Healthy work for female unpromoted general practice dentists

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This study describes how female unpromoted general practice dentists (GPDs) in a region in Sweden perceive 'healthy work', i.e. their image of the dimensions that the dentistry profession should contain if it is to be really healthy work. The study also investigates whether there is a gulf between ideal and reality for this group. All unpromoted GPDs within the Public Dental Health Service's general practice in a region in Sweden received a questionnaire, and 94% responded. The data were collected during July and August 2000 and the question about healthy work was taken from work environment studies. A principal components analysis was performed. Three factors explaining more than half the variance (53%) formed three well-defined vector clusters: 1) a factor for moral values and possibilities for skill discretion, i.e. properties specific for human services, 2) a factor for career development, and 3) a factor for work environment. We found that factor 1 alone explained a greater proportion of the variance (28%) for the respondents. The main results were that the female unpromoted GPDs emphasized free and intellectually stimulating work and that the gulf between ideal and reality was wide, especially concerning the dentist's influence on important decisions. A salutogenetic approach built on good communication and democracy at work, and based on freedom and the employees' influence, could bring ideal and reality closer. ☐ *Human service organization; public health dentistry; salutogenesis; work conditions*

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The concept of healthy work in occupational research today is difficult to define unequivocally. Opinions differ about what healthy work is and what it should be. It tends to be defined negatively as work that does not lead to ill health, i.e. absence of disease (1). This is hardly concordant with the World Health Organization's (WHO) definition of health: 'health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (2), which means that the prevention of accidents and diseases is insufficient as a definition of health. Unfortunately, it is easier to adopt a pathogenetic (3) than a salutogenetic approach in the analysis of healthy work.

Four dimensions of organizational health can be identified, namely environmental factors, physical health, mental (psychological) health, and social health (1). What this means in detail is unclear, however. We contend, in particular, that there are difficulties in generalizing about organizations per se, and that relevant properties vary in fundamental ways between types of organization. In this article we attempt to investigate the dimensions that healthy work can have in dentistry, a form of human service organization (HSO).

Human services are characterized as having a moral foundation. The people working there actively participate in shaping and enacting moral rules (4). Often there is a difference between ideal and reality, and a corollary of the dimensional issue of this article is whether such a difference can be discerned.

Aronsson et al. (5) measured discrepancies between ideal and reality in order to investigate the nature of healthy work among publicly and privately employed academics in Sweden. Among the investigated groups were dentists in both the public sector—the Public Dental Health Service (PDHS)—and the private sector. There were large discrepancies between these two groups of dentists, indicating that important occupational conditions were not met in work among dentists in the PDHS. Additionally, according to Aronsson, women were more likely than men to state that these different aspects of healthy work were important to them (5). Many reports have shown that dentists (3, 6), and among them especially the female unpromoted general practice dentists (GPDs) (7), have a difficult work situation. It seems that the discrepancy between ideal and reality is sharp for dentists and especially so for female unpromoted dentists, where 'unpromoted' means that the dentists have a position with no management tasks in the PDHS in Sweden. About half of the dentists in Sweden are employed in the PDHS, where 68% are women, with an average age of between 40 and 44 years (8). More than one-fourth of all dentists in Sweden are unpromoted female dentists.

The reality is well documented, but less so the ideals. It has been shown that dentists emphasize efficiency more so than many others (6), but there is no previous study on the dimensionality of the ideals for healthy work for dentists.

In this article we study female unpromoted GPDs in a Swedish county in Sweden and their views on the idealized core of healthy work. More specifically, the aims of this study are: (i) to describe how female unpromoted GPDs perceive 'healthy work', i.e. their image of the dimensions that the dentistry profession should contain if it is to be really healthy work for them and (ii) to investigate whether there is a gulf between ideal and reality for this group.

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Materials and methods

Study base

This study concerns unpromoted female GPDs in the region of Scania, which is the southernmost part of Sweden with about 1.2 million inhabitants, one-eighth of the population of Sweden. The region is dominated by some large cities in its western part, where the city of Malmö is situated. Almost one-third of about 1500 persons who work in the PDHS in Scania are dentists and there are about 130 clinics at 70 locations in both big and small communities.

All unpromoted GPDs within PDHS general practice in this region, in total 183, received a mailed questionnaire, and 94% responded. The data were collected during July and August 2000. Confidentiality was assured by the Department of Oral Public Health of Malmö University.

