Working Conditions in Primary Care: A Qualitative Interview Study with Physicians in Sweden Informed by the Effort-Reward-Imbalance Model

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Abstract

Background: Many problems with primary care physicians’ psychosocial working conditions have been documented. Many studies on working condition have used the Effort-Reward-Imbalance (ERI) model, which posits that poor health and well-being may result from imbalances between the level of effort employees perceive that they put into their work and the rewards they receive. The model has not been used in qualitative research or applied to investigate primary care physicians’ working conditions. The aim of this study was to apply the ERI model to explore the perceived efforts and rewards by primary care physicians in Sweden and approaches they take to cope with potential imbalances between these efforts and rewards.

Methods: The study has a qualitative design, using semi-structured interviews. A purposeful sampling strategy was used to achieve a heterogeneous sample of primary care physicians who represented a broad spectrum of experiences and perceptions. We recruited 21 physicians; 15 were employed in public health care and 6 by private health care companies.

Results: The analysis of the interviews yielded 11 sub-categories: 6 were mapped to the efforts category, 3 were attributed to the rewards category and 2 were approaches to coping with effort/reward imbalances. Many of the statements concerned efforts in the form of high workload, restricted autonomy and administrative work burden. They also perceived resource restrictions, unpredictability of work and high expectations in their role as physicians as efforts. Three reward factors emerged; the physicians found their job to be stimulating and meaningful, and the work climate to be supportive. The physicians coped with imbalances by means of job enrichment and using decisional latitude.

Conclusions: This study of primary care physicians suggests a lack of reciprocity in terms of high costs and low gains, providing a plausible explanation for work stress and associated consequences that have been shown in previous primary care research. We found the ERI model to be useful to explore physicians’ primary care work and working conditions and to identify effort and reward factors as well as approaches to managing effort/reward imbalances of relevance for their job satisfaction.

Introduction

Health care is often a stressful work environment. Physicians are an important risk group for whom work stress has become an increasing concern. Numerous international studies have identified stressors such as heavy workload, administrative burden, understaffing, high staff turnover, frequent interruptions and poor job control [1, 2]. Work stress among physicians has been associated with adverse consequences in terms of poor subjective health and well-being [3–11]. Stressful working conditions may also result in reduced quality of work, which could negatively affect the quality of patient care and patient safety [12, 13].

Primary care research in several countries has documented many work-related health problems among physicians. Studies have identified problems with various working conditions, including low perceived compensation and social status compared with other specialist fields in medicine, lack of recognition for good work, large workload, low work commitment, poor job satisfaction, high staff turnover and difficulties with recruiting primary care physicians [14–18]. As first-line care, primary care is vulnerable to changing societal conditions that likely affect the working conditions, including ageing populations, higher patient expectations for access to care and increased patient involvement in care decision making [19].

Problems with the psychosocial working conditions in primary care in Sweden have received increased attention in the past decade. There has been considerable debate among the physician profession, policymakers and researchers concerning the prevalence and causes of stressful work environments in primary care [20, 21]. Swedish primary care physicians have reported experiencing negative psychosocial working conditions and work-related stress more frequently than other professions in primary care [6, 22]. There is a shortage of physicians in Swedish primary care, including specialist and resident physicians, and difficulties in recruiting and retaining physicians have been documented [23]. Compared with most other European countries, Sweden has a low proportion of primary care physicians versus hospital physicians [24]. From an international perspective, primary care physicians in Sweden have been shown to be more dissatisfied with the health care system than their colleagues in many western countries [25].

Psychosocial working conditions in many settings have been studied using the Effort-Reward-Imbalance (ERI) model [26]. The model is used to identify a potential mismatch between efforts and rewards in a work setting and has had considerable success in predicting the health status of employees [27, 28]. It postulates that poor health and well-being may result from imbalances between the level of effort employees perceive that they put into their work (e.g. due to having a considerable workload and overtime work) and the rewards they receive (e.g. in terms of having good promotion prospects and secure employment) [26]. The underlying theoretical principle of ERI is the notion of social reciprocity, which posits that individuals invest efforts and expect rewards in return. Failed reciprocity resulting from a violation of this norm of return expectancy elicits negative emotions and stress responses [28].

The ERI model has been applied in many cross-sectional survey studies of working conditions in various countries, health care settings and professions. However, there is a paucity of research using the model to study working conditions in primary care or specifically amongst physicians in this setting. We have only found one study by Teles et al. [9] that applied the ERI model to investigate working conditions among primary care physicians, but they integrated physicians into their sample of 729 Brazilian health care workers (including nurses, dentists, community health workers, etc.) without providing separate results for the different professions. The ERI model has been used in studies of nurses [4] and physician assistants [1] and in studies in hospitals [11] and secondary public health care facilities [8].

