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'Stepchildren of the Ministry': an examination of the difficulties endured by family physicians in Istanbul during the course of the COVID-19 pandemic

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ABSTRACT

Introduction. Efforts to contain the SARS-CoV-2 virus would fall short without strong primary health care. **Aim.** In this study, we aimed to understand family physicians' experiences of coronavirus disease 2019 (COVID-19) in Istanbul, focusing on their coping strategies in order to draw lessons for the future management of pandemics. **Methods.** Twelve community-based physicians working in Istanbul participated in semi-structured interviews between January and May 2021. Purposive sampling was used to ensure a range of physicians' characteristics. Individual interviews were conducted with each participant on an online platform. Participants were asked 26 open-ended questions. Phenomenological analysis was performed to describe experiences of physicians. **Results.** The physical conditions of participants' health centres were insufficient to provide service safely during the COVID-19 pandemic. Most physicians were uncomfortable about the quality and quantity of personal protective equipment received from the Ministry of Health and took additional measures themselves. Vaccine supply was thought to be insufficient and there were problems with the associated software. Many family physicians highlighted the inadequate communication from the Ministry. Insufficient knowledge about the disease caused anxiety and fear for the physicians and hindered their performance at the beginning of the pandemic. Physicians who live with their families were more anxious than those who did not. **Discussion.** Despite challenges, routine procedures have mostly been continued, but newly added responsibilities during the COVID-19 pandemic have had significant impact on physicians' lives.

Keywords: ambulatory care, COVID-19, family health centres, family physicians, general practitioners, Istanbul, pandemic, primary health care, qualitative research, vaccines.

Introduction

Primary care is the backbone of healthcare systems and robust primary care is crucial in the management and control of pandemics. Primary care doctors play an essential role in health systems as they are the first and often the only point of contact for a large proportion of patients. They therefore also have extensive responsibilities during pandemics. Their tasks cover a wide range of roles in mitigating pandemics including triage, screening, handling the helplines, providing telemedicine consultations, training other healthcare providers, educating the community, facilitating community participation, guiding local community leaders, and assisting public health authorities.[1]

Countries around the world had varying levels of endemic plans after the Severe Acute Respiratory Coronavirus (SARS-CoV) epidemic, and the importance given to primary healthcare services also varied across countries. For example, the United States (US) had an up-to-date pandemic plan, but it included no defined role for primary care.[2] The Netherlands, with universal healthcare coverage and an updated pandemic plan, reorganised its primary care system to adapt to the SARS pandemic, whereas in the United

WHAT GAP THIS FILLS

What is already known: Primary care is essential to support a strong response against the COVID-19 pandemic. Family health centres in Turkey have endured a variety of difficulties ranging from adapting to the 'new normal' to shortages of equipment and inadequate work environment, on top of the risk of infection.

What this study adds: The physicians in our study mainly highlighted their exhaustion and concerns during the first year of the COVID-19 pandemic. They emphasised that although routine procedures were continued, they were faced with additional responsibilities that had a significant negative impact on them in occupational and psychological terms.

Kingdom (UK), primary care was transformed quickly despite their out-of-date pandemic plan with no identified role for primary care.[2] Turkey's pandemic plan was created after the 2005 avian influenza outbreak; however, efforts to improve the general health system, and especially the primary health system, date back to 2002 when community outreach was widely expanded.[3] The Early Warning and Response System was established in 2007 for the surveillance of communicable diseases, and regular updates were made to Turkey's pandemic plans.[3]

In Turkey, primary care physicians were involved actively in the management of the COVID-19 pandemic from the beginning. They had multiple responsibilities. First, they continued their daily practices such as clinic consultations and protective and preventive services.[4] In addition, because family physicians needed to differentiate possible COVID-19 cases among patients at family health centres, they triaged patients and suspected cases were transferred to hospitals for treatment.[5] Family physicians also started to vaccinate people at their clinics after vaccine distribution. They were responsible for the follow up of confirmed or possible positive cases, patients discharged from hospital, and affected people coming from abroad.[5] Family physicians were also in charge of completing follow-up forms after daily calls to isolated patients to check whether any had developed symptoms.[6]

