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To cite this article: Elina Penttilä, Samuli Hannula, Jura Numminen, Heikki Irjala, Tuomas Selander, Piitu Parmanne & Antti Mäkitie (2021) Satisfaction of young ENT surgeons with their work. A Finnish national study, International Journal of Circumpolar Health, 80:1, 1925445, DOI: [10.1080/22423982.2021.1925445](https://doi.org/10.1080/22423982.2021.1925445)

To link to this article: <https://doi.org/10.1080/22423982.2021.1925445>



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Published online: 10 May 2021.



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Satisfaction of young ENT surgeons with their work. A Finnish national study

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ABSTRACT

The objective was to investigate work satisfaction among recently graduated otorhinolaryngologist – head and neck surgeons – (ENT surgeons). An electronic questionnaire was sent to all ENT surgeons graduated in Finland during a ten-year period. Answers about work satisfaction were analyzed in detail with regards to age, gender, university of specialist training, experience, place of work and further education. Altogether 125/129 (96.9%) responded. The majority (87.8%) of the respondents enjoyed their current main occupation. The older age group (≥ 40 vs < 40 years) was more satisfied (93.7% vs. 81.7%; $p=0.042$). Consultation opportunities and workplace atmosphere were reported as good by 85.6% and 90.4% of the respondents, respectively. Training opportunities were considered good by 82.4%, albeit by only 60% of the private physicians ($p=0.047$). Private sector practitioners were also less satisfied with the versatility of their work ($p<0.001$). Work at a university hospital was considered more strenuous ($p<0.001$). Over half (54.8%) felt insecure about continuation of their employment status. Most of the recently graduated Finnish ENT surgeons are satisfied with their current occupation, consultation opportunities and workplace atmosphere. However, work at university hospitals in particular was considered often strenuous and over half of the respondents felt insecure about the continuity of their employment.

ARTICLE HISTORY

Received 13 August 2020
Revised 29 April 2021
Accepted 29 April 2021

KEYWORDS

Career prospects; insecurity; work satisfaction; otorhinolaryngology; specialist training; strain

Introduction

Well-being at work is one of the cornerstones of our wellness. Observing and studying the well-being of employees in a changing world is important in preventing exhaustion, burnout and reduced professional ability.

There is a lot of published evidence concerning the well-being of physicians. However, the studies are mostly conducted across North America, especially in the USA, for which reason the results may not fully relay to other populations and healthcare systems [1,2]. Those studies have shown moderate to high levels of work satisfaction, which appears to have been established during the last decades. At the same time, physician burnouts in the USA have reached epidemic proportions, reaching as high as 50%, and the figures are still rising, even as burnouts in other occupations

are stable [3,4]. Evidence on work-related well-being among European physicians is scarce and we found only one review estimating the level of well-being moderate in European countries and thus lower than in North America [5]. This difference was thought to be explained by the different work environments and healthcare systems.

The factors contributing to well-being at work show that there is a statistically significant association between physician satisfaction and quality of management, professional development and the professional support of colleagues [6]. At the same time, major factors associated with resident well-being are autonomy, building of competence, strong social relatedness, sleep and spare time [7]. Nevertheless, every speciality has its own characteristics and challenges and therefore, targeted investigations are needed. We aimed to

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investigate work-related satisfaction of recently graduated ENT surgeons as it may impact career choices among young medical doctors. To our knowledge, there is a remarkable lack of published evidence on this topic among ENT surgeons and no similar study has previously been conducted.

The objectives of this study were to 1) investigate work-related satisfaction of recently graduated ENT surgeons in Finland during a 10-year period and 2) find out which factors have an effect on their satisfaction with work.

Materials and methods

All the ENT surgeons who had graduated in Finland between 1 July 2007 and 30 June 2017 were included and provided with an electronic questionnaire. The present work is part of our earlier study investigating employment status of young ENT surgeons, which included a longer version of the non-validated survey [8]. The questions concerning job satisfaction were analysed separately and are reported in the present manuscript (Table 1). Register notification was made to the office of the data protection commissioner according to the general data protection regulations in Finland and EU. An approval of the Research Ethics Board was not

needed as the study only involved electronically sent surveys.

Statistical analysis

All statistical comparisons were made with the IBM SPSS program 22.0 (SPSS, Inc., Chicago, IL). Results are presented as frequencies and percentages. Differences between the groups in categorical variables were assessed using Pearson's Chi-Squared test and in continuous variables with an independent samples' *t*-test. P-value of 0.05 was set as the limit for statistical significance.