Further, the ERI model has only been used in quantitative survey research, although the model could also guide qualitative research to gain a deeper understanding of how physicians in primary care make sense of efforts, rewards and what approaches they use to cope with potential imbalances between the two aspects. Addressing the topic inductively, by posing open questions that allow for physicians’ exploration, rather than asking them to choose between
fixed response options in a questionnaire, could yield new insights into their views on efforts and rewards in their primary care work. A qualitative approach could also facilitate new insights into how perceived effort/reward inequity might be overcome.

Addressing these knowledge gaps, the aim of this study was to apply the ERI model to explore the perceived job-related efforts and rewards by primary care physicians in Sweden and approaches they take to cope with potential imbalances between these efforts and rewards. It is important to investigate their attitudes towards primary care work, both the work itself and working conditions, to gain a better understanding of what types of changes might be needed to improve working conditions in primary care to reduce work-related health problems and to make primary care work a more appealing career option.

Methods

Study design and setting

The study has a qualitative design, using semi-structured interviews. A qualitative approach with interviews was considered relevant to gain a deeper understanding of primary care work and working conditions based on physicians’ experiences and perceptions.

The Swedish health care system consists of 21 regions providing health care for the Swedish population of more than 10 million funded primarily by taxes. All residents are insured by the state with equal access to health care for the whole population. Fees are low and regulated by law [29, 30].

Primary care is first-line care in Sweden and is responsible for the delivery of basic medical treatment, preventive work and rehabilitation. There are approximately 1200 primary care units in Sweden of which 43% are privately owned. The private health care companies are usually contracted to regions and the out-of-pocket fees for their patients are equal to that of publicly funded health care [29]. Primary care units typically employ physicians, nurses, physiotherapists and psychologists, although there are variations in the composition of the workforce among different units [31].

Recruitment of participants

A purposeful sampling strategy was used to achieve a heterogeneous sample of participants [32]. We recruited (1) physicians who were employed in publicly funded primary care units and in private health companies; (2) physicians who were employed in primary care units that differed with regard to geographic location; (3) physicians who were specialists and residents in primary care; and (4) physicians who currently worked with conventional face-to-face patient consultations although they may also be active in digital consultations, which have increased rapidly in Sweden in recent years [19]. The objective of this sampling strategy was to recruit physicians who represented a broad spectrum of experiences and perceptions of relevance for exploring the working conditions in primary care.

We recruited 21 primary care physicians for the interviews. 15 were employed in public health care and 6 were employed by private health care companies. To recruit participants working in public care, we contacted all 21 regions in Sweden by examining the regions’ websites to identify the person who seemed to be responsible for digital consultation in the region because we wanted to involve physicians who had experience with both digital and conventional face-to-face consultations. We sent an e-mail to this person, briefly informing them about our study and asking for physicians from the region to participate. We did not receive any response from 8 regions; 4 regions agreed to participate and provided contact information for physicians who had worked with digital consultation. We approached 29 primary care physicians from the 4 regions, and 15 who fulfilled the four purposive sampling criteria (see above) agreed to participate. To recruit participants working in private health care, we approached 7 private companies. Of these, 5 agreed to participate in our study. We approached 12 physicians from these companies, and 6 who fulfilled the four purposive sampling criteria agreed to participate. All the participants had some experience of employment in publicly funded health care.

The research was conducted in accordance with the Declaration of Helsinki. The study was approved by the Regional Ethics Review Board in Linköping (2019 – 01910). Transcripts are stored in the authors’ password-protected computers and no unauthorized persons have access to the data.

Data collection

The authors developed a semi-structured interview guide to capture the physicians’ perceptions and experiences concerning their psychosocial work environment. The interview guide was assembled by the research team behind the study, based on the existing literature on psychosocial work environments. The questions concerned the physicians’ conventional face-to-face patient consultations and their work with digital consultations [19].

The questions that were analysed in this study were the following: Why did you choose the physician profession and to work as a primary care physician? What is most important for you in your role as a physician? How do you perceive the work situation to be at your primary care unit, in terms of working conditions, workload and expectations on you? How flexible do you perceive your job to be? Would you like it to be different in any way and, if so, how? What support do you receive from the management or manager? How is the collegial support and collaboration at your primary care unit? Is there anything you would like to see more or less of? How do you maintain the balance between your private and working lives?

Numerous probes and follow-up questions were also asked, e.g. what the physicians considered to be the best feature of their work, how satisfied they were with the current work environment and how their working conditions had changed over time. The aim was to capture relevant aspects of the physicians’ working conditions.