According to a survey conducted by the Turkish Medical Association (TTB), by January 2021, one in seven family physicians had been infected and 12 family physicians had died due to COVID-19.[7] According to TTB, the physical conditions of family health centres were insufficient and their space was inadequate,[8] which may be important causes of these healthcare personnel infections. By December 2020, in 68% of centres, at least one healthcare provider had been infected by COVID-19.[9] By April 2021, this figure had risen to 76%.[8] Although 92% of all family physicians were vaccinated, their COVID-19 infection rate rose from 12/10 000 to 45/10 000 from March to April.[10] Furthermore, they had problems with personal protective equipment supplies. TTB found that most family physicians were not satisfied with the supply of equipment (71%) or disinfectants (75%) provided by the Ministry of Health.[11] This situation continued through to February 2021.[8] A timeline tracking measures relating to COVID-19 management in Turkey is shown in Fig. 1.

The COVID-19 pandemic not only disrupted daily consultations, but also hindered vital preventive services, especially screening. A survey conducted by the Family Medicine Department of TTB found that 88% of family physicians reported that cancer screening had decreased when compared to previous years.[9] The same study revealed that early detection of at least 3000 colon cancer cases was hindered.[9] Routine immunisations were not, however, affected by the pandemic.[12]

Increase in the workload of primary care physicians during the COVID-19 pandemic has also led to high levels of stress and anxiety.[13] In previous research, most health workers stated that the psychological distress that resulted from the COVID-19 pandemic negatively affected their relationships with their families.[14]

In this study, we focus on the effects of the COVID-19 pandemic on family physicians in both mental and occupational health terms. We focused on family physicians in Istanbul because of its representativeness of Turkey and the high COVID-19 case numbers there.

Methods

Setting, participants and study design

We invited 12 primary care physicians working in primary health centres in Istanbul to participate in semi-structured interviews between January and May 2021. Purposive sampling was used to balance family physicians' characteristics such as gender, age, and location of family health centres. Three participants were identified by snowball sampling.

Data collection

Study interviews were conducted individually on the online platform, Zoom Video Communications, Inc. The online interviews facilitated reaching doctors in pandemic conditions and enabled recording of conversations. Participants were asked 26 open-ended questions (Supplementary File S1). Researchers and participants were not acquainted before the study.

The interviews took approximately 70 min. Five researchers used an interview guide to ask primary care physicians their views about their social situation, their own health practice and mental health status during pandemic. The two initial interviews were conducted as pilot interviews. As the flow of questions was appropriate, the data from the pilot interviews were included in the results. Data collection continued until data saturation was achieved.

Fig. 1. Measures put in place in the first year of COVID-19 pandemic in Turkey.

Qualitative analysis

To analyse data, we used the qualitative data analysis software, MAXQDA, Version 2018.1.1 (Verbi GmbH). Phenomenological analysis was performed, in which we reviewed each transcript line-by-line and applied codes to describe experiences of family physicians. We reviewed the applied codes and thematic categories, and adjustments were made.

Ethics statement

Participants provided verbal informed consent. Participants' consent and all the interviews were audio recorded and transcribed verbatim for analysis. The data were encoded numerically to ensure confidentiality and anonymity. Primary care physicians were not compensated for their participation. This research was approved by the Acibadem University Medical Research Ethics Commission on 24 February 2021 (Decree No. ATADEK-2021/04).

Consent to participate

The informed consent of each participant was received during the research.

Results

Twelve primary care physicians participated in the study; eight general practitioners and four family physicians who are specialists in family medicine. Although both are called

'family physicians' in Turkey, their remuneration schemes differ. Six (50%) were women and five (41%) were aged ≥40 years. Of these 12 primary care doctors, seven (58%) work in the Anatolian side of Istanbul. Nine (75%) were married and eight (66%) had at least one child. The number of family health units (comprising one family physician and one staff member) in each family health centre was 2 to 10; most being five units.

