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Job satisfaction among general practitioners: A systematic literature review

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Abstract

Objective: In recent years, the incidence of being overworked and burnt out has increased among general practitioners (GPs). One of the factors that influences the development of burnout is the job satisfaction that physicians experience. Therefore, we conducted a literature review to answer the question: what factors influence the job satisfaction experienced by GPs? *Methods:* We used two methods to retrieve citations. We searched four literature databases for citations from 1990 until July 2006, and we checked the reference lists of relevant articles. The inclusion criteria were: GPs had to be the subjects of the study, the study had to describe empirical research, the study had to focus on job satisfaction, and the number of subjects had to be greater than 30. *Results:* We found 24 relevant citations. Factors increasing job satisfaction which were mentioned more than twice were: diversity of work, relations and contact with colleagues, and being involved in teaching medical students. Factors decreasing job satisfaction were: low income, too many working hours, administrative burdens, heavy workload, lack of time, and lack of recognition.

Conclusion: Aspects of job satisfaction concerning the content of the profession seem to increase job satisfaction, and aspects concerning employment conditions seem to decrease job satisfaction.

Key words: *General practitioner, job satisfaction*

Introduction

A number of psychological conditions have become more common among general practitioners (GPs) during the last few decades. Overload and burnout are two examples of such conditions (1,2). Whether or not a GP suffers from burnout depends on a number of factors such as the amount of stress experienced while carrying out his or her profession (3,4). Job stress is closely related to job satisfaction (5). In turn, the amount of pleasure one feels doing one's job, or job satisfaction, is determined by a number of factors. Job satisfaction is thus partially determined by sociocultural factors such as the organization of healthcare and patients' attitudes towards and about physicians (6). These two factors have changed considerably during the past few years. For example, around 1990, the healthcare system in Great Britain changed dramatically, which was possibly related to GP job satisfaction (7–9). The organization of the healthcare systems in the former eastern bloc countries also changed significantly after they regained their independence in 1989 (10).

One of the changes of attitude is that patients are becoming more and more outspoken and critical, and that they benefit from increased legal protection. Another change, due partly to the development of the Internet, is that patients are also better informed (11).

Much research has been done investigating job satisfaction in general. The job satisfaction of physicians, including GPs, has also been studied in various countries. Job satisfaction is an ambiguous concept, and it contains different aspects. The literature mentions several different definitions. For this study, we defined the concept job satisfaction as the satisfaction with different aspects of one's job.

We carried out a literature search addressing this topic, and conducted an analysis based on the following question: what are the factors that influence GP job satisfaction? Insight into these factors might help to increase GP job satisfaction while, at the same time, decreasing the risk of burnout.

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Methods

Two search strategies were used. Using key words, the following literature databases were searched: Web of Science, Embase, Cochrane and PubMed. Additionally, we made use of the so-called "snowball method", whereby the reference sections of already selected articles were used to help locate other relevant articles. We selected articles written in English, Dutch, German, French or Spanish. Articles from 1990 up to and including June 2006 were included. The start of this period was selected due to the aforementioned sociocultural factors (for example, changing healthcare systems).

The inclusion criteria were: 1) a research population which included at least one (partial) group of GPs; 2) that the study was empirical; 3) that (part of) the study investigated job satisfaction; and 4) a research population of more than 30 subjects.

The key words we used were (also in Dutch) general physician(s), family physician(s), general practitioner(s), family medicine, general practice, and family practice. They were combined using AND with all of the terms (also in Dutch) job satisfaction, jobsatisfaction, professional satisfaction, work satisfaction, worksatisfaction, and employment satisfaction, as far as relevant for the database being searched.

Evaluation procedure for the articles

To assess the quality of each article, we used a list of questions to review articles with descriptive or experimental studies of job satisfaction. There are no guidelines or lists of criteria for the analysis of such articles. There are a variety of lists of criteria for evaluating the quality of observational research, but there are no validated checklists. For this reason, we composed our own list of criteria.

Each methodical aspect was assigned a point value, and a total number of points was calculated for each article included in our study. These aspects were:

- Was a random sample taken? Yes: 1 point; no: 0 points (abbreviated as "R" in Table I)
- Did the researchers mention the generalizability of the results? Yes: 1 point; no: 0 points (G)
- Were the non-responders analysed? Yes: 1 point; no: 0 points (NR)
- Was a known, validated list of questions used? Yes: 2 points. If no: Were psychometric characteristics (i.e. reliability and/or inter-item correlations and validity) mentioned for the list used? Yes: 1 point; no: 0 points (V)
- Statistical analysis: multivariate: 2 points; bivariate: 1 point; other: 0 points (S)

The maximum number of points was seven.