We pilot tested the interview guide in 2 interviews, which indicated that further questions regarding aspects of digital work needed to be incorporated into the interview guide. Despite this, the first 2 interviews included relevant information and were therefore included in the analysis.

The interviews were conducted by all authors except PN and JS. Each interview lasted between 24 and 84 minutes and was digitally audio recorded. No field notes were taken during or after the interviews. The interviews were conducted by video meeting, telephone or a personal meeting, depending on what suited
the participant best. Before the interviews were conducted, the participants signed informed consent stating that their confidentiality was guaranteed and that no one other than the interviewer would know their identity. To the other researchers, the participant was known only by initials and other demographic, non-identifying data. No participant withdrew participation during or after the interviews.

Only the participant and interviewer were present during the interviews to allow the participant to speak freely. The participants did not have any previous relationship with the researchers except for the 2 participants in the pilot interviews (known to HF) and one participant (known to HF). The first 3 interviews were transcribed verbatim by HF and the remaining interviews were transcribed by a professional transcription agency. All transcripts were carefully examined by HF to ensure accuracy. The interviews took place from April to October 2019.

**Theoretical framework**

We used the ERI model as a framework for a qualitative directed content analysis [33] of the interviews with regard to efforts and rewards experienced and/or perceived by the physicians and their approaches to coping with imbalances that may exist between efforts and rewards. Efforts refer to job-related factors that are imposed on the employee and make work demanding, e.g. time pressure due to a heavy workload, interruptions while performing the job, a great deal of job responsibility and pressure to work overtime. Rewards can be job-related factors such as receiving adequate salary, good promotion prospects, secure employment, a position that adequately reflects a person's education and training, respect from superiors and/or other relevant persons, adequate support in difficult situations and being treated fairly at work. The ERI model posits that individuals use different approaches to cope with effort/reward imbalances, referred to as over-commitment, to modify deleterious effects on health and well-being, e.g. sacrificing a great deal for one's work and seeking approval [34].

In this study, efforts were work-related characteristics (e.g. terms, responsibilities and circumstances) that were perceived to have a negative impact on the physicians' job satisfaction, rewards were characteristics that were perceived to positively influence job satisfaction and approaches to coping with effort/reward imbalances were personal strategies used by the physicians to improve job satisfaction. Job satisfaction is the positive and negative attitudes employees have towards their work or individual aspects of the work, encompassing both the work itself and the working conditions [35].

**Data analysis**

Participants’ responses concerning job-related efforts and rewards and their approaches to coping with effort/reward imbalances were analysed using directed content analysis, applying the ERI model to develop the initial coding scheme [33]. All authors read all transcripts to obtain an understanding of the whole and examined the ERI model because the model provided a framework for the analysis. Each category of the ERI model (i.e. efforts, rewards and coping approaches) covered one aspect only, i.e. the requirement of uni-dimensionality [36].

In the first step, PN coded the transcripts by identifying participants’ statements that were related to one of the three aspects. The statements were grouped into meaning units (i.e. constellations of statements that relate to the same central meaning), which were assembled into sub-categories that shared content associated with any of the three ERI components.

The sub-categories were created to be internally homogeneous and externally heterogeneous and were intended to be mutually exclusive, i.e. the requirement of mutual exclusiveness [36]. Each sub-category was given a name to provide a concise description of what it refers to and a description was generated to provide information about what is meant by a given sub-category [36].

In the next step of the analysis, PN mapped each sub-category onto one of the three pre-determined categories (efforts, rewards or coping approaches). This step involved all authors reading and reflecting on the three ERI-related categories and the proposed sub-categories, including their names, descriptions and associated quotations. These findings were discussed at several Zoom meetings (the analysis was carried out during onsite workplace restrictions due to the coronavirus pandemic) and via emails. This process continued until consensus was reached on the categories and sub-categories.

Representative quotations from participants were selected by PN and HF and were then discussed with the rest of the team before the final quotations were agreed upon. Quotations are marked from physician #1 to physician #21 in the Results.

