Job Satisfaction among Certified and Non-certified General Practitioners

Shmuel Fennig MD[1], Dan Yuval PhD[3], Miriam Greenstein[3], Stanley Rabin PhD[4] and Michael Weingarten MA BM BCh[2]

[1]Shalvata Mental Health Center, Hod Hasharon (affiliated with Sackler Faculty of Medicine, Tel Aviv University), [2]Department of Family Medicine, Rabin Medical Center (Beilinson campus), Petah Tiqva, and Sackler Faculty of Medicine, Tel Aviv University, [3]Joint Distribution Committee and Brookdale Institute of Aging, Jerusalem; and [4]Department of Family Medicine, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer Sheva, Israel

Key words: job satisfaction, primary care, family medicine, certification

Abstract

Background: The aim of family medicine is to provide patients with comprehensive care within the biopsychosocial model. High job satisfaction is necessary to attract physicians to this specialty

Objective: To compare job satisfaction levels between primary physicians with training in family medicine and physicians without specialty training.

Methods: A self-report questionnaire, the "Task Profiles of General Practitioners in Europe," was mailed to a stratified random sample of 664 primary care physicians in Israel. The response rate was 77.6%. Bivariate and logistic regression procedures were used to analyze the data.

Results: Physicians with training in family medicine were less satisfied with the rewards for their work than general practitioners with no formal specialization in family medicine. Satisfaction with the intrinsic aspects of the work was found to be equal. Women and rural physicians were more satisfied than men and urban physicians.

Conclusion: Measures should be taken by health maintenance organizations to increase the level of job satisfaction of specialist-certified family physicians to avoid a crisis in the profession.

IMAJ 2000;2:823–827

The provision of care within the biopsychosocial model in our era of economic pressure, high consumer expectations and medical reorganization has placed a heavy burden on the general practitioner. In the 1960s, in order to meet these new and often conflicting demands many countries, including Israel, introduced specialization programs for the training of family doctors [1,2].

Most of these programs were based on the assumption that increasing primary care physicians' competency and their ability to deal with the heterogeneous medical problems encountered in the clinics would increase their satisfaction with their job, thereby enhancing patient satisfaction and attracting new doctors to this specialty [3,4]. However, in a study of British general practitioners, disillusionment was found to be associated with higher levels of qualification, especially in the psychosocial and clinical aspects of their work, and especially among male physicians [5]. On the other hand, in the United States, the most highly qualified group, those who worked in academic settings as compared with solo or group practice, were the most satisfied with their careers, presumably because their special work environment protected them against the disillusionment associated with working in regular community clinics [3].

Thus it remains unclear today whether the investment in the education and qualification of primary care physicians increases their level of satisfaction or if it creates expectations that are later unfulfilled. In one recent study, family physicians reported feeling a loss of certainty, control and autonomy [6]. In contrast, in a large study of board-certified family physicians (n=537), most family physicians (82.4%) were satisfied with their careers and if given the opportunity most (74.9%) would again select family practice as their specialty [7].

A recent study conducted among members of the Israel Society of Family Physicians found that the more professionally active physicians were also the more satisfied. Challenging work, work variety, and the opportunity to utilize medical knowledge scored highest as positive components. The authors conclude that clinical work and teaching provide the most satisfaction, while administrative work and lack of time were the main causes of dissatisfaction [8]. This study did not include GPs without specialist certification in family medicine.

The family medicine specialization program in Israel consists of 2 years supervised clinical work in community clinics and 2 years hospital rotations. Concurrently there is a 400 hour course of classroom teaching that covers all aspects of clinical care, total patient management, and practice organization. The aim of the present study was to determine the level of satisfaction of these certified family physicians and family medicine residents in their last year of training compared to general practitioners who did not

specialize in family medicine. Specific variables with a potential impact were taken into account, namely employment conditions and HMO affiliation, area of practice (rural or urban), case load, age and gender [9–15]. Israel is a natural laboratory for investigating this issue owing to the large number of physicians from different countries who have been integrated within the system of primary care, including both general practice physicians who graduated from the programs in family specialization and those who have no formal education in family medicine. In addition, Israel has four HMOs with different methods of payment, a high rate of female physicians, and a good distribution of clinics throughout the country. Finally, Israeli law provides for national health insurance coverage for all citizens.