Results

The hundreds of articles resulting from our literature search were examined one by one. The abstracts of the 56 articles which, at first glance, appeared to be relevant to our research question were analysed. Twelve of these abstracts were ultimately not included, because closer reading revealed that they did not conform to the inclusion criteria. The complete text was obtained for the remaining 44 articles. The full text was not available for three of the articles (12–14). Since the abstracts did not contain sufficient information for the purposes of the study, they were excluded.

Of the 41 articles for which the complete text was available, 17 additional articles were excluded after closer reading. Eleven of the 17 did not meet the inclusion criteria. In two of the studies, the amount of job satisfaction was recorded without any further analysis of the relationship with other variables. Job satisfaction was not specifically measured in an additional two studies, and one article was excluded because it only included a survey of the total amount of job satisfaction experienced. One article was not published in an official journal. Two researchers (KG, IvH), working independently, judged the remaining 24 articles according to the aforementioned methodical aspects. A third researcher (JdH) was consulted when a difference of opinion came up, and his opinion decided the matter.

Only two of the 24 articles were awarded the maximum of seven points. Eight articles received six points, five articles five points, five articles four points, two articles three points, and two articles two points. The total number of points and the number of points per methodical aspect are presented in Table I. No quality comparison was done, as the points were not equally weighted.

One article was written in Spanish (15). The remaining 23 were in English. The number of GPs included in the study populations ranged from 84 to 1950 (16,17).

Operationalizing and defining "job satisfaction"

"Job satisfaction" is an umbrella term with a number of dimensions: for example, job satisfaction with respect to the amount of time GPs have available for work and for their personal lives compared to the

Table I. Factors that increase or decrease the job satisfaction experienced by general practitioners.

Year	First author Country	*n*	Points	Increased satisfaction	Decreased satisfaction
1993	Sutherland UK (21)	917	5 R1, G0, NR0, V2, S2	- Social support systems used as coping strategy	
1993	Skolnik USA (22)	1066	4 R1, G1, NR1, V1, S1	- Relationships with patients - Feeling of clinical competence - Relationships with partners and colleagues - Working in an academic hospital	- Size of income (low) - Amount of free time (little) - Working in a solo practice
1996	Rout UK (23)	414	4 R1, G0, NR0, V1, S2		- Practice administration - High demands of the profession - Interference with family and social life - Routine medical work - Interruptions during work - Sub-optimal workenvironment
1998	Hueston USA (24)	537	4 R1, G1, NR0, V0, S2		- GP group of three or fewer - No care for mother and child
1998	Appleton UK (19)	285	5 R1, G0, NR1, V2, S1		- Too many working hours - Too little recognition for work - Income too low
1999	Kapur UK (25)	285	3 R1, G0, NR0, V2, S0	- Diversity in the job - Autonomy	- Lack of appreciation - Too many working hours
1999	Kitai Israel (26)	183	3 R1, G0, NR0, V1, S1	- Opportunity to use medical knowledge - Challenging work - Diversity in work - Teaching - Clinical work	- Too much work - Insufficient sources of support - Too much paperwork - Not enough time
1999	Rout UK (27)	587	6 R1, G0, NR1, V2, S2		- Too many working hours - Income too low - Too much work - Interruptions/time pressure - Work environment - Suboptimal or lack of communication with colleagues and patients - Establishment of career and goal attainment
2000	Berg USA (20)	210	2 R1, G0, NR0, V0, S1	- Presence of a hospital in the city	- Large number of working hours
2000	Eliason USA (28)	1224	4 R1, G0, NR0, V2, S1	- Teaching medical students - Doing good works as a guiding principle in life	
2000	Sibbald UK (8)	1817; 917; 1828	5 R1, G1, NR0, V2, S1		- Income - Number of work hours - Too little recognition
2000	Fennig Israel (18)	677	6 R1, G1, NR0, V2, S2	- Independently established - Working in a rural environment	
2000	Kalda Estonia (16)	84	6 R1, G1, NR0, V2, S2	- Independently established - Patient relationships - Opportunity to teach advanced students - Variety in the profession	- Low income