**Results**

The characteristics of the 21 participants are shown in Table 1. Seventeen of the participants were employed by primary care units in 4 regions and 11 worked in 5 different private companies. Participating regions and companies were in central and southern Sweden. Ten of the participants had received their medical training in Sweden and 11 had undergone medical education abroad.
Table 1
Participant characteristics

| Characteristic                              | Number (%) |
|---------------------------------------------|------------|
| Sex                                         |            |
| Male                                        | 10 (48)    |
| Female                                      | 11 (52)    |
| Age                                         |            |
| 30–39 years                                 | 7 (33)     |
| 40–49 years                                 | 7 (33)     |
| 50–63 years                                 | 7 (33)     |
| Level of medical training                   |            |
| Specialist in primary care medicine         | 16 (76)    |
| Resident in primary care medicine*          | 5 (24)     |
| Employer                                    |            |
| Region                                      | 15 (71)    |
| Private company                             | 6 (29)     |

*In Sweden, resident physicians have finished medical school, possess a medical licence and for 5 years, they provide health care and are learning to become specialist physicians (in this case, specialists in primary care medicine).

The analysis of the interviews yielded a total of 11 sub-categories: 6 were mapped to the efforts category, 3 were attributed to the rewards category and 2 concerned approaches to coping with effort/reward imbalances (Fig. 1).

Efforts

High workload

Physicians described their workload as high, which had a negative impact on their job satisfaction. Many also said that the work burden was uneven, with busy, intense days interchanged with calmer periods. Stressful workdays could affect them long after work was over for the day. It was even argued that the high workload was too exhaustive to work full-time as a clinician in primary care.

I had such a day today. I was at the health centre all day until 4 [pm], I came home, I thought, 'No, now my head is cracking.' There were so many questions, tasks in the journal, extra prescriptions, extra notes on the table. [#17]

It is so intense that you cannot bear it. But we have many who do something else besides, work at the university with teaching or research or so. [#20]

There were also physicians who described their workload in a more favourable light, emphasizing that the amount of work was usually reasonable although it could still vary a great deal from day to day or with regard to longer time periods.

The workload is good, although there are periods during the year when it is tougher. [#1]

It varies. Some days, very reasonable, other days, long queues, many patients who need help. [#11]

Restricted autonomy

The physicians’ job satisfaction was negatively influenced by what they perceived as restricted autonomy. They described having limited decisional latitude and influence over their work. Many of the statements specifically concerned dissatisfaction with the regimented nature of the work and the lack of flexibility it allowed. The lack of independence was attributed to the governance of health care; many physicians were negative about higher management and political levels dictating terms for primary care. Physicians expressed that they felt controlled and believed many tasks that were imposed on them detracted from their desired focus on caring for patients.

We work so damned unstructured because we cannot control ourselves. All these ideas from above make it harder to manage. The big change was 15 years ago, when 'silo governance' was introduced. Previously I was more self-governing, then they introduced the silos and they must have statistics. [#4]

It's quite inflexible. The schedule is set, it is often fully booked and it is difficult, especially when you have other assignments and would need to take time off. [#8]

Administrative work burden
The administrative work tasks imposed on the physicians led to many complaints and had a negative impact on their job satisfaction. Their main concern was that this type of work was time-consuming for which they did not seem motivated, and it ultimately detracted from a desired patient focus. The physicians mostly spoke about the consequences of the administrative work burden, but one of them blamed New Public Management principles for this development.

*I would like to spend a little less time on administration. It's a lot to sit and write letters or write medical certificates and stuff like that. That's the part you really want to shorten.* [#7]

*You meet patients, but then every patient also requires administration, so it is usually difficult to keep up with it. There is often too little time for the administrative tasks because we don't have enough doctors.* [#16]

**Resource restrictions**

Job satisfaction was also negatively affected by perceived resource limitations. The physicians mentioned restrictions concerning technology, transfer of data and information as well as with the localities. They believed that these problems could have a negative impact on the quality and effectiveness of the work they perform.

*We are very vulnerable to IT problems, which we had here this morning. There were several employees who could not log in at all to the system. It is difficult to catch up later. These are probably our biggest challenges, IT problems and congestion in the [primary care unit] premises.* [#19]

*We do not have such a good structure for information transfer; a lot of mails that come in duplicate. Yes, it's difficult.* [#21]

**Unpredictability of work**

The physicians' job satisfaction was negatively influenced by difficulties they perceived with regard to planning work ahead and being prepared for unexpected events that might occur. The physicians accepted the inherent "putting out fires" nature of much health care, yet they were dissatisfied with the focus on the short-term as it impeded their ability to plan and perform their work as well as they would like.

*When we work in health care, care in general, planning is very difficult. You notice this quite clearly because there is a lot that happens unforeseen in terms of patient flow. And we are quite vulnerable when there are fewer staff due to diseases and so on.* [#3]

*There are both calm days and stressful days, but I would say that days are mostly stressful. If bookings are wrong, it affects the day a lot. Then it will be stressful of course.* [#9]

**High expectations**

Some of the expectations the physicians associated with their role as physicians had a negative impact on their job satisfaction. Although they recognized that they should be held accountable for decisions they make, they believed it was often difficult to live up to moral, ethical and patient safety ideals under less than optimal working conditions. Managers, colleagues and patients all contributed to the high expectations the physicians felt in their work.