Results

A total of 129 ENT surgeons had graduated in Finland between 1 July 2007 and 30 June 2017 from the five universities offering specialist training in Finland, and 125 (96.9%) of them responded. The detailed demographics of the respondents are described in the previous publication [8]. The average (mean) age of the respondents was 40 years (range, 31–60) and 50.4% were men. There were only few missing answers, 1–2 of them depending on the question.

Table 1. Questions concerning training- and work-related satisfaction of the respondents.

(1) How satisfied are you with your own specialist training?
<input type="radio"/> Very satisfied <input type="radio"/> Fairly satisfied <input type="radio"/> Hard to say <input type="radio"/> Fairly unsatisfied <input type="radio"/> Very unsatisfied
(1) What was "your dream job" when you graduated as a specialist?
<input type="radio"/> University Hospital <input type="radio"/> Central Hospital <input type="radio"/> Regional Hospital <input type="radio"/> Private Sector <input type="radio"/> Other, what?
(1) How does the specialist training that you have received match the requirements of your current main occupation?
<input type="radio"/> Very well <input type="radio"/> Fairly well <input type="radio"/> Moderately <input type="radio"/> Fairly poorly <input type="radio"/> Very poorly
(1) How much do you enjoy your current main occupation?
<input type="radio"/> Very well <input type="radio"/> Fairly well <input type="radio"/> Moderately <input type="radio"/> Fairly poorly <input type="radio"/> Very poorly
(1) How satisfied are you with the training opportunities of your current main occupation?
<input type="radio"/> Very satisfied <input type="radio"/> Fairly satisfied <input type="radio"/> Hard to say <input type="radio"/> Fairly unsatisfied <input type="radio"/> Very unsatisfied
(1) How satisfied are you with the opportunities for career advancement of your main occupation?
<input type="radio"/> Very satisfied <input type="radio"/> Fairly satisfied <input type="radio"/> Hard to say <input type="radio"/> Fairly unsatisfied <input type="radio"/> Very unsatisfied
(1) What do you think about the strenuousness of your main occupation?
<input type="radio"/> Not strenuous at all <input type="radio"/> Hardly strenuous <input type="radio"/> Hard to say <input type="radio"/> Fairly strenuous <input type="radio"/> Very strenuous
(1) Do you feel uncertainty about the continuation of the work of your main occupation?
<input type="radio"/> Not at all <input type="radio"/> From time to time <input type="radio"/> Often <input type="radio"/> Constantly
(1) How satisfied are you with the consultation opportunities of the job of your main occupation?
<input type="radio"/> Very satisfied <input type="radio"/> Fairly satisfied <input type="radio"/> Hard to say <input type="radio"/> Fairly unsatisfied <input type="radio"/> Very unsatisfied
(1) How satisfied are you with the versatility of your main occupation?
<input type="radio"/> Very satisfied <input type="radio"/> Fairly satisfied <input type="radio"/> Hard to say <input type="radio"/> Fairly unsatisfied <input type="radio"/> Very unsatisfied
(1) What is your experience the working atmosphere of your main occupation?
<input type="radio"/> Very good <input type="radio"/> Quite good <input type="radio"/> Hard to say <input type="radio"/> Quite bad <input type="radio"/> Very bad
(1) Where would you like to work in future?
<input type="radio"/> University Hospital <input type="radio"/> Central Hospital <input type="radio"/> Regional Hospital <input type="radio"/> Private Sector <input type="radio"/> Other, where?
(1) Free text:

Specialist training

A majority (109/125, 87.2%) of the respondents were very satisfied or fairly satisfied with the specialist training they had received and 73.4% (91/124) felt that their training corresponded very well or fairly well to their current primary occupation. There were no statistically significant differences between different universities concerning the satisfaction of specialist training ($p=0.620$). Almost two thirds (75/125, 60%) mentioned that working at a university hospital was their “dream job”, whereas the corresponding figures were 30.4% (38/125) for a central hospital, 1.6% (2/125) for a regional hospital, 2.4% (3/125) for a private sector occupancy and 5.6% (7/125) for the option of “other dream job”.