Our hypothesis was that physicians who have specialized in family medicine are more satisfied with their work than those who are not certified specialists, after other factors known to contribute to satisfaction are taken into account.

Methods

This study is part of a national survey conducted in 1993 to investigate the role of the primary care physician in Israel. The study's primary objective was to examine the central issues in primary care practice: work load, staff and equipment infrastructure, division of work with other specialties, relationships of primary care physicians with hospitals, and the degree of job satisfaction. These data were included in a comparative study of 30 countries, mainly in Europe, conducted by the Netherlands Institute of Primary Health Care (NIVEL). Full details of the methodology have been published previously [16].

Sampling

The physicians were selected from a list based on data provided by the four HMOs in Israel, and as of the beginning of 1992 included 2,925 names. The sampling was randomized and stratified according to two variables: affiliation to HMO (General Health Services only, which is the largest and known as "Clalit," or working in another HMO or in two or more HMOs) and specialty of the physician (specialist in family medicine or resident in family medicine and with no specialty or specialty in another branch of medicine). Study variables (age, gender, practice setting, location of clinic, appointment practice) showed that those physicians working for two HMOs – Clalit and another – were similar to physicians working for the small HMOs alone, and for the rest of the analysis they were included among the small HMOs. In the sample there was an intentional over-representation of FPs and physicians from the small HMOs to provide enough cases for comparison among the groups. The findings were weighted according to the ratio of sampling in each stratum. Of the 1,065 selected physicians 193 were no longer in active practice (retired or deceased), and of the remaining 872 physicians 677 returned their questionnaires (77.6% response rate). There was no difference in response rate according to gender or HMO affiliation.

Questionnaire

All physicians surveyed were asked to complete the Task Profiles of General Practitioners in Europe questionnaire. (Copies of the study instrument are available from Winke Boerma, NIVEL, P.O. Box 1568, Utrecht, The Netherlands.) Validation procedures showed that the data were corroborated by data collected from other sources, such as the physicians' weekly activity logs. In addition, there was high internal consistency for responses to different questions [16].

Procedure

The questionnaire was mailed with a stamped return envelope to all the physicians. Each questionnaire was coded with an identification number to enable follow-up of its completion and return. Telephone reminders were conducted from March to August 1993, with the final reminder by the principal investigator or one of his assistants to physicians who missed the deadline return date.

Variables

Job satisfaction: measured by seven items rated on a Likert scale from 1 (strongly agree) to 5 (strongly disagree). The job satisfaction scale was based on the Job Satisfaction Index developed by Melville [14].

Professional status: The definition of primary care physicians was based on the guidelines of the World Organization of Family Physicians (WONCA, 1991); namely certified or resident in family medicine, residents in family medicine in their last year of the program, and practicing in primary care without specialization.

Based on the literature we assumed that in addition to the professional qualification, job satisfaction may be correlated with four domains: the professional activity as reported by the physicians, personal characteristics, work setting characteristics, and remuneration. These domains were represented by the following items: age and gender; area of practice (urban vs. rural); HMO (Clalit vs. others); number of daily contacts with patients; case load; number of work hours per week; and employment conditions (salaried, independent or combined, working part time in hospital, and salaried, working part time in hospital and independent, or salaried and having a private practice). Independent physicians have their own clinic and receive payment according to case load, whereas salaried physicians work in the HMO clinic, using its administrative facilities and earn a basic monthly salary.

Statistical analysis

Bivariate and logistic regression procedures were used.