*There is an expectation from my employer that I will do a good job and that the patients, above all, will be satisfied. There is a lot of focus on this and I think it is very good. And of course there is an expectation that I will 'produce'.* [#11]

*There are more expectations from the patients. The patients are more well-read and I think that is good, I like that the patients have read online and that makes them better prepared, but they also can make justified demands. It can be perceived as pressing for some, that they know what they need.* [#21]

**Rewards**

**Stimulating work content**

The stimulating content of the work the physicians do positively influenced their job satisfaction. They particularly appreciated the interesting challenges provided with the variation and breadth of tasks in primary care work, which required them to develop and use many different skills and abilities. Meeting, getting to know and following patients over time were mentioned as inspirational and satisfactory aspects of their work.

*The variety [is the best part of the job], I would say. I am a person who gets a little tired if I have to do the same thing all the time.* [#9]

*I chose primary care because I'd like to follow my patients over time and develop a sort of relationship with the patients as they return to their primary care unit.* [#11]

**Meaningfulness of work**

Physicians considered their work to be highly meaningful, which contributed positively to their job satisfaction. They recognized that the work they perform as physicians is of great importance for patients who seek primary care for help with their illnesses. Having the skills and ability to make a difference by helping patients and achieving patient benefits was important for the physicians' sense of meaningfulness. With few exceptions, the physicians did not mention financial aspects as being relevant for the meaningfulness of work.

*The patient contact is probably the most important because that is why I became a clinician. The patient contact gives a lot back.* [#14]
[Most important in my work] is the patient contact, to have a valuable and good time together with the patient that is valuable for the patient. But it also rewarding for me as a doctor that I can help the person who is seeking help from me. [#18]

**Supportive work climate**

Working in a supportive climate at a primary care unit had a positive impact on the physicians’ job satisfaction. Collaborating with other physicians and staff from other professions, receiving support from colleagues and interacting with and receiving feedback from patients were important aspects of the favourable work climate. The opportunity to speak informally with and ask other physicians was also appreciated. Some physicians claimed that job satisfaction was primarily due to the social relationships at work.

The best thing about my job, hand on heart, may not be the medical work itself, but it is probably this togetherness we have with my employees and colleagues and with other professions. [#3]

It has become a good learning climate. There are many who are willing to share their knowledge so we can increase our overall competence level. [#19]

**Approaches to cope with effort/reward imbalances**

**Job enrichment**

The physicians utilized various opportunities to enrich their job as a way to cope with imbalances between efforts and rewards, thus improving their job satisfaction. This involved initiatives to diversify their work tasks, develop new competences and take on responsibilities beyond the normal job in primary care. Such initiatives could reduce the workload because it gave them a break from regular clinical patient work in the primary care unit.

I just felt, 'I cannot live like this:' It became far too much [work] and we are understaffed and there was never enough [time and staff]. When this online work appeared, I thought I would give it a try. This has saved me, so I have been able to continue working as much as before. I have my quality of life and work quality too. [#17]

There are of course always exciting development issues. I have not been involved in the introduction of this digital application, the AI function. It would have been fun to have been more involved in it, but you cannot be everywhere. I would like to get more involved in medical quality issues. [#21]

**Job decisional latitude**

Using job decisional latitude to influence one’s own work schedule, i.e. when and how much to work, provided the physicians with another means to reduce an overbearing workload and try to avoid over-commitment in their work, thus improving their job satisfaction. Several physicians described the attainment of a good work/leisure balance as a difficult struggle.

You have to fight to catch up and I’m used to it now. I can set limits, but [to maintain a decent work/leisure balance] that’s tough. [#4]

You have to work actively to get it [balance between work and leisure]. The job can devour all your time, that happens fast, because you get a lot of assignments all the time. So somewhere you proactively just have to prioritize well and above all try to make time for your own life so that you do not get stressed by your job. [#6]

**Discussion**

This study sought to explore primary care physicians’ perceived job-related efforts and rewards as well as their approaches to coping with potential imbalances between efforts and rewards. We used the ERI model as a framework for the analysis of interviews with the physicians. Most of the sub-categories that emerged from the analysis could be mapped to the efforts category of the ERI model. This finding suggests a lack of reciprocity in terms of high costs and low gains, which elicits negative emotions according to the ERI model. In the long run, an imbalance between efforts and rewards at work increases the susceptibility to poor health and well-being [26], which means that our findings provide a plausible explanation for work stress and associated consequences, such as poor subjective health and well-being, that have been shown in previous primary care research [3–11].