Satisfaction with main occupation

A total of 87.8% (108/123) of the respondents felt that they enjoyed their current main occupation very much

or fairly much; more detailed information and comparison with different variables are shown in Table 2. The only statistically significant difference in work satisfaction was between age groups: the older age group (≥ 40 vs. < 40 years) was more satisfied, 93.7% vs. 81.7% ($p=0.042$). The majority 85.6% (107/125) were very or fairly satisfied with consultation opportunities. More than three quarters (97/125, 77.6%) were very or fairly satisfied with the versatility of their main occupation and the workplace atmosphere was reported as very or fairly good in 90.4% (113/125) of the responses. More than half (69/125, 55%) of the respondents were very or fairly satisfied with their opportunities for advancement in their career, whereas 9.6% (12/125) were very or fairly unsatisfied, and 33.6% (42/125) answered “hard to say”.

In total, 82.4% (103/125) were very or fairly satisfied with the professional training opportunities of their main occupation, albeit only 66.7% of private physicians were satisfied ($p=0.001$). In addition to professional training opportunities ($p=0.001$), also in consultation opportunities ($p=0.006$) and in versatility

Table 2. Proportions of those respondents who enjoyed their current main occupation ($n=123/125$, 2 missing). Data are percentages (number of cases), and differences between the groups in categorical variables were assessed using Pearson’s Chi-Squared test.

Gender		
Male (63)	87.1 (54/62)	$p=0.809$
Female (62)	88.5 (54/61)	
Age		
<40 years (61)	81.7 (49/60)	$p=0.042$
≥ 40 years (64)	93.7 (59/63)	
University of specialist training		
University of Helsinki (43)	85.7 (36/42)	$p=0.783$
University of Turku (24)	82.6 (19/23)	
University of Tampere (19)	94.7 (18/19)	
University of Eastern Finland (19)	89.5 (17/19)	
University of Oulu (20)	90.0 (18/20)	
Main occupation		
Specialist (84)	83.3 (70/84)	$p=0.052$
Chief physician* (20)	100 (20/20)	
Clinical teacher (8)	100 (8/8)	
Other speciality (9)	100 (9/9)	
Other (2)	50.0 (1/2)	
Place of employment		
University hospital (69)	84.1 (58/69)	$p=0.182$
Central hospital (27)	100 (27/27)	
Regional hospital (8)	75.0 (6/8)	
Private practice (13)	92.3 (12/13)	
Other (8)	83.3 (5/6)	
Type of employment		
Permanent (65)	92.3 (60/65)	$p=0.202$
Temporary (48)	81.3 (39/48)	
Private practitioner (10)	90.0 (9/10)	
Education		
Doctor of Medical Science (48)	89.6 (43/48)	***
Docent degree (equals to Adjunct Professor level) (5)	100 (5/5)	
Subspeciality** (6)	100 (6/6)	
Other speciality (11)	100 (11/11)	
Total (125)	87.8 (108/123)	

*chief physicians of departments, department heads and deputy chiefs.

**2 in audiology, 2 in otology, 1 in rhinoallergy and – surgery, 1 in head and neck surgery.

***can’t be determined.

($p < 0.001$) there was a statistically significant difference between different places of employment. In other questions, the differences between different types of hospitals were statistically non-significant. The significant differences in comparison between different hospitals can be seen in [Table 3](#).

Most of the respondents reported intention to continue working in their current job in the future (university hospital 61/66, 92.4%; central hospital 24/29, 82.8%; regional hospital 2/2, 100%; in private sector 10/15, 66.7%). Several respondents had included additional comments stating that versatility in job options, such as working both in the public and private sector or combining clinical and research work, was rewarding.

Strenuousness and insecurity of work

Of all the respondents, 43.1% (53/123) considered their main occupation very or fairly strenuous, whereas 38.2% (47/125) did not consider their job to be strenuous at all. Work at a university hospital was considered significantly more strenuous than work in other positions ($p < 0.001$): for those working in university hospitals, the work was considered very or fairly strenuous by 65.2% (45/69) of the respondents (central hospital 22.2%, regional hospital 0% and in the private sector 7.7%).

Over half of respondents (68/124, 54.8%) felt insecure about the continuation of their employment (40.3% from time to time, 9.7% often and 4.8% constantly). More than one third (3/8, 37.5%) of those working in a regional hospital often or constantly experienced insecurity regarding continuation of their work (university hospital 20.3%, central hospital 0% and in the private sector 7.7%, $p = 0.028$). Those working under a fixed-term employment contract and private physicians experienced more insecurity regarding the continuation of their work than those who had a permanent job ($p < 0.001$).