HMO = health maintenance organization
FP = family physicians

Results

The sample for the present study included 664 physicians (13 physicians were excluded because information on their professional status was missing). The sample included 156 FPs (23.5%), 56 RFPs (8.4%), and 452 nFPs (68.1%). Table 1 summarizes the characteristics of the sample.

Analysis of the responses to the Job Satisfaction Index of the whole sample showed that in general 91.3% of the whole cohort still had the same interest in their work as in the past (strongly agreed or agreed) and 89.1% enjoyed their job. Only 5.6% would have preferred a non-medical job if the salary and work conditions were the same. However, 33.2% believed there was no sense in some aspects of their work, 50.5% responded that there was too much administrative work, and 19.9% that there was wasted efforts in their work. Only 35.19% strongly agreed or agreed that the reward was commensurate with the efforts they invested in their work.

Table 2 presents the levels of satisfaction for each item of the Job Satisfaction Index. FPs and RFPs, compared to nFPs, had a greater tendency to perceive their work as having unreasonable aspects ("job nonsense") and involving unnecessary administrative work, with little correspondence between effort and remuneration.

Table 1. Characteristics of physicians

Variable	FP (n=156) No.	%	RFP (n=56) No.	%	nFP (n=452) No.	%	χ^2 *P*
Work for Clalit	126	81.0	49	8.3	139	48.6	33.82 .0001
Urban practice	133	85.3	39	69.6	385	85.2	13.97 .001
Independent practice	29	18.6	2	3.6	126	27.9	26.97 .0001
Age (yr) (mean ± SD)	47±11.40		40±6.97		50.0±10.77		25.38 .0001
Case load (mean ± SD)	1,454±580.25		1,629±860.02		1,373±772.68		3.19 .04

Table 2. Level of job satisfaction

Variable	FP No.	%	RFP No.	%	nFP No.	%	*t*	*P*
Job nonsensical	57	42	21	38	115	30	6.7	.004
Job interesting	141	94	54	93	385	90	2.64	NS
Unnecessary administrative work	86	59	33	57	187	47	7.6	.002
Prefer non-medical job	5	4	2	3	26	6	2.2	NS
Enjoy job	134	89	55	93	388	89	1.0	NS
Poor ratio of effort to remuneration	44	30	19	33	152	37	2.3	NS
Futile work	31	22	12	20	78	19	1.30	NS

RFP = residents in family medicine
nFP = family physicians without specialization

Factor analysis of the Job Satisfaction Index identified two clusters: intrinsic factors, including three items ("still interested in work as in past," "assuming same salary and same work conditions I would prefer another, non-medical job," and "I really enjoy my work") and compensation factors, including four items ("I feel there is no reason in some aspects of my job," "I deal a lot with unnecessary administrative work," "In my work there is a strong correlation between work and remuneration," and " I invest much futile effort").

Univariate analysis yielded statistically significant differences for the following [Table 3]:

- *Professional status:* FPs and RFPs were less satisfied than nFPs regarding the compensation factors, but there was no difference between the groups for the intrinsic factors.
- *Gender:* women were more satisfied than men regarding the intrinsic factors.
- *Employment conditions:* independent physicians were more satisfied than salaried or combined salaried and independent for both intrinsic factors and compensation factors
- *Area of practice:* rural doctors were more satisfied than urban doctors for the compensation factors.
- *HMO affiliation:* physicians working for Clalit had lower scores on the Compensation Factors than physicians belonging to the other HMOs. Pearson correlation for Intrinsic Factors and caseload: r=-0.082, P=0.041; Compensation Factor and case load: r=-0.182, P=<0.0001; number of patient contacts: r=-0.137, P=0.001; number of regular work hours per week: r=-0.103, P=0.009.
- *Age:* age was not significantly related to satisfaction.