Most of the physicians lamented about their high workload although there were also those who described the work burden in more neutral terms, emphasizing that their work was also characterized by calmer periods. The overall findings concerning the work burden are consistent with other studies that have documented problems with high workload in primary care in many countries [24, 37, 38]. High workload in primary care has been attributed to many factors, including ageing populations, changing disease patterns in the population and evolving societal norms and values in society, some of which have yielded higher expectations for access to primary care, improved patient experience and increased patient involvement in care decision making [19, 39–42]. The workload has also been affected by a shift in tasks from secondary to primary care, which has not always been accompanied by sufficient resources. Primary care increasingly manages conditions previously handled by secondary care, e.g. palliative care and chronic disease, and patients are discharged to primary care more quickly than before [43].

Many of the physicians’ statements concerned restricted autonomy and the burden of administrative work. Again, these findings are consistent with many international studies concerning physicians’ working conditions [6, 44–46]. Issues related to limited autonomy and administrative work burden for health care professionals have often been attributed to New Public Management (NPM) principles because physicians and other health care professionals are expected to document their work, take on administrative tasks and participate in management-led quality improvement initiatives to achieve organizational goals [24, 47, 48]. There has been a lively public debate in Sweden on NPM, with many physicians critiquing core NPM principles and highlighting the consequences for health care professionals [49–51]. In response to the criticism of NPM principles, the Swedish government has recently introduced the concept of "trust-based
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Declarations

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Authors’ contributions

PN conceptualized the study. All aspects were discussed with HF, IS, KS, CE and JS. PN drafted the first version of the manuscript with assistance from HF and KS. Later versions of the manuscript were discussed with all authors as PN continuously revised the manuscript. All authors approved the final manuscript.

Authors’ information

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Availability of data and materials

The data will be available from the corresponding author on reasonable request. Transcripts are stored in the authors’ password-protected computers and no unauthorized persons have access to the data.

Ethics approval and consent to participate

The study was approved by the Regional Ethics Review Board in Linköping (2019-01910).

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

References

1. Vu-Eickmann P, Li J, Muller A, Angerer P, Loerbroks A. Associations of psychosocial working conditions with health outcomes, quality of care and intentions to leave the profession: results from a cross-sectional study among physician assistants in Germany. Int Arch Occup Environ Health. 2018;91:643–54.
2. Derycke H, Vlerick P, Burnay N, Declere C, D’Hoore W, Hasselhorn H-M, et al. Impact of the effort-reward imbalance model on intent to leave among Belgian health care workers: a prospective study. J Occup Organ Psychol. 2010;83:879–893.
3. Orton P, Orton C, Gray DP. Depersonalised doctors: a cross-sectional study of 564 doctors, 760 consultations and 1876 patient reports in UK general practice. BMJ Open 2012;2:e000274.
4. Lamy S, de Gaudemaris R, Lepage B, Sobaszek A, Caroly S, Kelly-Irving M, et al. The organizational work factors’ effect on mental health among hospital workers is mediated by perceived effort–reward imbalance. J Occup Environ Med. 2013;55(7):809–16.
5. Häusler N, Bopp M, Hämmig O. Effort-reward imbalance, work-privacy conflict, and burnout among hospital employees. JOEM. 2018;60(4):e183–87.
6. Anskär E, Lindberg M, Falk M, Andersson A. Legitimacy of work tasks, psychosocial work environment, and time utilization among primary care staff in Sweden. Scand J Primary Health Care. 2019;37(4): 476–483.
7. Weyers S, Peter R, Boggild H, Jeppesen HJ, Siegrist J. Psychosocial work stress is associated with poor self-rated health in Danish nurses: a test of the effort-reward imbalance model. Scand J Caring Sci. 2006;20:26–34.
8. Darboe A, Lin IF, Kuo HW. Effort-reward imbalance and self-rated health among Gambian healthcare professionals. BMC Health Serv Res. 2016;16:125.
9. Teles MAB, Barbosa MR, Vargas AMD, Gomes VE, Ferreira e Ferreira E, Martins AMEdBL, et al. Psychosocial work conditions and quality of life among primary health care employees: a cross sectional study. Health Qual Life Outcomes. 2014;12:72.
10. Kakunje A. Stress among health care professionals – the need for resiliency. Online Journal of Health and Allied Sciences, 2011;10(1):1–2.
11. Ohlander J, Weigl M, Petru R, Angerer P, Radon K. Working conditions and effort-reward imbalance of German physicians in Sweden respective Germany: a comparative study. Int Arch Occup Environ Health. 2015;88:511–19.

