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Interest and Competence in Management Among Newly-Qualified Specialists

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COMPETING INTERESTS The authors declare they have no competing interests.

ETHICS This study falls under human sciences as opposed to medical sciences. The research design did not contain elements requiring an ethical review from a human sciences ethics committee according to the Finnish National Board on Research Integrity TENK guidelines (2019, 19).

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ABSTRACT

BACKGROUND

Medical faculties in Finland are responsible for the quality and content of continuous professional specialization programs (300-360 ECTS), including 10 ECTS compulsory management studies in all 50 specialization programs for medicine. These management studies consist of organizational management and leadership, the social and healthcare system, HR management, leadership interaction, organizational communication, healthcare economy, and legislation.

METHODS

The Universities of Turku and Tampere conducted a survey for specialists, who completed their specialist training between January 1st 2016 and January 1st 2019. Of these specialists 83 completed the survey (response rate 25%). The aim of the study was to evaluate experiences of the compulsory management studies and specialists' attitudes concerning values as leaders and managers. The analysis was carried out using a cross-table, and in the visual analysis, a box plot has been utilized.

RESULTS

Of the respondents 38 % were content with management and leadership studies. Particular need for improving skills in HR management, healthcare economy, legislation, organizational management, and social and healthcare systems were reported. Most respondents (83%) showed interest in future leadership roles.

CONCLUSIONS

The findings of this study show that newly-qualified doctors do wish for added education and training in management and leadership.

KEYWORDS: Leadership and physicians, Management competencies, PGME, Management studies in specialist training in medicine

INTRODUCTION

The performance of health care systems and organizations has been shown to be correlated with management practices, leadership, manager characteristics, and cultural attributes associated with managerial values and approaches (1). The wellbeing of healthcare personnel depends on the quality of leadership and management and this, in turn, ensures the quality and availability of healthcare services (1)

Physician-leaders have described challenges in both taking the time needed to act as a manager and defining their role in relation to being a physician (2). Confusion concerning manager role authority and responsibility may have negative consequences, not only for the healthcare professionals, but also for the quality of care (3). According to earlier research, medical leadership would benefit from opportunities to pursue management training (4) and a more integrative model of management and medicine(5).

Good management is essential so that the healthcare system can operate more effectively, and availability of services will be assured. Recent, unexpected, worldwide changes, like the COVID-19 pandemic, emphasized the importance of continuous education of leadership and knowledge management (6).

The psychological safety of a working environment (including a sense of inclusion and safety in speaking up) is also an increasingly important part of management (7), as is social support among colleagues (8). In addition, the medical profession is increasingly female-dominated, which brings a new perspective to the profession itself, as well as to managerial work (9). Hence, although not every doctor will work as a manager, good workplace skills as a member of multi-professional teams are needed (10). Our findings suggest that management and leadership training has the potential to foster such skills.

The purpose of the study was to gather new specialists' perceptions about the compulsory management and leadership studies (10 ECTS) included in their specialization training in Finland. Respondents were also asked to compare the importance of the subjects, to their self-assessed leadership competence, and future career goals. This data can then inform future changes to the curriculum and individual courses.

SUBJECTS AND METHODS

In Finland, the specialization programs in medicine can be undertaken at all five university medical faculties, in 50 different programs (11). The medical faculties are responsible for the quality and content of these specialization programs. To complete the specialist degree, a minimum of five years of medical practice after graduating from medical school is required. The extent of specialization programs is defined with European Credit Transfer and Accumulation System (ECTS) credits, which means 27 hours of academic work each credit point. The extent of specialization programs vary between 300–360 ECTS, including medical practice, theoretical substance-specific education, compulsory management studies (10 ECTS) and a national written exam (11). The compulsory management studies in every specialization program consist of modules on organizational management and leadership, the social and healthcare system, human resources (HR) management, leadership interaction and organizational communication, healthcare economy, and legislation (10). In the Universities of Tampere and Turku, the 10 ECTS management studies include academic lectures, advanced written assignments on selected themes and portfolio work. (10)

In the Universities of Turku and Tampere, we conducted a survey for all newly-qualified specialists (n=423) who completed their specialist training between January 1st 2016 and January 1st 2019. In December 2019, we tried to reach these newly-qualified specialists by e-mail. Due to 89 invalid e-mail-addresses, 334 subjects received the questionnaire. Finally, 83 of them (25%) completed the

survey. Respondents were fully informed of the questionnaire in the cover letter and data was collected anonymously.

In addition to demographic variables (age, gender, and work experience as physician and in health care), the questionnaire comprised of questions on the relevance and importance of compulsory management studies of the specialist training and the respondents' self-assessment of their competence regarding the main issues included in management studies. The answers to the detailed questions concerning leadership studies were rated on a 5-point Likert scale (1= "totally disagree" - 5= "totally agree"). This questionnaire-based study only reflects physicians' opinions on the training, not the objective criteria.

Additionally, questions on attitudes concerning values as leaders and managers, based on Quinn's Theory of Competing Values (12) and the related roles of innovator, producer, broker, director, mentor, coordinator, and monitor were asked.

In addition to analysing our whole data, to analyse for possible differences between specialties, we conducted analyses in three specialty subgroups based on working environment: Outpatient Health Care, Special Health Care for Medicine Specialties and Surgical Specialties and Diagnostics.