Significance of age, gender and experience on work satisfaction

The older age group (≥ 40 vs. < 40 years) was more satisfied with their work, 93.7% vs. 81.7% ($p = 0.042$). The responders with work experience of ≥ 5 years were nearly equally satisfied (50/55, 90.0%) than those with shorter experience < 5 years (58/68, 85.3%) ($p = 0.733$). No statistically significant differences were found between the sexes in the questions measuring satisfaction. The only difference between the sexes was that men held the position of a chief physician more often 20.6% (13/63) vs. 11.3% (7/62) ($p = 0.034$). However, there was no significant difference between the sexes with regard to how the respondents felt about their career development opportunities ($p = 0.536$).

Discussion

We report, for the first time, on the professional well-being among young ENT surgeons in Finland, which is one of the five Nordic countries (Denmark, Finland, Iceland, Norway, Sweden), representing a geographically and culturally relatively unified and distinct area in Europe and globally. Health care in these countries is based on public services, in addition there are several private healthcare operators. Other common features of these countries include sparse populations and long distances. At the same time, modern urbanisation is evident in these Nordic regions. All of these factors contribute to the characteristics of the working environment of ENT surgeons as well.

In Finland, with a population of 5.5 M, the municipalities are responsible for organising and financing both primary and specialised health care. The latter is provided by hospital districts, which form five catchment areas for highly specialised medical care. The most demanding treatment and complex surgeries are centred at five university hospitals with their population varying between 0.75 M and 2.2 M. Central ($n = 15$) and regional hospitals ($n = 6$) have less facilities and offer more common ENT services and procedures. In central

Table 3. Comparison of work satisfaction between different hospitals. Data are percentages (number of cases), and differences between the groups in categorical variables were assessed using Pearson's Chi-Squared test.

	University hospital	Central hospital	Regional hospital	Private sector	
Professional training opportunities	85.5% (59/69)	96.3% (26/27)	75.0% (6/8)	69.2% (9/13)	$p = 0.001$
Consultation opportunities	91.3% (63/69)	85.2% (23/27)	62.5% (5/8)	76.9% (10/13)	$p = 0.006$
Versatility of main occupation	84.1% (58/69)	96.3% (26/27)	37.5% (3/8)	46.2% (6/13)	$p < 0.001$

hospitals, these include both in- and outpatient wards and on-call duties. The majority of the working-age ENT surgeons in Finland work in the nationally funded public sector, while a minority of physicians work either solely in the private sector or in both sectors. The private sector, for one, is financed by patients, employers, insurance companies and, in a small portion, by taxes. Over half of the young ENT surgeons work at the university hospitals.

Most of the respondents were satisfied with their main occupation and the satisfaction of Finnish ENT surgeons seems to be remarkably higher compared with ENT colleagues around North America and elsewhere in Europe [1,2,5]. An earlier study has also indicated satisfaction of Finnish ENT surgeons with the field: in the report, only 8/78 (10.1%) would not choose the same speciality again [9]. Also, Finnish residents seem to be satisfied with their education (87.2%) [9]. An article about the training satisfaction of ENT residents, work environment and conditions in six European countries showed a lower level of satisfaction with the work conditions and work satisfaction. Their results ranged between 4 and 8 on a scale from 0 (low satisfaction) to 10 (high satisfaction) [10]. ENT speciality has its own challenges, such as duties, patients with life-threatening diseases and the need for broad surgical skills, which can affect our well-being. Therefore, these, at least, should be considered and cared for by fair management, organisation of tasks and flexibility of working hours [11].

The Physician 2018 study is part of a series of cross-sectional studies that began three decades ago in Finland and are still reiterated every 5 years [12]. The study population consisted of physicians (general practitioners and specialists) who had been licenced in 2007–2016 ($n=3,148$). In total, 81% of the Physician 2018 study population enjoyed their current main occupation, so our respondents were somewhat more satisfied (88%). Sixty-nine per cent of them were satisfied with the specialist training they had received, whereas 88% of the respondents of our study were satisfied. However, our study population felt that the specialist training corresponded well to their current principle occupation slightly less frequently (73% vs. 77%). This is an important issue, because the correspondence of specialist training with one's current work has been shown to significantly predict satisfaction with the chosen speciality [13].