None of the study family physicians has been infected with COVID-19. They were able to test themselves for COVID-19 only when they had case contacts or symptoms. Some physicians had never been tested whereas others had been tested up to six times. The interviewed physicians stated that approximately 15% of all their patients were diagnosed with COVID-19. Most believed that physicians contracted the infection from patients whereas others thought they caught it from each other during breaks. They even started to contract it from people in their homes when the risk increased substantially.

Change in workload

The primary care physicians in the study stated that the number of patients who consult at family health centres had decreased as a result of the curfews and the fear of getting COVID-19, especially at the beginning of the pandemic. They also observed very few influenza cases because everyone was being careful about mask wearing and physical distancing. The number of patient visits decreased when the Ministry of Health extended the existing care of patients with chronic diseases so they no longer needed to visit the centres for repeats of long-term prescription drugs. This was thought to be an important way of preventing the spread of infections. Despite the number of patient visits decreasing, family physicians stated that many people still preferred to go to the centres instead of hospitals, which also led to some increased activity in the health centres.

The workload of primary care physicians became much heavier during the COVID-19 pandemic. They were not included in decisions about initiating contact tracing, but had the additional responsibility of contact tracing follow up, which was exhausting and time-consuming. They were also responsible for calling polymerase chain reaction (PCR) test-positive COVID-19 patients who were monitored at home, as well as patients with suspected positive PCR tests and case contacts. These phone calls, which took approximately 90 min per day with approximately 2 min spent on each call, amounted to approximately 90 h each month. Although 3 of the 12 participants were no longer making follow-up calls, most were continuing to make them. There was agreement that such calls have no benefit for either patients or family physicians. Family physicians were not remunerated for this work and some were confronted with verbal abuse during some of these calls.

> It is not examining the patients that exhausts us, but rather the challenges of trying to communicate with patients that does. (Female, aged 32)

Family physician participants observed very little change regarding the immunisation of newborns. They stated that 'with the pandemic, many families did not want to bring their babies for vaccination. … but if babies are not vaccinated, the prevalence of measles, rubella, mumps, and hepatitis would increase in a few years, so we were able to somehow convince the families. We vaccinated their newborns by having them come to Family Health Centers (FHCs) via special appointments but this also led to an increase in our workload' (Male, aged 41).

The family physicians also stated that many patients postponed participating in cancer screening programmes. Some said cancer screening decreased, whereas others said they could not do it at all. They also stated that 'We could not do screens to a large extent, because we are neither given enough material for this, nor can we provide sufficient hygiene or sufficient isolation for screening' (Male, aged 41).

Government support

Family physicians participating in the study recognised the critical nature of their work: 'We are the most important cogs of the wheel. If we break, if we don't work, this wheel will not spin' (Male, aged 41).

Most participants reported that the physical conditions of their health centres were not sufficient to provide health services safely during the pandemic. The main problem was constricted space, about which one physician commented: 'how can I make people wait in a health centre of 10 square meters? It is like a 'COVID spreader party' (Female, aged 32). Several physicians added that ventilation was a problem whereas others felt 'lucky' that the conditions of their health centres were better than that of others.

The Ministry of Health was thought to act 'slowly' in terms of personal protective equipment (PPE) supply for primary health care. Although some family physicians were convinced of the quality and supply of PPE provided by the Ministry of Health, most participants purchased PPE with their own money as they thought that PPE provided by the Ministry of Health was lacking in terms of hygiene, timely supply and quality.

> They [The Ministry of Health] send us flimsy masks. Receiving them is far worse than not receiving anything at all. (Male, aged 53)

> We are still receiving equipment of poor quality. It is like we are living in a horror movie! We tell them that we are dying, but they continue to send these poor-quality masks. It would be better if they did not come. (Male, aged 46)

Most of the physicians said that they took additional measures like washing clothes and taking a shower immediately after coming home from work. They also ate their meals separately inside health centres and avoided contacting patients directly whenever possible, so that they could continue to provide patient care.

