ORIGINAL ARTICLE

How does a shortage of physicians impact on the job satisfaction of health centre staff?

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Abstract

Objective. The aim was to determine how a shortage of physicians at Finnish health centres has affected the job satisfaction of the entire staff. **Methods.** A questionnaire was posted to 2848 employees working with patients at health centres in the Finnish provinces of Satakunta and Varsinais-Suomi. The information concerning the shortage of physicians at health centres was taken from research undertaken by the Finnish Medical Association in October 2003. The health centres were divided into four groups according to the severity of the shortage. **Results.** The questionnaire was returned by 1447 employees. The staff at health centres with the most severe shortage of physicians were less satisfied with the management of the organization. Employees at health centres with a minor shortage of physicians were more satisfied with the quality of services in their operational unit. The shortage of physicians had no impact on staff satisfaction regarding the operation of their work unit, the strain of dealing with issues within their work environment, feelings of stress, the strain of working under pressure that they experienced, or interest in finding a new job. **Conclusion.** The majority of healthcare employees are satisfied and motivated in their work. The shortage of physicians has only a slightly negative impact on their satisfaction.

Key Words: Family practice, Finland, job satisfaction, medical staff, shortage of physicians, work environment, work-related stress

In Finland, the health centres provide preventive healthcare and other services, including child health and maternity services, treatment of illnesses, rehabilitation, laboratory, and X-ray services. Employees at a health centre work as a part of the organization, but in their own separate work units, e.g. preventive healthcare units, physicians' reception or rehabilitation. Most health centres also have an inpatient ward for treating general practice patients. There have, however, been problems with access to and continuity of care at health centres and the system may be changing in the future [1,2].

For years, Finnish health centres have suffered a shortage of physicians. In October 2006, 9% of the medical posts were unfilled, approximately 7% were filled through employment agencies, and one quarter of health centres lacked 20% or more of their quota of medical staff [3].

Very little research has been done on the effects of this shortage of physicians on the job atmosphere

and job satisfaction at health centres. This study focuses on the aforementioned effects using data from the provinces of Satakunta and Varsinais-Suomi in south-western Finland.

Material and methods

Staff lists were received from 25 out of the 36 health centres in Satakunta and Varsinais-Suomi. People who worked directly with patients (n = 2848) were selected from the lists on the basis of their professional titles (see Table eI, added to the Internet version of the article), and in March 2004 they were sent questionnaires. Information concerning the shortage of physicians at health centres in October 2003 was obtained from the Finnish Medical Association.

The questions used are shown in Table eII and Table eIII (added to the Internet version of the article). The factors reflecting job satisfaction

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- The majority of healthcare employees are satisfied and motivated in their work.
- A shortage of physicians has only a slightly negative impact on employee job satisfaction.

included satisfaction with management, the quality and adequacy of services, the functionality of the work community, the desire to find new job, and the experience of work stress and strain due to factors affecting the workplace atmosphere or working under pressure. Sum variables were created from statements concerning the same subject (Table eIII). Health centres were divided into four groups based on the severity of their physician shortage, i.e. less than 5%, 5–19%, 20–39%, or 40% or more vacant medical posts.

Cronbach's alpha values were used for the sum scores of combined questions to illustrate internal consistency. Cross-tabulation and variance analysis were utilized, and the significances of the differences were tested using the chi-squared test.

Results

The questionnaire was returned by 1447 employees, constituting a response rate of 54%. Detailed rates are presented in Table eI.

The respondents' satisfaction with the management of their work unit, the management of the organization, the adequacy of the services in their operational area, and the quality of the services within their operational unit are presented in Table I.

A total of 68% of the respondents were completely or quite satisfied with the functionality of their own work community. Some 70% stated that factors related to the work atmosphere had placed a strain on them only very seldom or seldom; 10% of the respondents felt they were under quite a lot or a great deal of stress. A total of 54% stated that they often felt under strain as a result of pressure from work; 18% of all respondents had searched for a new job during the previous six months. However, the shortage of physicians was not associated with satisfaction with the work community or work atmosphere, job-seeking activity, feelings of stress, or working under pressure.

Discussion

The majority of the respondents were satisfied with the activities of their work unit. The work organization signifies here the health centre as a whole, and

Table I. Satisfaction with the management of the work unit and organization and opinions on the quality and adequacy of services by shortage of physicians.

	Shortage of doctors	n	Satisfied portion	95% confidence intervals	
				Lower bound	Upper bound
Satisfaction with management of work unit	–5%	592	0.57	0.53	0.61
	5–19%	444	0.66	0.62	0.70
	20–39%	174	0.51	0.43	0.58
	40%–	206	0.57	0.50	0.64
	Total	1416	0.59	0.56	0.62
Satisfaction with management of organization	–5%	579	0.37	0.33	0.41
	5–19%	437	0.39	0.34	0.43
	20–39%	172	0.32	0.25	0.39
	40%–	205	0.20	0.15	0.26
	Total	1393	0.34	0.32	0.37
Adequacy of services within one's own operational unit	–5%	585	0.42	0.38	0.46
	5–19%	437	0.42	0.37	0.47
	20–39%	175	0.41	0.34	0.49
	40%–	207	0.31	0.25	0.38
	Total	1404	0.40	0.38	0.43
Quality of services at the workplace	–5%	587	0.77	0.73	0.80
	5–19%	440	0.78	0.74	0.82
	20–39%	174	0.65	0.58	0.72
	40%–	207	0.61	0.54	0.68
	Total	1408	0.73	0.71	0.76

the work unit signifies, for example, reception or an inpatient ward. The shortage of physicians, however, increased dissatisfaction towards management at organization level. Satisfaction with the local management also decreased as the physician shortage worsened but not to the same degree. It may be that it is easier to direct one's dissatisfaction at a more remote area of the organization. The shortage of physicians could also be interpreted as a result of problems in managing the organization.

Many respondents stated that the services in their area of operations were inadequate, but the shortage of physicians had no great impact on their impressions regarding adequacy. The majority were satisfied with the quality of services at their workplace, but the shortage of physicians was related to a lower level of satisfaction. It seems that, faced with severe physician shortages, health centres are forced to use resources to ensure the quantitative adequacy of services at the expense of quality.

The shortage of physicians did not appear to have increased the stress experienced, the strain brought on by working under pressure or the employees' desire to find a new job. It is possible that those who responded to the questionnaire were employees who are highly committed to their work or who handle pressure well despite the shortage of physicians. However, one cannot draw conclusions regarding the degree of staff turnover on the basis of this study.

The response rate was 54%, which may be regarded as fair when using a mail questionnaire. The respondents represented all the occupational groups in health centres and employees both from health centres with minor and severe shortages of physicians.

The research was carried out approximately six months after the information concerning the shortage of physicians was gathered in autumn 2003. This is unlikely to weaken the reliability of the results because in the health centres with a shortage of

physicians the shortage had been a problem for many years [4–6].

Healthcare personnel work at a constant pace and under pressure. The majority are motivated and satisfied with their work. Although the shortage of physicians has had a detrimental effect on the operation of many health centres, it appears that it has little impact on job satisfaction. The shortage of physicians may be reflected in dissatisfaction with the organization and management, even though the employee is satisfied with her/his own work. A severe medical staff shortage may actually give rise to improved community solidarity and force the staff to work together more closely to get the work done.

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