

# Frequency of Job-Related Burn-out in Family Physicians working in General / Family Practice in the Middle East

Abdulrazak Abyad (1)

Bader Almustafa (2)

Abbas Ali Mansour (3)

Manal S Al-Mutar (4)

Thamer Al Hilfi (5)

Seyed Habib Olla Kavari (6)

Middle East Primary Care Research Network  
Research Project

(1) A. Abyad, MD, MPH, MBA, AGSF, AFCHSE., Lebanon,

(2) Bader Almustafa, MD. Saudi Arabia

(3) Abbas Ali Mansour, MD, Iraq

(4) Manal S Al-Mutar, MD, Kuwait

(5) Thamer Al Hilfi, MD, Iraq

(6) Seyed Habib Olla Kavari, Iran

## Correspondence:

A. Abyad, MD, MPH, MBA, AGSF, AFCHSE.,

Tripoli

Lebanon

**Email:** aabyad@cyberia.net.lb

## Abstract

**Introduction:** The aim of this study was to determine the prevalence of burnout, and of associated factors, amongst family doctors (FDs) in the Middle East.

**Methodology:** A cross-sectional survey of FDs was conducted using a custom-designed and validated questionnaire which incorporated the Maslach Burnout Inventory Human Services Survey (MBI-HSS) as well as questions about demographic factors, working experience, health, lifestyle and job satisfaction. MBI-HSS scores were analysed in the three dimensions of emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA).

**Results:** Seven hundred questionnaires were distributed in 5 Middle Eastern countries, and 500 were returned to give a response rate of 71%. As far as burnout, 44% of respondents scored high for EE burnout, 30% for DP and 28% for PA, with 15% scoring high burnout in each of the three measurements. A little more than 33% of doctors did

not score high for burnout in any dimension. High burnout was observed to be emphatically connected with a few of the variables under concentrate, particularly those relative to respondents' nation of home, occupation fulfillment, expectation to change work, sick leave usage, the misuse of liquor, tobacco and psychotropic medication, more youthful age and male sex.

**Conclusions:** Burnout is by all accounts a typical issue in FDs over the Middle East and is connected with individual and workload pointers, and particularly work fulfillment, aim to change work and the abuse of liquor, tobacco and medicine. The study survey has all the earmarks of being a substantial instrument to quantify burnout in FDs. Proposals for changes of employment conditions and future research are needed for further exploring the issue.

**Key words:** Burnout, Middle East, general practice, job satisfaction.

## Background

The practice of medicine is inherently stressful. Physicians must continuously respond to the needs of patients and their families, routinely interact with the most intense emotional aspects of life and expend their own emotional resources to provide care and caring to others. Each day, physicians are called on to cope and adapt with stresses characteristic of their role. Extensive 'withdrawals' from emotional reserves are required, while emotional 'deposits' may be infrequent and few. For some, each day becomes increasingly more difficult as coping mechanisms prove inadequate and emotional reserves become depleted (1).

Burnout is generally characterized as loss of eagerness for work, sentiments of negativity, and a low feeling of individual achievement. There have been inquiries concerning the utilization of these criteria, in any case. Burnout is a reaction to chronic, job-related stress. It is an emotional state that may be accompanied by a number of physical and behavioural changes. It is a construct used to describe negative changes in the attitudes, moods, and behaviours of individuals in reaction to stresses at work. The sources of burnout in physicians are maladaptive coping habits, which are fostered by the medical training system. Postgraduate training in medicine involves long hours, excessive workloads, sleep deprivation, changing working conditions, peer competition, self-denial, and social isolation from the 'real world' (2).

Those physicians who manage to survive their training years find that their expectations often do not conform to reality. Instead of the ideal life they envisioned, they find numerous new sources of stress waiting for them. Many arrive at this point with their sense of self-worth completely tied to their productivity. A growing practice would seem to be a sign of success and gratification but may actually require a physician having to work faster and longer to meet demands. Under these conditions, the practice may become routine and tedious. The rapidly increasing body of medical knowledge and technology make it difficult to keep up to date, and there is an increasing pressure to focus on the disease rather than the patient (3).

It is estimated that between 30-40% of physicians suffer from burnout at a level sufficient to affect their personal or professional performance. Prevalence rates for depression and stress (anxiety and burnout) have been reported for British general practitioners, Canadian and American emergency room physicians, American Internists, American family practice residents, Spanish and Canadian general practitioners (4).