12. Panagioti M, Geragthy K, Johnson J, Zhou A, Panagopoulos E, Chew-Graham C, et al. Association between physician burnout and patient safety, professionalism and patient satisfaction. JAMA Inter Med. 2018;178(10):1317–30.

13. Shanafelt TD, Balch CM, Bechamps G, Russell T, Dyrbye L, Satele D, et al. Burnout and medical errors among American surgeons. Ann Surg. 2010;251(6):995–1000.

14. Fisher RFR, Croxson CHD, Ashdown HF, Hobbs FDR. GP views on strategies to cope with increasing workload: a qualitative interview study. Br J Gen Pract. 2017;67:e148–56.

15. Van Ham I, Verhoeven AH, Groenier KH, Groothoff JW, De Haan J. Job satisfaction among general practitioners: a systematic literature review. Eur J Gen Pract. 2006;12:174–80.

16. Le Floch B, Bastiaens H, Le Reste JY, Lingner H, Hoffman R, Czachowski S, et al. Which positive factors give general practitioners job satisfaction and make general practice a rewarding career? A European multicentric qualitative research by the European general practice research network. BMC Fam Pract. 2019;20:95.

17. Ejlertsson L, Heijbel B, Ejlertsson G, Andersson I. Recovery, work-life balance and work experiences important to self-rated health: A questionnaire study on salutogenic work factors among Swedish primary health care employees. Work. 2018;59:155–63.

18. Spinelli WM, Fernstrom KM, Galos DL, Britt HR. Extending our understanding of burnout and its associated factors: providers and staff in primary care clinics. Ment Health Employ. 2016;39(3):282–98.

19. Frenemark H, Skagerström J, Seing I, Ericsson C, Nilsen P. Digital consultations in Swedish primary health care: a qualitative study of physicians' job control, demand and support. BMC Fam Pract. 2020;21:241.

20. Wilczek A. Amerikanska läkares "burnout" och svenska läkares "uttnatning". Läkartidningen. 2015;112:DHLA.

21. Andersson J. Svenska allmänläkarer mer stresstade än kollegorna i andra länder. Läkartidningen. 2019;116:FXPX.

22. Vårdanalys. Vården ur primärvårdsläkarnas perspektiv 2019: En jämförelse mellan Sverige och tio andra länder, Stockholm: Myndigheten för vård- och omsorgsanalys. 2020. https://www.vardanalys.se/rapporter/ihp-2019/. Accessed 12 January 2021.

23. Socialstyrelsen. Bedömning av tillgång och efterfrågan på legitimerad personal i hälso- och sjukvård samt tandvård. Nationella planeringsstödet 2020. Stockholm: Socialstyrelsen; 2020.

24. Anskär E. Time flies in primary care. Linköping: Dissertation thesis, Linköping University; 2019.

25. Vårdanalys. Vården ur primärvårdsläkarnas perspektiv. Stockholm: Myndigheten för vård- och omsorgsanalys; 2015.

26. Siegrist J. Adverse health effects of high effort-low reward conditions at work. J Occup Health Psychol. 1996;1:27–43.

27. Van Vegchel N, De Jonge J, Bosma H, Schaufeli W. Reviewing the effort-reward imbalance model: drawing up balance of 45 empirical studies. Soc Sci Med. 2005;60:1117–31.

28. Siegrist J, Starke S, Chandola T, Godin I, Marmot M, Niedhammer I, et al. The measurement of effort-reward imbalance at work: European comparisons. Soc Sci Med. 2004;58:1483–99.

29. SKR. Ekonomi- och verksamhetsstatistik. 2020. https://skr.se/ekonomijuridikstatistik/statistik/ekonomiochverksamhetsstatistik.1342.html. Accessed 14 January 2021.

30. SKR. Patientavgifter i hälso- och sjukvården 2020. 2020. https://skr.se/halsasjukvard/patientinflytande/patientavgifter.14668.html. Accessed 14 January 2021.

31. SKR. Vad är definitionen av primärvård? 2020. https://skr.se/halsasjukvard/kunskapsstodvardochbehandling/primarvardnaravard/tillganglighetprimarvarden/verksamhetsstodutokaduppfoljningiprima Accessed 20 December 2020.

32. Patton MQ. Qualitative research & evaluation methods. 3rd ed. Thousand Oaks, CA: Sage; 2002.

33. Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. Qual Health Res. 2005;15:1277–88.