Multivariate analysis was performed because of a likely interaction among the variables,. For each analysis we entered the professional status (FP or nFP) first and then the status of resident vs. non-resident (RFP or FP). Of the three employment status items two were entered into the

Table 3. Univariate analysis

	Intrinsic factors	Compensation factors
Professional status	nFP 3.16±0.84	FP 2.89±0.79 RFP 2.9±0.73 F=6.47, P<0.001
Gender	Female 4.4±0.5 Male 4.28±0.7 F=10.9, P<0.001	
Employment	Independent 4.49±0.61 Combined 4.33±0.71 Salaried 4.30±0.65 F=4.857, P=0.008	Independent 3.4±0.85 Combined 3.0±0.85 Salaried 2.95±0.79 F=16.37, P<0.0001
Area		Rural 3.1±0.86 Urban 2.99±0.67 P=26.76, P<0.001
HMO		Others 3.31±0.88 Clalit 2.95±0.79 P=26.76, P<0.0001

Table 4. Logistic regression analysis predicting level of job satisfaction (whole population)*

Dependent variable	Independent variable	Beta	*T* value	*P*
Intrinsic factors	Independent	.20	2.29	.02
	Gender	-.0.20	-3.49	.00
Compensation factors	FP	-.21	-2.58	.01
	Independent	.38	3.68	.00
	No. of patients on list	-0.0001	-1.89	0.06
	HMO	-0.24	-2.94	.000
	Gender	-.20	-2.78	.01

* Only variables found to be significant are shown.

regression as a dichotomous variable as compared to being salaried (e.g., independent vs. salaried, combined independent and salaried vs. salaried). In addition, the following variables were entered: number of patients per day (continuous variable), number of work hours per week (continuous variable), case load (continuous variable), gender, rural vs. urban setting, type of HMO (Clalit vs. other), and age (continuous variable). The analysis was done separately for each factor of the Job Satisfaction Index [Table 4]. We repeated the analysis for the HMO Clalit physicians separately.

In summary, the results showed that:

- *For intrinsic factors:* independent physicians were more satisfied than salaried, and women were more satisfied than men.
- *For compensation factors:* FPs were less satisfied than nFPs, women were more satisfied than men, HMO Clalit doctors were less satisfied than other HMO doctors, independent physicians were more satisfied than salaried, and increasing list size was associated with lower satisfaction.
- *For HMO physicians only:* the findings were similar for the intrinsic factors. For the compensation factors the findings were similar, and physicians working in a rural setting were more satisfied.

Discussion

The primary care profession worldwide is suffering from a crisis expressed by low morale [17]. There is a documented increase in both morbidity and mortality for general practitioners, with higher rates of deaths from suicide, poisoning and cirrhosis of the liver than among other professions [18]. In the United States, there is a serious decline in interest in primary care among medical students and burnout among increasing numbers of practicing primary care physicians [19].

The main finding of this study was that certified family physicians are less satisfied in their work than non-certified general practitioners. Residents in family medicine were similar to certified family physicians in this respect. In general terms, our results are corroborated by Gross et al. [8], who showed that 67.1% of certified family physicians were satisfied or very satisfied with their job compared to 73.6% of non-certified general practitioners. In our study, this was expressed mainly by the family physicians' perceptions of the imbalance between efforts and compensation, an excess of unnecessary administrative work, and a high degree of "job nonsense." In contrast, similar levels of satisfaction were found for the two groups regarding the intrinsic factors.

The majority of physicians in this representative sample of general practitioners enjoy their job, find interest in it, and would not prefer a non-medical job. However, physicians were not satisfied with the balance between the efforts they invested in their work and the monetary rewards. Similar findings were found in Austria, Sweden and Estonia [20]. Similarly, in a recent study conducted in Mexico that compared family physicians' job satisfaction in different medical care organization models, the risk of dissatisfaction increased among specialists in family medicine [21]. Interestingly, in all of these countries, as in Israel, there is no obligatory specialization in family medicine. By contrast, in Holland, Norway, Switzerland and Ireland, researchers found less dissatisfaction among family physicians with this aspect of work [20].