Questionnaire

The questionnaire comprised 76 questions and statements. The section concerning 'healthy work' was introduced as follows: 'Here are some questions about how you view your work, your working role and how you experience "healthy work".' The question about healthy work was taken from a study by Aronsson, Bejerot and Härenstam (5) and reads as follows: 'What defines "healthy work" for you and to what degree is this fulfilled in your present work?' The question was in two sections, one with the headline 'defines healthy work' and the other 'fulfilled in my present work'. Each section was subdivided into 12 parts covering aspects of healthy work. The response alternatives for the 'defines healthy work' section were: 'less important', 'rather important', and 'very important'. For the section 'fulfilled in my present work', the response alternatives were: 'to a low extent', 'to a certain extent', and 'to a high extent'.

The parts items were: 1. The work is well paid. 2. Opportunity for career advancement. 3. Intellectually stimulating. 4. The work is of benefit to others/society. 5. The work is compatible with important personal values. 6. The work provides opportunities to specialize in areas of special interest for me. 7. Hazard-free work environment. 8. Stimulating fellowship. 9. Free and independent. 10. The work provides opportunities to have an influence on important decisions. 11. Personal qualities can be utilized constructively. 12. Innovative thinking and initiative-taking are appreciated.

Statistical methods

The data were first presented in frequency tables where percentage unit differences were calculated. Principal components analysis (PCA) was then used on the raw scores of the ideal questions using the Kaiser criterion and inspection of scree plots for determination of the number of factors. The factor solution was varimax rotated (9). Data were analysed in SPSS 6.1, for the Macintosh computer.

Results

The response frequencies for both sections are given in Table 1. Notably, the female unpromoted dentists rated 'intellectually stimulating work' highest (91%) and the 'opportunity for career advancement' lowest (37%).

The percentage unit differences between the response alternative marked A in the table, i.e. 'defines healthy work as very important' (the ideal), and the one marked B, i.e. 'fulfilled in my present work to a high extent' (the reality), are given in column A–B in Table 1. It is noteworthy that the highest ranking ideals—intellectual stimulation, influence, use of personal qualities, freedom and indepen-

Table 1. Frequencies in percent and percent unit differences for unpromoted female dentists ($167 \leq n \leq 170$) for the question: 'What defines "healthy work" for you and to what degree is this fulfilled in your present work?'

Defines healthy work				Fulfilled in my present work			
Less important	Rather important	Very important (A)		To a low extent	To a certain extent	To a high extent (B)	A–B
1	8	91	Intellectually stimulating	19	63	19	72
4	33	63	The work is compatible with important personal values	11	61	28	35
0	21	79	Free and independent	35	55	11	68
1	14	85	The work provides opportunities to influence important decisions	57	41	3	82
1	17	82	Personal qualities can be utilized constructively	28	62	10	72
0	24	76	Innovative thinking and initiative-taking are appreciated	33	57	10	66
2	39	59	The work is well paid	76	24	0	59
19	44	37	Opportunity for career advancement	51	46	3	34
5	44	51	The work provides opportunities to specialize in areas of special interest for me	32	57	11	40
4	31	66	The work is of benefit to others/society	2	42	56	10
2	36	63	Hazard-free work environment	33	58	8	55
2	18	81	Stimulating fellowship	22	58	21	60

Table 2. PCA of what defines healthy work. Factor loadings >0.20. Major loadings in boldface type

Communalities	Variables	F1	F2	F3
0.41	Intellectually stimulating	**0.63**		
0.57	The work is compatible with important personal values	**0.55**	−0.26	0.44
0.48	Free and independent	**0.66**		
0.57	The work provides opportunities to have an influence on important decisions	**0.73**		
0.57	Personal qualities can be utilized constructively	**0.71**		0.22
0.49	Innovative thinking and initiative-taking are appreciated	**0.49**	0.36	0.35
0.49	The work is well paid		**0.70**	
0.63	Opportunity for career advancement		**0.79**	
0.54	The work provides opportunities to specialize in areas of special interest to me		**0.69**	0.21
0.47	The work is of benefit to others/society	0.44		**0.49**
0.49	Hazard-free work environment		0.31	**0.63**
0.61	Stimulating fellowship			**0.78**
	Variance explanation (%)	27.8	15.5	9.5
	Total 52.8%			

dence—also have the greatest differences between ideal and reality in percentage unit difference.

A principal components analysis was performed on the raw scores and is presented in Table 2. Three factors (F) explained more than half the variance (53%). In loading plots they formed 3 well-defined vector clusters. The factors are arranged in order in Table 2. When comparing Table 1 with Table 2, it can be seen that those items with large differences between ideal and reality almost all belonged to the first factor (F1), with a mean percentage unit difference of 66. The mean difference between ideal and reality for F2 was 44%. The mean difference for F3 was 42%, with the extremes 10% and 60%.