Table I (*Continued*)

Year	First author Country	*n*	Points	Increased satisfaction	Decreased satisfaction
2000	Dowell New Zealand (29)	391	5 R1, G1, NR0, V2, S1	- Variety in the profession	- A lot of paperwork - Changes in healthcare - Bureaucracy - Too many working hours - Call - Working in a rural area - Working in a solo practice
2001	McGlone Australia (30)	353	6 R1, G1, NR0, V2, S2	- Experience more opportunities for control - Experience lower expectations	- Greater number of working hours
2001	Sibbald UK (7)	1924	6 R1, G1, NR0, V2, S2		- Large number of working hours - Low income
2002	Simoens Scotland (31)	802	6 R1, G1, NR1, V2, S1	- Colleagues - Variety in the profession - Amount of responsibility	- Salary - Large number of working hours
2002	Ulmer Australia (32)	406	5 R1, G0, NR0, V2, S2	- Factors which increase autonomy: job variety, taking responsibility, freedom to choose own working methods, and opportunity to use skills	- Working in an urban setting (men) - Working full-time (women) - Having to speak another language than mother tongue during office hours - Being in poor health psychologically (men) - Large number of working hours - Low income - Politics with respect to family medicine - Having solely patients who are covered by public healthcare (women)
2003	Sibbald UK (33)	1332 (974)	6 R1, G1, NR0, V2, S2	- Physician belongs to an ethnic minority	- Large work burden - Physician belongs to an ethnic minority - Practice in large cities - Demographically disadvantaged patient population in the practice
2003	Sobreques Spain (15)	603	6 R1, G1, NR0, V2, S2	- Fewer years working in primary care - Working in academic centres	
2005	Buciuniene Lithuania (10)	243	2 R1, G0, NR0, V0, S1	- Autonomy at work - Relationship with colleagues - Management quality	- Low compensation - Low social status - Large workload
2005	Nylenna Norway (34)	295	4 R1, G1, NR0, V2, S0	- Opportunities to use their abilities - Cooperation with colleagues and fellow workers - Variation in work - Freedom to choose own method of working	- Large number of working hours
2006	Whalley UK (17)	1950	7 R1, G1, NR1, V2, S2	- Colleagues and fellow workers - Amount of variety in the work - Amount of responsibility given	- Many hours of work - Lack of recognition for good work - Low remuneration
2006	O' Sullivan Ireland (35)	226	7 R1, G1, NR1, V2, S2	- Freedom to choose one's own method of working - The amount of responsibility given	- Many hours of work

For points abbreviations, see text.

time taken up by call schedules. Only two articles paid attention to this particular practical aspect of job satisfaction when they mention the various dimensions of job satisfaction found in the (subdivisions of the) questionnaire (18,19). Berg and Elliott (20) did not provide any practical definition and only mentioned a global definition of the concept of job satisfaction. In only one article is a real definition of job satisfaction given (job satisfaction comprises positive and/or negative attitudes held by individuals in respect to their job) (10).

Literature search results

The results of our literature search are presented in Table I, which shows that some factors show up in only single research articles as increasing or decreasing job satisfaction. Factors that were mentioned more than once as contributing to increased job satisfaction were: variety in the job, relationships and contact with colleagues, and lecturing to medical students. Factors mentioned more than once as contributing to a decreased feeling of job satisfaction were: income, the number of work hours, the administrative load, having too much work, not having enough time, and a lack of recognition. In summary: too much work and not enough income.

In addition to the information provided in Table I, a number of articles were explicit about which factors did not have a statistically significant relationship to job satisfaction; for example, the composition of the patient population and the number of years spent practising. In a number of articles, the researchers reported which subgroups of GPs experienced the highest average and the lowest average job satisfaction in their research population.

Discussion

We conducted a literature review to discover which factors influence job satisfaction experienced by GPs. Twenty-four articles that met the inclusion criteria were found. Factors that were mentioned more than twice as increasing job satisfaction were: variety in the profession, relationships and contact with colleagues, and teaching medical students. There were several factors that were mentioned more than twice as reducing job satisfaction. These factors were: income, working hours, administrative load, too much work, not enough time, and not enough recognition. It is interesting to note that factors focusing on the profession often increased the experienced job satisfaction, whereas employment conditions, in so far as they have influence, often reduced feelings of job satisfaction.