34. Siegrist J, Li J, Montano D. Psychometric properties of the effort-reward imbalance questionnaire. Düsseldorf: University of Düsseldorf; 2019. https://www.uniklinik-duesseldorf.de/fileadmin/Fuer-Patienten-und-Besucher/Kliniken-Zentren-Institute/Institut_fuer_Medizinische_Sozioziologie/Dateien/ERI/ERI_Psychometric-New.pdf. Accessed 10 December 2020.

35. Aziri B. Job satisfaction: a literature review. Manage Res Pract. 2019;20:95.

36. Schreier M. Qualitative content analysis. In: Flick U. editor. The SAGE handbook of qualitative analysis. Los Angeles, CA: SAGE; 2013. p. 170–83.

37. Shanafelt TD, Boone S, Tan L, Dyrbye LN, Sotile W, Satele D, et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. Arch Intern Med. 2012;172(18):1377–85.

38. Rimmer A. GPs want longer consultations, BMA survey finds. BMJ. 2015;350:h1910.

39. Drozt E, Poksinska B. Lean in healthcare from employees' perspectives. J Health Org Manage. 2014;28:177–195.

40. Alonso JM, Clifton J, Diaz-Fuentes D. The impact of new public management on efficiency: an analysis of Madrid's hospitals. Health Policy. 2015;19:333–40.

41. WHO. Continuity and coordination of care. A practice brief to support implementation of the WHO Framework on integrated people-centred health services. Geneva: World Health Organization; 2018.
42. Nilsen P, Seing I, Ericsson C, Birken SA, Schildmeijer K. Characteristics of successful changes in health care organizations: an interview study with physicians, registered nurses and assistant nurses. BMC Health Serv Res. 2020;20:147.

43. Croxson CH, Ashdown HF, Hobbs FR. GPs' perceptions of workload in England: a qualitative interview study. Br J Gen Pract. 2017;67(655):e138–47.

44. Osborn R, Moulds D, Schneider EC, Doty MM, Squires D, Samak DO. Primary care physicians in ten countries report challenges caring for patients with complex health needs. Health Aff (Millwood). 2015;34(12):2104-12.

45. Rassolian M, Peterson LE, Fang B, Knight HC Jr, Peabody MR, Baxley EG, et al. Workplace factors associated with burnout of family physicians. JAMA Intern Med. 2017;177(7):1036–8.

46. Agarwal SD, Pabo E, Rozenblum R, Sherritt KM. Professional dissonance and burnout in primary care: a qualitative study. JAMA Intern Med. 2020;180(3):395–401.

47. Almqvist R (2006). New public management. Malmö: Liber.

48. Vedung E. Implementering i politik och förvaltning. Lund: Studentlitteratur; 2016.

49. Engström I. Läkaresällskapet: NPM – en av de viktigaste frågorna. Läkartidningen. 2014;111:CPE9.

50. Björgell P. Vården utgår inte längre från patientens behov. Dagens Samhälle. 2017. https://www.dagenssamhalle.se/debatt/varden-utgar-inte-langre-fran-patientens-behov-17177#:~:text=utf%C3%B6rs%20av%20lakejer.-,Sjukv%C3%A5rdsapparaten%20utg%C3%A5r%20f%20C3%20A4ngre%20fr%C3%A5n%20C3%A5n%20v%C3%A5rdbeh. Accessed 12 January 2021.

51. Emanuelsson A. Debatten om new public management. Stockholm: Arena idé. Ny Tid; 2018. Rapport 39. http://www.arenaide.se/rapporter. Accessed 12 January 2021.

52. Bringselius L. Tillit - en ledningsfilosofi för framtidens offentliga sektor. Helsingborg: Komlitt Förlag; 2020.

53. SKR. Tillitsbaserad styrning. 2020. https://skr.se/demokratiledningstyrning/stodforattstyraochleda/attstyraforresultat/tillitsbaseradstyrning.33595.html. Accessed 12 January 2021.

54. Aalto A-M, Heponiemi T, Josefsson K, Arffman M, Elovainio M. Social relationships in physicians' work moderate relationship between workload and wellbeing – 9-year follow-up study. Eur J Public Health. 2018;28(5):798–804.

55. Horowitz CR, Suchman AL, Branch Jr WT, Frankel RM. What do doctors find meaningful about their work? Ann Intern Med. 2003;138(9):772–5.

56. Herzberg F. Work and the nature of man. Cleveland: World Publishing; 1966.

57. Herzberg F. One more time: how do you motivate employees? Harvard Bus Rev. 1987;46(1):53–62.

58. Adlesvärd V. Avundsjukan har urgamla anor. Svenska Dagbladet, 2 November 2003. https://www.svd.se/avundsjukan-har-urgamla-anor. Accessed 21 January 2021.