> When a fireman sees a fire, he cannot just turn his back and leave. His duty is to spray water and extinguish the fire. We work like firemen and our water in this struggle is vaccines. (Male, aged 46)

COVID-19 vaccination

Many of the family physicians were not invited to volunteer for the vaccination research and also felt there was insufficient information about the studied vaccines. Several physicians stated that they volunteered, but that their turn did not come, whereas many added that they got their vaccines as soon as they were available. People were immunised against COVID-19 using an appointment system in the centres and vaccines were supplied daily. Study participants' thoughts on the matter diverged. Several physicians said that vaccine supply was inadequate or they had problems with the software program used for the vaccinations. They thought that the vaccination process was too slow for reaching a herd-immunity threshold. Others noted that they have had no problem with supplies.

Family physicians' perception of the Ministry of Health

> We, family physicians, are like stepchildren in the eyes of the Ministry. (Female, aged 39)

Many family physicians stressed that they were not officially and explicitly informed by the Ministry of Health about their duties during the COVID-19 pandemic. They followed the news from various sources (internet, TV, etc.) and found the right path over time. Many family physicians had communication problems with district health directorates, and they were not informed about what was happening in their neighbourhood or district. They could not access COVID-19 tests routinely and several physicians felt that it was unwise to perform the vaccinations in Family Health Centres. One physician suggested establishing vaccine centres to perform immunisations, whereas others thought that the capacity of primary care was used poorly. In addition, they felt as if they were left out of the efforts to deal with COVID-19. A family physician stated:

> At the beginning of the pandemic, there was no epidemiologist within the Scientific Board. There was no family physician either. They started with a utopic, hollow legal planning, which sounded disconnected from the field. (Female, aged 49)

Family physicians' mental health

Family physicians were on the frontline during the COVID-19 pandemic, which involved certain risks. Physicians had serious concerns for themselves and their families due to the risk of transmission. Inadequate knowledge about the course, prognosis, and treatment of the disease at the beginning of the COVID-19 pandemic led both primary care physicians and their patients to experience anxiety and fear. This pressure on their mental health hindered the performance of physicians. Their fear subsided as information about the disease improved. Physicians who lived with their families were more anxious than those who lived alone. This fear led them to take additional measures both in their workplace and home. Their main precaution was to wear proper masks and ventilate their office. Most study participants thought that their workplace, colleagues and patients were the main risk factors for transmission whereas some thought that family and public transportation were additional major risks.

A small group of the physicians had either a colleague or an acquaintance lost to COVID-19. Hearing about such deaths was also a significant source of anxiety and fear; doctors who lost acquaintances were more anxious than those who did not. Moreover, restrictions on vacations, resignation, and retirement also negatively affected physicians' mental health. Most study participants who said they were not affected had taken a break from work in the previous months.

Communication with patients, obscurity of the disease, and inability to change their circumstances were the main factors that exhausted participants mentally, and they found explaining risk factors to patients and trying to prevent their risky behaviour to be challenging. Spending long hours on computers and telephones limited their ability to exercise physically, with consequent negative impacts on their mental health. Separation from their families imposed a further burden. Constant tiredness and mental exhaustion led some of the physicians to recognise their need for mental support, although most did not access mental support, mainly because of a lack of time. However, nearly half of the physicians interviewed have used psychiatric medication previously.

Participants' overall rating of their mental health status was 6–7 out of 10, but most mentioned that their scores fluctuated during the COVID-19 pandemic. Our participants relaxed by watching TV, going for walks, cycling, painting, listening to music, playing instruments, doing jigsaw puzzles, and some were able to take a short vacation just before travel restrictions were implemented.

According to study physicians, patients also felt pessimistic, especially the elderly and children who were affected

the most due to harsher restrictions imposed on them. Elderly people felt lonelier and less healthy than middle-aged people as a result of the curfews. Children were 'more bored' than other age groups. Many patients were anxious and some even considered suicide due to the 'COVID lifestyle'. Despite the workload and the psychological burden, none of the study physicians regretted being a doctor. Some said that they are very happy with their profession at this time, but that they wish they could help patients more.