The quality of the articles varied. According to our rating system, the quality of the more recent articles was better than the quality of the older articles. All of the researchers used questionnaires as their primary research tool. No intervention studies were included. Therefore, the criteria used for intervention studies did not play a role. The length of the questionnaires varied considerably. In some of the articles, only a few questions were used to assess job satisfaction, whereas in others extensive questionnaires were used. The questionnaire composed by Warr et al. (or variations of it) was used relatively often (7,8,17,19,21,27,29,31,33,35). In a number of cases, the researchers developed their own questionnaire. Psychometric characteristics (i.e. reliability and/or inter-item correlations and validity) were mentioned in most of the articles.

All of the studies used either a random sample of the population or the entire population in their investigations. The response rates varied from 45 to 82% (15,29). The generalizability of the results was mentioned in 14 of the articles, although in some cases the description was somewhat brief (7,8,15,18,22,24,27,29–31,33).

The questionnaires were mailed out anonymously in many of the studies, which makes it impossible to examine whether the group of non-responders experiences less job satisfaction than the responders.

Limitations of the study

One problem we encountered when doing our literature search was the lack of a global definition for the concepts of general practitioner and job satisfaction. Although the term general practitioner has slightly different meanings throughout the world, and healthcare systems also differ, the job conditions are similar enough for comparisons of job satisfaction to be useful.

Only a limited comparison of information from the literature is possible. The studies differed in their use of questionnaires, with some of the researchers developing their own questionnaires to investigate job satisfaction and others using previously developed ones. Because of this, statistically comparing the results of the studies is not possible. The different conditions in the various countries may also have affected the results. For example, many of the articles based on GP populations from Great Britain mention the fact that the existing National Health Service and its modifications have influenced job satisfaction (7,8,17).

With respect to the fact that several authors found differences in job satisfaction when they compared specific groups of GPs, it is difficult to pinpoint what causes these differences. Two authors, for example, reported that general practitioners working in rural areas were more satisfied with their jobs than those who work in the city (18,33). We can therefore conclude that working in rural areas increases job satisfaction. It is not clear, however, what aspect of working rurally causes this increased job satisfaction. Are rural practices generally smaller than urban practices? Are the duties of the rural physicians different? Are the rural physicians more independent? Are there other factors?

Research has also been done to investigate and compare the job satisfaction of male and female GPs (5,27,36–41). In several studies, no difference was found in job satisfaction between male and female doctors, but in some studies female doctors were more satisfied than male doctors.

In the literature, just a few articles were found concerning the influence of part-time or full-time work on GP job satisfaction (31,39,42). The conclusion of these articles was that part-time-working doctors are more satisfied.

It would be interesting to find out whether the job satisfaction experienced by GPs could be increased by improving employment conditions such as increasing incomes, taking care of well-equipped practices and decreasing job-related pressure. Concentrating on job-related aspects such as increasing the variety of work and the opportunities for teaching could also have the same effect. However, it is not possible to respond to these issues based on this literature review.

One could investigate whether less job variety changes the level of job satisfaction, for example by removing emergency care from the GP's tasks. Ideally, this should be investigated before any changes are made to the tasks of the GP. Six literature articles mention job variety as a factor that increases job satisfaction; therefore, decreasing the variety of a GP's job would be expected to decrease job satisfaction rather than increase it (17,19,25,29,31,34). On the other hand, the large administrative burden carried by GPs is often mentioned as decreasing job satisfaction. Reducing administrative tasks would also decrease job variety, but administration is not inherent to the profession, and GPs would probably experience an increase in their job satisfaction as a result. In recent years, in many countries, other staff members have taken over some of the tasks of the GP. However, it is still unclear what the possible impact of use of other staff, e.g. nurses, would be on GP job satisfaction.

In an article about the concept of job satisfaction as it relates to the general labour force, job satisfaction has been connected to receiving supervision, colleagues, work, income, the chance of promotion and personal growth, and the number of working hours (6). These factors were also mentioned in a number of the articles in our study as determinants for job satisfaction. In general, for doctors' job satisfaction, the choice of speciality, the type of practice, and the location of the practice are important factors that influence job satisfaction (43).

In conclusion, a number of factors have been reported to have an effect on the job satisfaction experienced by GPs. Factors directly relating to the profession itself are mentioned most often as increasing job satisfaction, whereas factors relating to conditions of employment most commonly decrease the level of job satisfaction.

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