Multivariate analysis showed that in addition to the professional qualifications, other factors – being a woman, working in a rural or small community, and working on an independent basis – were associated with higher levels of satisfaction. The findings for gender are similar to those in the literature [10–13], but the findings regarding area of work (rural vs. urban) are in contrast with reports from the U.S. [5,7]. This might be explained by the different geographic distributions and socioeconomic profiles of the populations in rural areas in the two countries: rural communities in Israel are usually within a 15 minute drive from a medical center and have a higher socioeconomic status. Since the focus of our study was the association between professional qualifications and job satisfaction, we did not analyze these findings further. Other variables of work strain, such as case load, number of patients seen daily and number of weekly clinic work hours, were not strongly associated with level of satisfaction.

How can we explain the lower level of satisfaction among certified family physicians? This finding, although surprising at first glance, may be understood in terms of expectations. Family physicians are usually the more idealistic primary care physicians and are willing to devote many years to postgraduate studies. Yet, they may find the reality of medical practice disappointing [4]. One of the findings of the NIVEL study is that physicians in Israel, compared with other countries, have the lowest number of working hours per week (38.45 vs. 45.1 hours in Sweden and 57.1 hours in Austria) but they see the second highest number of patients daily [21]. Apparently, Israeli doctors devote less time to

each patient, a factor that may have an important impact on the physician's satisfaction [16]. It is also the family physician, in contrast to the non-certified GP, who expects more quality in his or her work and who would therefore be more demoralized by this state of affairs. This finding is in accordance with our own impression from speaking with graduates of the residency programs in family medicine in Israel, and from the summaries of Balint group meetings over the last 15 years with residents in family medicine at Ben-Gurion and Tel Aviv University (B Maoz, personal communication).

According to the classic study by Grol and colleagues [15], feelings of frustration are one of three factors found to affect general practitioners' work satisfaction most adversely. In their study 57 Dutch doctors reported on sources of positive and negative experience in their daily work, and the negative factors were found to affect clinical performance adversely. In their editorial in the *British Journal of General Practice*, McBride and Metcalfe [17] cite two possible causes of general practitioners' low morale: the high workload and the inability to develop a career in family medicine. These observations, coupled with our findings, should raise concern among educators and directors in the field who are striving to increase the number of qualified family physicians but fail to organize the system for high job satisfaction. This increases the crisis in primary care medicine since more dissatisfied doctors mean more dissatisfied patients [22,23]. In particular, it has been shown that patient satisfaction is most closely related to the quality of the physician's personal relationships [24].

Possible solutions include a restructuring of the work setting, the organization of consultation groups such as Balint groups, and the provision of counselors and mentors. Furthermore, considering our findings regarding compensation, we suggest that higher financial remuneration might moderate the dissatisfaction felt by the certified FPs. They should also be given more clinical privileges than non-certified GPs and/or be allowed a wider range of accredited procedures [25,26].

Limitations of the study

As all the data were collected by self-report, the physicians may have given socially desirable responses. Anonymity might have lessened this trend. Nevertheless, the study instruments were well validated [16], the sample was formally randomized, and the response rate was adequate.