A national overview distributed in the Archives of Internal Medicine in 2012 reported that US doctors endure more burnout than other American workers (5). This year, in the Medscape Physician Lifestyle Report, 46% of all doctors reacted that they had burnout, which is a generous increment since the Medscape 2013 Lifestyle Report, in which burnout was accounted for in marginally under 40%

of respondents.. A few studies have recommended that a low feeling of individual achievement is not connected with burnout, in any event in men (6,7).

In other studies , essentially including the statements "I feel burned out from my work" and "I have become more callous toward people since I took this job" appears to be a valid method for measuring burnout (8, 9). Given the vagueness in characterizing and measuring burnout, the criteria utilized as a part of the Medscape review to survey burnout in our doctor individuals give helpful data on the present condition of doctor morale which, tragically, is low.

An article distributed in the Journal of General Internal Medicine reported burnout rates running from 30% to 65% across specialties, with the most elevated rates brought about by doctors at the front of care, such as, emergency medicine and primary care (10). The 2015 Medscape study results mirror this same example, with the most elevated burnout rates found in critical care (53%) and emergency medicine (52%), and with half of all family doctors, internists, and general surgeons reporting burnout. Of considerably more worry, among internists and family doctors who reacted to the Medscape overview, burnout rates ascended from around 43% in 2013 to half in both gatherings, a flat out expansion of 7% however a 16% ascent in frequency in only 2 years. In a year ago's Medscape Physician Compensation Report, family doctors and internists were two of the specialties most likely to say they would choose medicine again, but also two of the specialties most likely to say they would not choose their own specialty again.

Other studies have demonstrated that the pervasiveness of burnout in essential consideration doctors (PCPs) has expanded over the earlier decade in the United States as well as in Europe (7, 11). The minimum worn out doctors as indicated by our study are dermatologists (37%), therapists (38%), and pathologists (39%). As far as we can tell no one has yet documented rates of burnout in general practice in the Middle East.

## Aims and Objectives

Burnout can be prevented by psychological or social interventions. The aim of this study is to quantify burnout in Middle-Eastern FPs/GPs (Family Doctors/General Practitioners), and try to identify factors which predict burnout in the study population.

### Objectives

The objective of this study is to perform a survey of burnout in General Practice/Family Medicine, with the participation of Middle-Eastern FPs/GPs. We may then investigate the frequency of burnout in FPs/GPs and to identify risk factors contributing to the development of such burnout.

## Study population - Methods - Research Plan

Randomly assigned FPs/GPs from participant countries were asked to participate in this study. The randomisation and sample selection process was co-ordinated by a key FP/GP in each Country, selected from the participants of project meeting, or their delegates. Each Country was expected to provide up to 100 completed questionnaires to the co-ordinating doctors (authors) for analysis.

Participating doctors were asked to complete a questionnaire that had two parts, and which had been piloted successfully and validated (12) (Table 1):

Part one was a self-prepared questionnaire with questions about demographic information, with questions on working place, working tenure, training, workload, remuneration, job satisfaction, alcohol consumption, smoking, use of psychoactive medication, sick leave, etc.

Part two was the Maslach Burnout Inventory, Human Services Survey, a conceptualization of burnout as a syndrome characterized by three dimensions: emotional exhaustion, depersonalization and decreased sense of personal accomplishment (13), and Part three was a seven-point Likert type satisfaction questionnaire.

In those Countries where the use of an English-language instrument may have posed a barrier, the questionnaire was translated to the native language by the key co-ordinating FP/GP in that Country. The translation process was validated by cross translation.

## Data collection and Statistical Analysis

The country co-ordinators, one lead FD in each of 5 participating countries were responsible to send the questionnaire to a representative sample of their country's FDs. The original target was a sample size of 100 completed questionnaires from each country. Each country co-ordinator coded the data from the returned questionnaires into a custom-designed Microsoft Excel spreadsheet template, and these were then imported into SPSS version 17 by the coordinator of the study.

Scores were output in the three dimensions of burnout and were then transformed into dummy categorical variables for high, average and low burnout in the dimensions of emotional exhaustion (EE), depersonalization (DP), and Personal Accomplishment (PA) as recommended by Maslach using the cutoff values applicable for doctors (13). However, the burnout outcome variables were recoded into high and not-high (average or low burnout) for the statistical analyses.