In the interpretation of the factors, we regarded the items for F1 as aiming at moral values and possibilities for skill discretion, i.e. properties specific for human services. Six questions were included in this factor concerning intellectual stimulation, moral, freedom and possibilities for personal influence and development.

We defined F2 as a factor for career development. This factor included three questions. The variables contained aspects of a well-paid job, and of possibilities of specialization and of career.

We defined F3 as a factor for work environment. This factor also included three questions. Here the variables contained aspects of fellowship, benefit, and a hazard-free work environment. It is noteworthy, however, that the item 'benefit to society' had a substantial minor loading on the first factor.

Discussion

This study analyses ideals and reality for the content of healthy work for the female unpromoted GP dentist.

The main results were that the respondents emphasized free, influential, and intellectually stimulating work, and that the gulf between ideal and reality was wide, especially concerning the dentist's influence on important decisions. Emphasis on moral values covaried with desire for skill discretion. The first factor was the most important for the respondents. The ideal job for the unpromoted female GP dentist should be intellectually stimulating, provide opportunities for influencing important decisions, be developing, free, and independent, and also compatible with important personal values. All these central values concern the female dentist's mental well-being.

The dentist is educated to have the patient at the centre of attention. One foundation in HSO is that the work has a special character, i.e. the personnel in HSOs work with human beings. The core of the work is the relation between clients and providers, and the quality of those relations is essential for the result (10).

In 1984, Bourassa reported many difficulties related to the dentist's occupation (3). He reported severe stress factors and an increased risk for suicide among dentists as consequences of the stress in dentistry. A new Swedish report about democracy at work by Theorell (11) shows that women with no influence on their job situation, and with little support from colleagues and management, have an 80% over-risk of being sick-listed for a long time. The dentists in our report wanted to a high degree to have greater influence on their work, but this presented the largest difference between ideal and reality.

It is important to consider the content of the dentist's work. It seems that the organization takes for granted what dentists want. The dentists might have to cope with tight schedules and to act as if dentistry were an assembly line production with, as in the PDHS, very close supervision. Worth consideration is that the dentists in our study rated the factor for career lower than both the factor for moral and skill discretion and the factor for work environment. They valued freedom and intellectual stimulation more highly than career.

The dentist's professionalism must obtain recognition from both the organization and the patients (3, 6, 7). If there is a wide gulf between ideal and reality there is a great risk that the female dentist will lose her sense of coherence and work progress (12). When the female dentist lacks influence on important decisions it might result in poor health for her (11). It is further obvious that one can apply a gender theoretic perspective on the

present results (13). It is by no means certain that the same results would have been obtained on a male population. Lacking data, however, this must remain a hypothesis to be investigated in future research.

Effersöe Gannik studied the mechanisms and structures of expectation for what is healthy and what is sick (14). Adapting her ideas on dentists' thoughts about ideal and reality, a possible explanatory structure for the present results can be that many dentists are of the opinion that it is normal to suffer from one's work. Effersöe Gannik proposes that sickness is interplay between a person and a situation. The sickness is transformed to a phenomenon, which is an integrated part of the structure of everyday life. Due to sickness experience, the individual changes her workday and her life. For a dentist, it is normal to suffer from work, and therefore she puts up with it.

Effersöe Gannik sets out a relational concept of sickness, which she calls situational sickness, where prevention and treatment must emanate from the individual's situation and experience. Her theory of situational sickness states that the field of sickness action is the missing link between life situation and living conditions, on the one hand, and sickness processes on the other, i.e. between the person and the situation. This experience also differs between men and women, where men more than woman believe they can control their health. In a previous study (7), we have shown serious health problems in our study group. According to this argument the gulf between ideal and reality may well be a fundamental cause of the health problem. However, the focus on healthy work emphasizes yet another theoretical discourse, namely salutogenesis.

In an authoritative article, healthy work implies a 'new generation' approach to occupational health and that we must make more effective use of available research (15). This 'new generation' approach could be very simple, namely salutogenetic, i.e. studying health rather than disease, as Antonovsky proposed in 1979 stating 'the most mysterious, intriguing and meaningful challenges for philosophy and the biological and the social sciences' (16). If the best results are to be obtained, this approach has to be founded on good communication between employees and employers, and democracy at work, based on freedom and the employees' influence, with the aim that ideal and reality should not diverge. However, in some places efforts have already been made to create healthy workplaces (1). The place of work has to give the employees energy and not ill health, and it is important to learn from examples of good practice (1, 15).

The results of this study confirm that salutogenetic ideas influence dentists' ideals. The obvious question now is of course: how are good circumstances obtained? In future studies we will therefore look further into the causal patterns behind healthy work using the dimensions found here.

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