References

1. Burns B, Scott JE, Burket JD, Kessler LG. Mental health training of primary care residents. A review of recent literature. *Gen Hosp Psychiatry* 1983;5:157–69.
2. Polliack M. Specialization in family medicine (syllabus): workbook and guidelines. *Fam Phys* 1992;20(Suppl):1–47.
3. Skolnik NS, Smith DR, Diamond J. Professional satisfaction and dissatisfaction of family physicians. *J Fam Pract* 1993;37:257–63.
4. Wolosin RJ. Satisfaction and dissatisfaction of graduating family practice residents. *Fam Med* 1993;25:384–7.
5. Branthwaite A, Ross A. Satisfaction and job stress in general practice. *Fam Pract* 1988;5:83–93.
6. Borkan JM. Examining American family medicine in the new order: a study of 5 practices. *J Fam Pract* 1999;48:620–7.
7. Hueston WJ. Family physicians' satisfaction with practice. *Arch Fam Med* 1998;7:242–7.
8. Gross R, Tabenkin H, Grinstein M, Bramli-Greenberg S, Harrison M. Primary care physicians in Israel 1997: characteristics and changes. *Bitahon Soziali* (Social Security) 1999;54:169–90 (Hebrew).
9. McCormick IRN, Thomson AN. What future for solo general practice. *N Z Med J* 1989;102:530–2.
10. Forti EM, Martin KE, Jones RL, Herman JM. Factors influencing retention of rural Pennsylvania family physicians. *J Am Board Fam Pract* 1995;8:469–74.
11. Collins KS, Schoen CA, Khoransanizadeh F. Practice satisfaction and experiences of women physicians in an era of managed care. *J Am Med Womens Assoc* 1997;52:52–6.
12. Britt H, Bhasale A, Miles DA. The gender of the general practitioner. Secondary analysis of data from the Australian morbidity and treatment survey in general practice 1990–1991, Sydney: Family Medicine Research Unit, University of Sydney, 1994.
13. Chambers R, Campbell I. Gender differences in general practitioners at work. *Br J Gen Pract* 1996;46:291–3.
14. Melville A. Job satisfaction in general practice: implications for prescribing. *Soc Sci Med* 1980;14:495–9.
15. Grol R, Mokkink H, Smits A, van Eijk J, Beek M, Mesker P, Mesker-Niesten J. Work satisfaction of general practitioners and quality of patient care. *Fam Pract* 1985;2:128–35.
16. Gross R, Yuval D, Japhe Y, Boerma W. The role of the primary care physician in Israel. Preliminary findings from a national survey. RR-216-294 JDC Brookdale Institute, Jerusalem, 1994.
17. McBride M, Metcalfe D. General practitioners' low morale: reasons and solutions. *Br J Gen Pract* 1995;45:227–9.
18. Office of Population Censuses and Surveys. Occupational Mortality 1979–1980, 1982–1983, London: HMSO, 1986.
19. Sandy LG, Foster NE, Eisenberg JM. Challenges to generalism: views from the delivery system. *Acad Med* 1995;70:(Suppl 1):44–6.
20. Shvartzman P, Gross R, Tabenkin H, Yuval D, Grinshtein M, Wienka B. Primary care physicians in Israel compared with the European countries. *Harefuah* 1998;134:505–10 (Hebrew).
21. Garcia-Perez C, Reyes-Frausto S, Reyes-Lagunes I, Luroz-Hernandez O. Family physician job satisfaction in different medical care organization models. *Fam Pract* 2000;17:309–13.
22. Mainous AG, Ramsbottom-Lucier M, Rich EC. The role of clinical workload and satisfaction in rural primary care retention. *Fam Med* 1994;3:787–92.
23. Howie JGR, Porter AMD, Heany DJ. Long to short consultation ratio: a proxy measure of quality of care for general practice. *Br J Gen Pract* 1991;40:26–31.
24. Linn LS, Brook RH, Clark VA, Davies AR, Fink A, Kosecoff J. Physician and patient satisfaction as factors related to the organization on internal medicine group practice. *Med Care* 1985;21:821–9.
25. Blankfield RP, Kelly RB, Alemagno SA, King CM. Continuity of care in a family practice residency program. Impact on physician satisfaction. *J Fam Pract* 1990;31:69–73.
26. Bertakis K, Callahan E, Helms E, Azari R, Robbins J, Miller J. Physician practice styles and patient outcomes – differences between family practice and general internal medicine. *Med Care* 1998;36:879–91.

Correspondence: Dr. S. Fennig, Shalvata Mental Health Center, P.O. Box 94, Hod Hasharon 45100, Israel. Phone: (972-9) 747-8543, Fax: (972-9) 740-5452, email: sfennig@isdn.net.il