EE: low burnout < 13, average burnout 14-26, high burnout > 27 (The scoring guide actually recommends that average scores for EE range from 19 to 26. Scores in the range from 14 to 18 are thus difficult to classify. For the purposes of the description of rates of burnout found in this

study, EE scores in the range of 14 to 18 were classified as average, to avoid unclassified cases. However, all the statistical analyses performed on the data set used the outcome variable of high as against not high burnout in the three dimensions.)

**DP:**

low burnout < 5, average burnout 6-9, high burnout > 10.

**PA:**

high burnout < 33, average burnout 34-39, low burnout > 40 (inverse scale).

## Results

A total of 500 completed questionnaires were returned from more than 700 sent giving a response rate of approximately 71%. Among the 500 respondents (270 males, 54 %) had a mean age of 47.4 years (SD 6.5 years) and had graduated 15 years previously to filling in the questionnaire (SD 7.5 years), worked 42 hours per week (SD 10 hours), saw 170 patients per week (SD 63 patients) and were roughly evenly distributed amongst the 5 countries

(See Table 2, page 9)

On the job satisfaction questions on Likert scale 6% of the sample have very low satisfaction and only 11% are highly satisfied with their jobs.

Table 3 (page 9) lists the frequency distributions of respondents by degree of burnout (high, average or low) in the three dimensions (EE, DP, PA). Table 4 gives the frequency distribution of respondents by presence of high burnout scores in none (0), one or more of the three dimensions (1, 2 or 3). In all, 44% of respondents scored high for EE (95% CI = 41.5-45.0%), 30 % for high DP (28.2-34.9%), 28.0% low for PA (26.6-32.3%). In Table 4 (page 9) 15% of respondents (13.3-17.1%) scored high for burnout in all three dimensions. Only 34.6 % of doctors (32.1-38.6 %) did not score high for burnout in any dimension.

Iraq and Lebanon scored the highest in term burnout score in each of the three dimensions followed by Iran, Saudi Arabia and Kuwait. Lebanese and Iranian respondents demonstrated high proportions of high EE burnout, Iraqi and Kuwaiti respondents demonstrated high proportions of high DP burnout, whilst Saudi respondents demonstrated high proportions of high PA burnout.

When looking at the factors associated with high burnout the strongest associations using both logistic regression and included job satisfaction and intention to change job, the (ab) use of tobacco, alcohol and psychotropic drugs, male sex, age, type of work and sick leave utilization.

Table 1

## PART 1

**Human services survey**

The information you record in this questionnaire will be treated with extreme confidentiality. Your identity will be unknown to us. Please answer all questions as truthfully as you can. Please only complete this questionnaire if you are a full-time general practitioner or family doctor, working either in state employment (including academic or educational work) or private practice, or both. Please do not return this questionnaire if you work 50% or more of your time in another specialty besides general practice or family medicine, or if you are presently retired.

*Thank you for your time.*

Age: \_\_\_\_\_

Sex: \_\_\_\_\_

Marital status: \_\_\_\_\_ (married, single, divorced/separated, widowed)

Number of children: \_\_\_\_\_ (number under 5 years of age: \_\_\_\_\_)

Years since qualification as M.D.: \_\_\_\_\_ Years in current position / workplace: \_\_\_\_\_

Further qualifications: \_\_\_\_\_

Type of work: (please tick all that apply)

State-employed  private practice  education/academic

currently in training

other (e.g. occupational health physician) – please specify \_\_\_\_\_

Do you work solo or in a group setting? \_\_\_\_\_ (solo/group)

Is your practice mainly rural or urban? \_\_\_\_\_ rural \_\_\_\_\_ urban \_\_\_\_\_ mixed

How much do you earn a month from all your GP/FM work, approximately?

Euro \_\_\_\_\_

How many patients do you see in one week, on average? \_\_\_\_\_

How many hours do you work in one week, on average? \_\_\_\_\_

How many hours a day do you sleep, on average?

