person, or substance misuse in a close friend or relative are situations which require trust in the confidant, and accordingly previous general knowledge would have an effect. This effect and a relatively high level of recognition suggest that this information reaches the doctor by diffusion over the years. A victim of violence or threats also relies on trust to confide, but the doctors' recognition was low. Sugg and Inui have found that family physicians avoid the subject of violence because

Table 3 Odds ratios for doctors' knowledge of indicator psychosocial problems.* Independent variables not listed were eliminated in regression analyses

Variable	No of patients	Odds ratio (95% CI)	P value
Sorrow (n=167†; 63 known to doctor, 104 not known to doctor)			
Age of patient (years):			
<40 years	40	1.0	
40-59 years	71	3.66 (1.25 to 10.7)	0.18
⩾60 years	56	6.35 (2.06 to 19.6)	0.001
Patient's educational level:			
Schooling <10 years	66	1.0	
Schooling⩾10 years	101	0.44 (0.21 to 0.91)	0.028
Previous knowledge:			
Scant	37	1.0	
Good	130	2.83 (1.12 to 7.17)	0.028
Caregiving task (n=102; 25 known to doctor, 77 not known to doctor)			
Age of patient:			
<40 years	37	1.0	
40-59 years	48	2.04 (0.66 to 6.24)	0.214
⩾60 years	17	4.39 (1.13 to 17.0)	0.032
Sex of patient:			
Male	33	1.0	
Female	69	3.70 (1.12 to 12.3)	0.033
Violence or threats (n=63; 12 known to doctor, 51 not known to doctor)			
Living situation:			
Other adult in household	44	1.0	
No other adult in household	19	8.67 (2.07 to 36.3)	0.003
Previous knowledge:			
Scant	14	1.0	
Good	49	5.50 (0.57 to 53.1)	0.140
Substance misuse in close friend or relative (n=31; 14 known to doctor, 17 not known to doctor)			
Previous knowledge:			
Scant	7	1.0	
Good	24	7.09 (0.74 to 68.2)	0.143
Difficult conflict (n=92; 43 known to doctor, 49 not known to doctor)			
Sex of patient:			
Male	30	1.0	
Female	62	3.06 (0.99 to 9.44)	0.052
Sex of doctor:			
Male	67	1.0	
Female	25	3.25 (1.01 to 10.4)	0.048
Age of doctor:			
<45 years	59	1.0	
⩾45 years	33	3.19 (1.09 to 9.38)	0.035
Patient's educational level:			
Schooling <10 years	30	1.0	
Schooling ⩾10 years	62	4.12 (1.36 to 12.5)	0.012
Location of practice:			
Urban or suburban	67	1.0	
Rural	25	6.13 (1.88 to 20.0)	0.003
Previous knowledge:			
Scant	18	1.0	
Good	74	3.39 (0.88 to 13.1)	0.076
Loneliness (n=85; 26 known to doctor, 59 not known to doctor)			
Age of patient:			
<40 years	21	1.0	
40-59 years	34	1.64 (0.36 to 7.35)	0.520
⩾60 years	30	5.16 (1.20 to 22.3)	0.028
Living situation:			
Other adult in household	55	1.0	
No other adult in household	30	2.65 (0.92 to 7.66)	0.072
Family splitting (n=84†; 41 known to doctor, 43 not known to doctor)			
Living situation:			
Other adult in household	44	1.0	
No other adult in household	40	2.38 (0.99 to 5.72)	0.052
Stressful working conditions (n=203; 108 known to doctor, 95 not known to doctor)			
Location of practice:			
Urban or suburban	164	1.0	
Rural	39	2.30 (1.09 to 4.86)	0.028

*No significant independent variables for knowledge of unemployment (n=42; knowledge 20, no knowledge 22)
†One case missing due to missing value in one variable.

Key messages

- At least one third of patients in general practice have psychosocial problems that they perceive as influencing their present health
- General practitioners recognise a fifth to a half of these problems, depending on the type of problem, previous general knowledge of the patient, and sociodemographic characteristics of the patient
- Variation in the patients' wishes and abilities to communicate, the need for confidence in the doctor-patient relationship before revealing intimate problems, and a tendency for doctors to be entrapped by their expectations may be some reasons for these findings

they are afraid of getting flooded by multiple other problems.[30] Since the doctors seem to be aware of this problem more often in patients who live alone, it is possible that it takes a major life event, such as a separation or divorce, for such information to be communicated.

In contrast to Yaffe *et al*,[6] we found that doctors' recognition of problems was strongly and significantly affected by the patient's sociodemographic characteristics, such as age, sex, educational level, or living alone. This suggests that selective awareness was present among the doctors. Expecting that patients had a demanding caregiving task or were lonely could have affected the doctors to such a degree that previous general knowledge was unimportant, an example of the pitfall described by Sackett *et al*.[8] Another possible explanation is that it is not the expectations that help the doctors come to a decision, but opinions on which patients need their advice. The effects of the patients' characteristics may be due to the patients' ability to communicate: doctors were more aware of sorrow among those patients with little education and more aware of difficult conflicts among those patients at higher educational levels.

