

Factors affecting physicians' dual practice in Iran

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Research

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Abstract

Background

One of the most important challenges of the healthcare system in recent years have been physicians' dual practice in the public and private sectors. this study aims to investigate the factors affecting the physicians' dual practice in Iran.

Methods

In this qualitative study 41 stakeholders were selected by purposeful sampling. Data were collected using in-depth semi-structured interviews. The Framework analysis was used to analyze the data.

Results

Factors affecting the physicians' dual practice in Iran were classified into three main themes: "individual motivational factors", "structural factors" and "historical and cultural factors".

Conclusions

Getting a faculty position, the demand for private services and job security, and the continuous and guaranteed income are the most important motivations for physicians to work in the public sector. Greater financial and monetary incentives, more job independence, as well as private offices as a work identity and prestige were the most important motivations for working in the private sector.

Background

The dual practice is defined as working in more than one center (private or public) at the same time [1]. Dual practice in the health sector (especially in low- and middle-income countries) referred to the practice of health workers in different sectors. This phenomenon can refer to those employed in the public or private sector (health or non-health related) [2]. In many countries, the dual practice of health workers is a common phenomenon, and the issue of dual practice is prevalent in most health care systems around the world. This affect the fairness, efficiency, and quality of service delivery. The most important and central factors in analyzing this phenomenon are the costs and benefits, as well as policies to reduce the negative impacts associated with it [3, 4].

Available information indicates the prevalence of physicians' dual practice in many developed and developing countries. In Europe, for example, doctors working in the public sector also work in the private sector. The most prominent examples are Austria, where 100% of public sector professionals work in the private sector and Ireland, where more than 90% of practitioners hired in public sector work in the private

sector. The United Kingdom noted that 60% of public-sector physicians also work in the private sector [5]. Outside Europe, reports from Australia and New Zealand show that respectively 79% and 43% of public-sector physicians work in the private sector as well. In developing countries, the lower public sector *wages* have reduced the number of people working in this sector, and dual practice in the private sector has become a common practice. For example, African countries such as Egypt, Mozambique, Zambia and Asian countries such as Cambodia, India, Indonesia, Thailand, Vietnam, South American, and Eastern European countries have a high prevalence of this phenomenon [2, 5, 6].

In many middle- and low-income countries, lower public sector wages along with the overwhelming growth of the private sector are among the factors influencing physicians' perceptions of the private sector [7]. Dual practice not only is considered as a livelihood solution (earning extra money to meet daily needs) but also it is raised because of its non-financial incentives such as social status, strategic influence, control over work and career opportunities [8]. The scope of employment varies from country to country, and does not appear to be affected by the existence or absence of corresponding legal mechanisms [9]. For example, in Indonesia with co-operative legal employment mechanisms, reports indicate that the prevalence rate of this practice is more than 80%. On the other hand, in some countries such as Egypt and Bangladesh where the dual practice is allowed, respectively 89% and 80% of physicians work in more than one job [10].

In Iran, some experts believe that one of the most important challenges of the healthcare system in recent years is physicians' dual practice in the public and private sectors, resulting in many complications. Without solving this problem, it is not possible to resolve other problems in the healthcare system. For this reason, the full-time physicians' law was included in the *5th Economic, Social and Cultural Development Plan* as one of the top priorities of the Ministry of Health and Medical Education. *hospital charter management* (Box 1). Moreover, in the Healthcare Reform System Map that is another upstream document in the health sector, the emphasis is placed more on the importance of paying attention to this point (Box 2) with full-time human resources being included in two of its goals. It seems that proper implementation of the full-time physician's plan faces major challenges that, if not adequately addressed, may result in the failure of health service delivery system [11].

Considering the great importance of this issue in health system's macro policies and the possible negative consequences of *not recognizing the* phenomenon and the views of stakeholders, this study aims to investigate the factors affecting the physicians' dual practice in Iran.