\_\_\_\_\_ (> or = 8) \_\_\_\_\_ (> 4 but < 8) \_\_\_\_\_ (< or = 4)

Do you do night visits, or work night shifts (after 8 pm, before 6 am)? \_\_\_\_\_ (Y/N)

If you do work at night, how many nights a month you do work on average? \_\_\_\_\_

Do you work on the weekend, or work weekend shifts? \_\_\_\_\_ (Y/N)

If you do work on the weekend, how many weekends a year are you off? \_\_\_\_\_

How many days were you off work on sick leave last year? \_\_\_\_\_

Have you seriously considered changing your job at least once over the past months? \_\_\_\_\_ yes \_\_\_\_\_ no

\_\_\_\_\_ undecided

How satisfied are you with your current job? (0 = very little, to 6 = very much) \_\_\_\_\_

Do you smoke tobacco regularly? \_\_\_\_\_ (Y/N)

Has your consumption of tobacco increased during the last year? \_\_\_\_\_ (Y/N)

Do you drink alcohol regularly? \_\_\_\_\_ (Y/N)

Has your consumption of alcohol increased during the last year? \_\_\_\_\_ (Y/N)

Have you taken psychoactive medication in the last year? \_\_\_\_\_ (Y/N)

## PART 2

Please reply to each question below with a score from 0 to 6 (one choice only per question).

The meaning of the scores are explained below:

0 = never,

1 = a few times a year or less frequently,

2 = once a month or less frequently,

3 = a few times a month,

4 = once a week,

5 = a few times a week,

6 = every day

1. I feel emotionally drained from work

Score =

2. I feel used up at the end of the workday

Score =

3. I feel fatigued when I get up in the morning and have to face another day on the job

Score =

4. I can easily understand how my patients feel about things

Score =

5. I feel I treat some patients as if they were impersonal objects

Score =

6. Working with people all day is really a strain for me

Score =

7. I deal very effectively with the problems of my patients

Score =

8. I feel burned out from my work

Score =

9. I feel I am positively influencing other people's lives through my work

Score =

10. I have become more callous towards people since I took this job

Score =

11. I worry that this job is hardening me emotionally

Score =

12. I feel very energetic

Score =

13. I feel frustrated by my job

Score =

14. I feel that I am working too hard on my job

Score =

15. I do not really care what happens to some patients

Score =

16. Working with people directly puts too much stress on me

Score =

17. I can easily create a relaxed atmosphere with my patients

Score =

18. I feel exhilarated after working closely with my patients

Score =

19. I have accomplished many worthwhile things in this job

Score =

20. I feel like I am at the end of my rope

Score =

21. In my work I deal with emotional problems very calmly

Score =

22. I feel patients blame me for some of their problems

Score =

*Thank you for your time.*

Table 2: Job Satisfaction on Likert Scale

Job Satisfaction	Frequency	Percentage
1 (Low)	30	6
2	50	10
3	105	21
4	150	30
5	110	22
6 (High)	55	11

Table 3: Frequency and cumulative frequency distributions of respondents by degree of burnout (high, average and low) with 95% CI in each of the three dimensions

Burnout	EE (n = 500)	% (95% CI)	DP (n =500)	% (95% CI)	PA (n = 500)	% (95% CI)
High	220	44.0 (41.5–45.0)	150	30.0 (28.2–34.9)	144	28.0 (26.6–32.3)
Medium	200	40.0 (36.5–43.6)	160	32.0 (29.9–33.1)	156	31.0 (26.1–30.2)
Low	80	16.0 (14.1–18.0)	190	38.0 (35.0–40.0)	200	40.0 (37.0–42.0)

Table 4: Frequency and cumulative frequency distributions of respondents by high burnout score in none (0) or any one, any two or all three dimensions (1, 2 or 3) with 95% CI

High Burnout	N=500	% (95% CI)
No Dimension	173	34.6 (32.1-38.6)
One Dimension	162	32.4 (28.1-34.7)
Two Dimension	90	18.0 (17.1-20.2)
All Three Dimensions	75	15.0 (13.3-17.1)

## Discussion

In rundown, MEPCRN investigation of burnout among family doctors in 5 Middle Eastern Countries with an approved instrument to gauge burnout accomplished a response rate of 71%. Taking all things together, 44% of respondents scored high for EE burnout, 30% scored high for DP burnout and 28% scored high for PA burnout. Just 34.6% of respondents did not score high for burnout in any measurement, whilst 21% scored high for burnout in no less than two measurements and 15% scored high for each of the three. In the wake of controlling for nation, low occupation fulfillment, communicated goal to change work, abuse of liquor, tobacco and psychotropic medication, sick leave usage, more youthful age, male sex and kind of work were connected with high burnout, as beforehand reported.(1)