Conclusions

Psychosocial problems which patients consider to be affecting their health are abundant in general practice. Doctors' recognition of such problems depends primarily on type of problem, previous general knowledge of the patient, and sociodemographic characteristics of the patient. Variation in the patients' wishes and ability to communicate, the need for confidence in the doctor-patient relationship before revealing intimate problems, and a tendency for the doctors to be entrapped by their expectations are some likely reasons for these findings.

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1 Hjortdahl P, Borchgrevink CF. Continuity of care: influence of general practitioners' knowledge about their patients on use of resources in consultations. *BMJ* 1991;303:1181-4.
2 Leopold N, Cooper J, Clancy C. Sustained partnership in primary care. *J Famy Pract* 1996;42:129-37.
3 McWhinney IR. The principles of family medicine. In: *A textbook of family medicine.* Oxford: Oxford University Press, 1989:12-26.
4 Stewart MA, Buck CW. Physicians' knowledge of and response to patients' problems. *Medical Care* 1977;15:578-85.
5 Rosenberg EE, Pless IB. Clinicians' knowledge about the families of their patients. *Family Practice* 1985;2:23-9.
6 Yaffe MJ, Stewart MA. Factors influencing doctors' awareness of the life problems of middle-aged patients. *Medical Care* 1985;23:1276-82.
7 Querido A. The family physician. Direct evaluation of the work of some general practitioners. In: *The efficiency of medical care. A critical discussion of measuring procedures.* Leiden: Stenfert Kroese, 1963:46-52.
8 Sackett DL, Haynes RB, Guyatt GH, Tugwell P. The clinical examination. In: *Clinical epidemiology. A basic science for clinical medicine.* Boston: Little, Brown, 1991:19-50.
9 Barbour A. Diagnostic strategies for unrecognized personal illness. In: *Caring for patients. A critique of the medical model.* Stanford: Stanford University Press, 1995:81-95.
10 Grol R, Mokkink H, Smits A, van Eijk J, Beek M, Mesker P, *et al*. Work satisfaction of general practitioners and the quality of patient care. *Family Practice* 1985;2:128-35.
11 WONCA Classification Committee. An international glossary for primary care. *Family Practice* 1981;13:671-81.
12 Schmeling-Kludas C, Odensass C. [Psychosomatic medicine in the general hospital: problem spectrum in a random sample of 100 internal medicine patients.] *Psychotherapie, Psychosomatik, Medizinische Psychologie* 1994;44:372-81. (In German.)
13 Martin FJ, Bass MJ. The impact of discussion of non-medical problems in the physician's office. *Family Practice* 1989;6:254-8.
14 Schwenk TL, Clark CH, Jones GR, Simmons RC, Coleman ML. Defining a behavioral science curriculum for family physicians: what do patients think? *J Fam Pract* 1982;15:339-45.
15 Kushner K, Meyer D, Hansen M, Bobula J, Hansen J, Pridham K. The family conference: what do patients want? *J Fam Pract* 1986;23:463-7.
16 Jones I, Morrell D. General practitioners' background knowledge of their patients. *Family Practice* 1995;12:49-53.
17 Goldberg RJ, Novack DH. The psychosocial review of systems. *Soc Sci Med* 1992;35:261-9.
18 Eide R, Thyholdt R, Hamre E. Relationship of psychosocial factors to bodily and psychological complaints in a population in western Norway. *Psychother Psychosomat* 1982;37:218-34.
19 Miller PM, Salter DP. Is there a short-cut? An investigation into the life event interview. *Acta Psychiatr Scand* 1984;70:417-27.
20 Chen CY, Liang YI, Hsieh WC. Evaluation of clinical diagnosis and stressful life events in patients at a rural family practice centre. *Family Practice* 1989;6:259-62.
21 Leeflang RL, Klein-Hesselink DJ, Spruit IP. Health effects of unemployment—II. Men and women. *Soc Sci Med* 1992;34:351-63.
22 Holmes TH, Rahe RH. The social readjustment rating scale. *J Psychosomat Res* 1967;11:213-8.
23 Lamberts H, Wood M. International classification of primary care: tabular list. In: *International classification of primary care.* Oxford: Oxford University Press, 1989:68-102.
24 Hjortdahl P. Continuity of care in general practice. A study related to ideology and reality of continuity of care in Norwegian general practice [dissertation]. Oslo: University of Oslo, 1992.
25 Tellnes G. Sickness certification—an epidemiological study related to community medicine and general practice [dissertation]. Oslo: University of Oslo, 1990.
26 Pendleton D, Schofield T, Tate P, Havelock P. General approaches to the consultation. In: *The consultation. An approach to learning and teaching.* Oxford: Oxford University Press, 1984:1-22.
27 Ogg J, Bennett G. Elder abuse in Britain. *BMJ* 1992;305:998-9.
28 McCauley J, Kern DE, Kolodner K, Dill L, Schroeder AF, DeChant HK, *et al*. The "battering syndrome": prevalence and clinical characteristics of domestic violence in primary care internal medicine practices. *Ann Intern Med* 1995;123:737-46.
29 Smilkstein G, Aspy CB, Quiggins PA. Conjugal conflict and violence: a review and theoretical paradigm. *Family Medicine* 1994;26:111-6.
30 Sugg NK, Inui T. Primary care physicians' response to domestic violence: opening Pandora's box. *JAMA* 1992;267:3157-60.

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