Interest in healthcare leadership and the importance of the contents of management studies were analysed by gender, age, work experience, and specialty subgroup.

The statistical analyses were conducted using the RStudio 2022 (RStudio: Integrated Development Environment for R. RStudio, PBC, Boston, MA URL <http://www.rstudio.com/>).

This study falls under human sciences as opposed to medical sciences. The research design did not contain elements requiring an ethical review from a human sciences ethics committee according to the 2019 Finnish National Board on Research Integrity TENK guidelines (p. 19) . (13)

RESULTS

The respondents (n=83) represented 29 different specialties, 64% of them were women, and the most represented age-group (80%) was 31-40 years. Of the respondents 51% had over ten years work experience as doctors, and 61% of them over ten years in health care in total. The most common specialty was general practice (21%). Most respondents (83%) showed interest in future leadership roles.

Almost half of the male respondents were interested in healthcare leadership roles, compared to only one-third of the female respondents. By age, 41 to 50-year-old respondents were the most interested in leadership roles. According to specialty subgroups, respondents in outpatient health care were the most interested in leadership. (Table 1)

Table 1. Interest in healthcare leadership role according to gender, age, work experience and specialty subgroup (n= number of respondents). The percentages have been calculated from the total number of responses for each specified variable.

	Interest in healthcare leadership role				
	Completely agree n (%)	Agree n (%)	Do not disagree or agree n (%)	Disagree n (%)	Completely Disagree n (%)
Gender					
Female	6 (13)	10 (21)	2 (4)	22 (46)	8 (17)
Male	2 (7)	11 (39)	0	12 (43)	3 (11)
Age (years)					
31-40	5 (8)	17 (27)	2 (3)	32 (51)	7 (11)
41-50	3 (23)	4 (31)	0	4 (31)	2 (15)
Over 50	0	0	0	0	2 (100)
Work experience as a doctor					
0-5 years	0	0	1 (100)	0	0
6-10 years	4 (11)	9 (24)	1 (3)	22 (58)	2 (5)
Over 10 years	4 (10)	11 (26)	0	15 (38)	10 (25)
Work experience in health care in all					
0-5 years	0	1 (50)	0	1 (50)	0
6-10 years	3 (10)	7 (24)	2 (7)	16 (55)	1 (3)
11-15 years	3 (8)	10 (26)	0	18 (46)	8 (21)
More than 15 years	2 (20)	3 (30)	0	2 (20)	3 (30)
Specialty subgroups					
Outpatient health care	5 (20)	7 (28)	1 (4)	7 (28)	5 (20)
Special health care for medicine specialties	2 (7)	8 (27)	0	15 (50)	5 (17)
Surgical specialties and diagnostics	1 (5)	6 (27)	1 (5)	13 (59)	1 (5)

Respondents were asked to assess the importance and meaningfulness of management and leadership studies' course contents in relation to their own level of expertise, called competence.

(Figure 1)

Figure 1. Respondents' assessment of the importance and meaningfulness of management and leadership studies' course contents in relation to one's own level of competence.

Respondents in all specialty subgroups considered competence to be significantly lower than importance for the following fields of management studies: healthcare economy, legislation and data management, organizational management, and social and healthcare system. (Figure 1)

We also found that self-assessed competence was rated significantly lower than perceived importance for every field of the management studies by respondents in all specialty subgroups.

Among the respondents in operational care and diagnostics, the difference between importance and competence was the highest in HR management and healthcare economy. However, they assessed their expertise in social and health policy adequate, in contrast with the other two subgroups.

Results showed no statistically significant differences between specialty subgroups.

Results on attitudes concerning values as leaders and managers, as well as the related roles based on Quinn's Theory(12), showed no differences between gender or specialty groups. Among all respondents the most prevalent roles and values were related to director and mentor, whereas monitor was rated as a minor role.

DISCUSSION

The objective of this study was to evaluate newly-qualified specialists' experiences of the compulsory management studies and attitudes concerning values as leaders and managers in relation to their own level of expertise.

Characteristics of a good doctor include the need to be a clinical expert but also a competent manager and leader (14,15). There is also a need for an attitude change among physicians to see physician leaders as equal members of the professional community (2). Newly-qualified specialists are interested in leadership roles (15), and as our results indicate, they feel the need to improve their skills particularly in HR management, healthcare economy, legislation and data management, organizational management, and social and healthcare systems.

According to our results, men were more interested in working in healthcare leadership roles than women. However, in earlier studies, female physicians in managerial positions were more satisfied with their work (9). Some of them also reported an interest in managerial work because of a desire to contribute to an inspiring workplace atmosphere (9).

In Finland, all 50 specialist programs' trainees in medicine and five specialist programs' in dentistry participate in the same compulsory management courses which provides a possibility to get acquainted with and understand colleagues in different specialties, as well as to acquire skills and knowledge of team work (10). It is important to continue to provide leadership training to all medical doctor at least to the current extent while also to enhancing their motivation for pursuing managerial positions (14).

CONCLUSIONS

Management and leadership studies included in specialist programs' trainees in medicine could be expanded and further modified to assist trainees in growing into not only clinical experts but also competent managers and leaders. Atmosphere provides a momentum to develop management and leadership in health care since the newly-qualified medical doctors appreciate leadership skills, and are keen on improving their competence in these skills as well as in clinical expertise.

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