Some prior studies reported lower rates of burnout, yet a comparable number of late studies reported comparable information (14,15,16,17-21). Not surprisingly, high burnout was more probable with low occupation fulfillment and

goal to change job (1, 15,22). Additionally,(1,3,4,14,22) elevated amounts of burnout were observed to be more probable with certain organizational elements (nation of root, as surrogate for health services framework, and kind of work) and increased sick leave use, and less so with high workload (patients per week and hours per week) and other employment stressors (pulling all nighters and weekends). Individual variables, for example, more youthful age, sex, conjugal status and number of youngsters were likewise connected with burnout, yet male sex all the more unequivocally so (1,22).

Scholastic work sort was connected to lower EE, however higher PA burnout, as beforehand reported (1). Low self-regard has been already answered to be connected with burnout.(1) In this study, we watched that burnout was more probable with expanding smoking, expanded utilization of liquor and utilization of psychotropic drug, which might be indications of low self-regard (15). Different variables, for example, salary, were shockingly rather feebly connected with high burnout, whilst others (non-scholastic kind of work, years since graduation, not

having further capabilities, expanding smoking) appeared to be connected with high EE burnout, yet make high PA burnout more outlandish; be that as it may, such vague discoveries have been beforehand depicted in burnout research in specialists, for instance, by Deckard et al. (4) Generally, the example of related variables seems like that reported by Goehring et al.(8) for those variables which were incorporated into both studies.

This is the initially reported study exploring the pervasiveness of burnout among Family Physicians in the Middle East, planned to look at the variables connected with high burnout. The constraints of this study incorporate the way that it is cross-sectional, that it has not been led simultaneously in all nations, that the study included FDs in different nations and working in various social insurance and healthcare frameworks without measuring the multifaceted nature of this environment. The burnout scores discovered seemed practically identical or high concerning prior studies.

## Conclusion

Burnout is by all accounts a typical issue in FDs crosswise over the Middle East, with high levels obviously influencing 66% of respondents in this study. Taking all things together, 44% of respondents reported abnormal amounts of EE, 30% DP and 28% low sentiments of PA. There is extensive variation between nations. High burnout was observed to be more probable in relationship with a few of the variables under study, especially those in respect to respondents' nation of living, work fulfillment, intention to change work, sick leave usage, the misuse of liquor, tobacco and psychotropic prescription, younger age and male sex.

Future examination is expected to investigate the issue top to bottom, create models to portray the marvel and to recognize causative elements and compelling between intervention methodologies. Work fulfillment is an essential element in such research, and it ought to be prioritized by MEPCRN as a potential for further work and research.

Late research dealing with burnout expects to grow new hypothetical structures that expressly coordinate both individual and situational elements, utilizing a model of job-person fit. Maslach and Leiter (30) address the test by defining a model that spotlights on the degree of match or befuddle between the individual and six spaces of the employment environment, specifically workload, control, reward, community, fairness and values. Re-look has shown that the more noteworthy the confounder, the more noteworthy the potential for burnout.

Future studies ought to address these elements when examining burnout in FDs, and the attention ought to be on positive as opposed to negative states, managing work engagement and fulfillment and not simply work stress.(1) In such manner, the solid relationships found in this study between low employment satisfaction and burnout support the thought of centering future examination on enhancing work fulfillment instead of tending to burnout straightforwardly.

Shockingly, little research has been led into mediations for burnout. In spite of the fact that examination demonstrates that it is the organizational attributes that appear to have more grounded relationship with burnout; generally intercessions have in the past incidentally been fixated on changing individuals (1). Various mediation methodologies have been concentrated, some concentrating on aversion of burnout and others on treatment when it has as of now happened, and results have been varied (1). This is another essential area where our knowledge is lacking.