Work content and satisfaction among private practitioners differs from that of specialists working at hospitals. Although most of the private doctors are satisfied with their work (92.3%) and they do not tend to feel that their work is strenuous, they were still less satisfied

with their training, consultation opportunities and the versatility of their main occupation (Table 3). These findings can partly be explained by several factors. Firstly, private practitioners are by themselves financially responsible to arrange further medical education. Also, the medical concerns of their patient population tend to be professionally less challenging compared with those encountered at a hospital. Further, the working environment lacks the communication possibilities and support of other ENT colleagues. It has been shown that in Finland physicians working in the private sector have higher levels of work satisfaction and organisational commitment and lower levels of job control [14], and burnout is less common among colleagues working in the private sector than in the public sector [15]. However, every third (5/15) young private ENT practitioner reported intentions to leave their current position. One plausible explanation for why the recently graduated ENT surgeons may be less satisfied with their careers in the private sector is that if hospital posts are occupied, a recently graduated physician may reluctantly end up doing work in the private sector [8]. Nevertheless, work in the private sector may be attractive especially due to higher income and entrepreneurial identity [16]. The private sector is partly saturated with ENT surgeons and consequently there are not enough patients in relation to available ENT doctor appointments. These findings highlight the importance of improving training and consultation opportunities for private practitioners.

Our results indicate that age, gender or work experience did not have significant effects on the satisfaction with work and these results are comparable with previous studies. In the present study, the responders with work experience of ≥ 5 years were nearly equally satisfied with their work compared with those with shorter experience ($p=0.733$). Previous studies have indicated that young ENT surgeons who had 5 years or less of professional experience had lower levels of stress than those who possessed 5 to 10 years of experience [15,17]. The only significant difference between genders was that men held the position of a chief physician more often ($p=0.034$). The same fault was shown in the previous study investigating expectations of young ENT surgeons in Finland [18]. However, in our previous study [18] there was no significant difference between genders with regard to how the respondents felt about their career prospects ($p=0.536$). This could mean that women are less ambitious in targeting chief surgeon positions. It remains a cornerstone of work satisfaction that everyone is treated equally and has the same career development possibilities.

Professional challenges and variety of duties are correlated with well-being at work. A remarkable part of the respondents had higher academic degree. In total, 38.4% (48/125) had received a PhD degree, and it seemed to correlate with higher satisfaction with work. The reason for this high rate is related to the requirement of a PhD degree for a specialist vacancy at the university hospitals in Finland. Of the ENT surgeons with a PhD degree, 89.6% (43/48) and all (5/5) with a docent degree, with subspeciality (6/6) or another speciality (6/6) were satisfied with their work. The high rate of other specialities in the responders of this series may be explained by the lack of available ENT vacancies and expectations of having a permanent position among young colleagues in Finland [8]. The chief physicians seemed to be more satisfied (20/20, 100%) with their work, although the difference did not reach statistical significance ($p=0.052$) (Table 2). Based on the aforementioned results, it remains to be investigated if offering young ENT specialists with more academic research resources would result in increased work satisfaction.

Over half (55%) of the respondents worked at university hospitals. This is an obvious reflection of their willingness to stay working in tertiary care and living in a bigger city. Even though work at university hospitals is often challenging and versatile, work at a university hospital was considered also significantly more strenuous ($p<0.001$). In addition to stress, another important factor reducing well-being at work is insecurity as more than half of the respondents felt insecure about the continuation possibilities of their employment. It remains important to obtain a balance between the number of ENT surgeons and their respective workload in a certain catchment area. This should be addressed in the planning of future number of ENT surgeons and in the organisation of their hospital professional duties.

The strengths of the study include the consecutive series and large number of ENT surgeons interviewed ($n=125$) and the particularly high response rate (97%). However, we do acknowledge certain limitations in our study. Some of the respondents had to think back as far as 10 years to their specialist training to be able to fill in the questionnaire. Further, after academic education and high commitment to work, it may be more common to report higher occupation-related satisfaction in a survey.

The present study offers an example of how a comprehensive survey of well-being of employees provides valuable new information and a basis for improving their working environment. Due to the rapidly changing working environment in the health-care system and current pressures arising from the

global COVID-19 pandemic, knowledge of physician well-being and associated factors is essential to health-care managers, persons in charge of specialist training and policymakers. Further longitudinal studies are needed to establish which interventions are most effective in specific specialities, and which solutions could deliver even greater improvements in physician well-being.

Conclusions

Most of the recently graduated ENT surgeons are satisfied with their current occupation. However, work at university hospitals in particular is often considered strenuous and over half of the respondents felt insecure about the continuity of their workplace.

Acknowledgments

The authors thank Keith Hakso and Riikka Mäkitie for proof-reading paper. This study was partly supported by a grant from the Finnish Medical Association and Finnish Association of Otorhinolaryngology – Head and Neck Surgery.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This study was performed and supported by the Board of the Finnish Association of Otorhinolaryngology – Head and Neck Surgery.

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