Discussion

This study revealed that even though primary care physicians were burdened with unprecedented increased workload during the COVID-19 pandemic, they attributed their fatigue to uncertainty, the negative attitudes of some patients, and the uninformative management of the COVID-19 pandemic. This study adds to existing studies examining perspectives of primary care physicians about the aspects and effects of the COVID-19 pandemic on their personal and occupational experiences, reporting Turkish family physicians' situation in terms of their working conditions, problems they had during vaccination, and their routine activities.

The COVID-19 pandemic has exacerbated the vulnerability of the Family Health Centres.[15] There were two main problems regarding vaccination practices: according to some physicians, the supply of vaccines was not adequate, whereas others thought that the Family Health Centres were not built for mass vaccination. This is consistent with the literature, which mentions the lack of staff in primary care centres to carry out mass vaccinations against COVID-19,[15] although none of our informants identified this as a problem.

Regarding PPE, family physicians in this study experienced problems due to low quality products provided by the Ministry of Health and poor access to PPE from the market due to supply disruptions. Primary healthcare workers in other countries also reported insufficient supply of PPE, especially in the first months of the COVID-19 pandemic. Community health centres in the US, which have been mostly serving under-resourced populations, were one of the focal points of struggle.[16] Primary healthcare workers in Brazil were not able to continue with their normal activities as face-to-face interactions were not possible.[17] A similar situation was reported in Ontario, Canada, where the primary care system is organised in a decentralised manner.[18] Acknowledgment of the importance of primary care followed by adequate investment in the capacity of the care centres remains an important issue in pandemic management.[18]

Other study has found that healthcare workers reporting they have access to adequate supplies of PPE when necessary had lower scores of depression, anxiety, and stress.[19] This finding emphasises the power of adequate PPE in increasing the resilience of the healthcare workers by contributing to their psychological wellbeing.

In our study, large decreases in routine cancer screening rates were reported, confirming existing literature that found that cancer screening rates fell by 88%.[8] Participants worried that people are avoiding screening during the COVID-19 pandemic and that this will lead to an increase in cancer in the future. Routine procedures mostly continued as normal in the health centres we evaluated, but another study conducted in Turkey has found that routine procedures ranging from vaccinations to chronic diseases follow up, including cancer screening, were disrupted.[20] These findings might be an important indicator of differing capacity of primary care centres in different regions of the country. It is also important to investigate the situation in different parts of the world because national responses have affected the course of the COVID-19 pandemic. The limited research from sub-Saharan Africa indicates that routine procedures have decreased significantly in volume.[21]

In this study, participants also mentioned increased anxiety levels. They have been concerned about getting infected with COVID-19 and spreading it to their family and close relatives. The effects of the pandemic on mental health vary among healthcare workers depending on their professional role and working environment, as shown in the current study and the literature.[22] Fear of carrying infection to their families is stronger than the fear of self-infection among healthcare workers.[20] Isolation from family and loved ones can lead to less psychosocial support which, in turn, can affect the physical and psychological resilience of healthcare workers.[20] Although healthcare workers report suffering high levels of anxiety, depression, and insomnia, only 1 in 10 physicians receive mental health support,[23] further negatively influencing their psychosocial wellbeing.

This study has several limitations. We interviewed primary care physicians from only 10 of the 39 districts of Istanbul. We collected less data from the European side than the Anatolian side. In addition, face-to-face interviews may have allowed better understanding of the perspectives of our participants as well as the physical conditions at Family Health Centres.

Conclusion

Overall, this study revealed the experiences of family physicians, their reflections about working under COVID-19 conditions, the problems they encounter, and how they are affected psychologically. Physicians highlighted their exhaustion and concern in the first year of the COVID-19 pandemic. A robust primary care sector with elevated safety and capacity will remain a critical need even after the COVID-19 pandemic. The physicians in our study continued their routine practice, but additional job tasks had a significant negative impact in occupational and psychological terms.

Supplementary material

Supplementary material is available online.

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