## References

1. Deckard GJ, Hicks LL & Hamory BH (1992). The occurrence and distribution of burnout among infectious disease physicians. *JID*. 165:224-8.
2. Fawzy IF, Fawzy NW & Pasnau R (1991). Burnout in the health professions. In: *Handbook of studies on general hospital psychiatry*. Judd, Burrows, Lipsitt (Ed). NewYork. Elsevier Science Publishers. pp.119-130.
3. Deckard G, Meterko M & Field D (1994). Physician Burnout: An examination of personal, professional, and organisational relationship. *Med Care*. 32:745-754.
4. Thommasen HV, Lavanchy M, Connelly I, Berkowitz J. Mental health, job satisfaction, and intention to relocate-opinions of physicians in rural British Columbia. *Can Fam Physician* 2001;47:737-744.
5. Shanafelt TD, Boone S, Tan L, et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Arch Intern Med*. 2012;172:1377-1385. <http://archinte.jamanetwork.com/article.aspx?articleid=1351351> Accessed December 1, 2014
6. Ludwig DS, Kabat-Zinn J. Mindfulness in medicine. *JAMA*. 2008;300:1350-1352. Abstract
7. Houkes I, Winants Y, Twellaar M, Verdonk P. Development of burnout over time and the causal order of the three dimensions of burnout among male and female GPs. A three-wave panel study. *BMC Public Health*. 2011;11:240. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3101180/> Accessed December 3, 2014.
8. West CP, Dyrbye LN, Satele DV, Sloan JA, Shanafelt TD. Concurrent validity of single-item measures of emotional exhaustion and depersonalization in burnout assessment. *J Gen Intern Med*. 2012;27:1445-1452. <http://link.springer.com/article/10.1007%2Fs11606-012-2015-7> Accessed December 10, 2014.
9. Dolan ED1, Mohr D, Lempa M, Joos S, Fihn SD, Nelson KM, Helfrich CD. Using a single item to measure burnout in primary care staff: a psychometric evaluation. *J Gen Intern Med*. 2014 Dec 2. [Epub ahead of print]
10. Linzer M, Levine R, Meltzer D, Poplau S, Warde C, West CP. 10 bold steps to prevent burnout in general internal medicine. *J Gen Intern Med*. 2014;29:18-20. <http://link.springer.com/article/10.1007/s11606-013-2597-8/fulltext.html> Accessed December 1, 2014.
11. Twellaar M, Winants Y, Houkes I. How healthy are Dutch general practitioners? Self-reported (mental) health among Dutch general practitioners. *Eur J Gen Pract*. 2008;14:4-9. Abstract

12. Yaman H, Soler JK. The job related burnout questionnaire. A multinational pilot study. *Australian Family Physician* 2002. 31: 1055-6.
13. Maslach C., & Jackson S.E. (1986). *Maslach Burnout Inventory*. 2nd ed. Pal Alto: Consulting Psychologists Press.
14. Goehring C, Bouvier Gallacchi M, Ku" nzi B, Bovier P. Psychological and professional characteristics of burnout in Swiss primary care practitioners: a cross-sectional survey. *Swiss Med Wkly*. 2005; 135: 101-108.
15. Thommasen HV, Lavanchy M, Connelly I, Berkowitz J, Grzybowski S. Mental health, job satisfaction and intention to relocate. *Can Fam Physician* 2001; B47: 737-744.
16. Yaman H, Soler JK. The job-related burnout questionnaire in family practice: a multinational pilot study. *Aust Fam Physician*. 2002; 31: 1055-1056.
17. Cathebras P, Begon A, Laporte S, Bois C, Truchot D. Burn out among French general practitioners. *Presse Med*. 2004; 33:1569-1574.
18. Prieto Albino L, Robles Aguero E, Salazar Martinez LM, Daniel Vega E. Burnout in primary care doctors of the province of Ca- ceres. *Aten Primaria*. 2002; 29: 294-302.
19. Esteva M, Larraz C, Jimenez F. La salud mental en los me` dicos de familia: efectos de la satisfaccio` n y el estre`s en el trabajo. *Rev Clin Esp*. 2006; 206: 77-83.
20. Grassi L, Magnani K. Psychiatric morbidity and burnout in the medical profession: an Italian study of general practitioners and hospital physicians. *Psychother Psychosom*. 2000; 69:329-334.
21. Kirwan M, Armstrong D. Investigation of burnout in a sample of British general practitioners. *Br J Gen Pract*. 1995; 45: 259-260.
22. Linzer M, Visser MRM, Oort FJ, et al. Predicting and preventing physician burnout: results from the United States and the Neth- erlands. *Am J Med*. 2001; 111: 170-175.