Methods

This study used a qualitative content analysis approach to identify the factors affecting the physicians' dual practice in Iran. The study population consists of the members of parliament (MPs), former health ministers, heads of medical *schools*, hospital managers/heads, Ministry of Health officials, insurance and social security organization officials, general and specialist physicians, university professors and relevant experts. Inclusion criteria were as following.

To select the interviewees, different stakeholders were identified, and then, from each class of stakeholders, individuals were purposefully selected according to their aristocracy on the study subject. According to qualitative studies, the maximum number of interviewees was considered. Semi-structured interviews were conducted with the main stakeholders of physicians' dual practice in the public and private sectors regarding the factors affecting the practice. Interviews and data collection were conducted over a 16-month period from late September 2013 to late December 2013. The interview guide was used to coherence the interviews. The interview guide was designed according to the scope of the study using the existing texts on the opinions of professors and experts. To ensure the validity of the data, five trial interviews were conducted, and the way of interviewing and collecting data was evaluated by the professors. The original interviews took place after providing comments and necessary amendments by professors. Finally, 41 interviews were conducted, 34 of which were in-person and seven through telephone (because the interviewee was very busy and unable to interview in-person). All of these interviews were immediately recorded after each interview with the permission of the interviewees. In addition, notes were taken during the interview. The interviewer did his/her best to maintain impartiality during the interviews. The duration of all interviews varied from 30 to 80 minutes.

The Framework analysis was used to analyze the data. Preparing reports from interview data took place shortly after completion, by repeated listening to audio files, reading notes during the interview, and recording and writing new comments that the interviews come up with. Then, the key issues, concepts, and themes of the interviews were identified, listed, and coded according to the relevant theme. Finally, based on the codes assigned to them, the relevant themes were extracted from the interviews and then arranged in the table.

Results

The study was conducted with a population composed of 41 MPs, former Health Ministers, Heads of Medical Sciences schools, Hospital Managers and Heads, Ministry of Health officials, Insurance and Social Security Organization officials, general practitioners, specialists, university professors, and experts. All interviewees were men. The highest work experience was 11-20 years (41.6%) with the most abundant education for Ph.D. (48.8%). In terms of individual positions, the highest positions were for academics (26.8%), and the lowest positions for heads of medical schools (5%).

Upon data analyzed, factors affecting the physicians' dual practice in Iran were classified into three main themes: "individual motivational factors", "structural factors," and "historical and cultural factors." individual motivational factors consist of three categories. One of the most important factors affecting the tendency to work in the public and private sectors at the same time was the desire of most people to get the most benefits from different sectors.

Individual motivational factors affecting physicians' dual practice consist of three categories:

- 1) Individual motivational factors

1-1) Motivation for work in the public sector

1-1-1) Gaining Faculty Position

"Those who are faculty members in public sector use the public sector as a credit and the private sector as a way to improve their income. Being a faculty member at public universities indicates that the person is of high quality, high in knowledge, and trusted by the scientific community. If such a person works in the private sector, his position in the public sector contributes to his progress in the private sector and consequently gaining a very high income. The most important thing that encourages physicians to work in the public sector at the same time is that the public sector can help them be more successful in the private sector. This means that the public sector is not only an obstacle to their progress in the private sector, but it also helps them" (P8).

"In addition, there are social incentives. For example, one of the social motives is that a university professor can improve the social aspect of her/his character and can get the deserved respect from people" (P11).

1-1-2) Creating Demand for Private Sector Services

"The reason why both sectors are selected is that the public sector is a launching pad for physicians. They get their patients from there. They (patients) come from the public sector, not the private sector. The doctor comes from the public sector to tell the patient that if you stay here, you will lose your foot, you will be blind, you will die, but if you go to the private sector, you will survive. That is why all doctors prefer to keep the public sector as their gateway and patient entrance gateway" (P10).

1-1-3) Interest in education and research

"A large part of the scientific community in the country includes motivated individuals who wish to contribute to the country's scientific progress, increase the science production, and to play an effective role in educating the younger generation. They are intrinsically interested in education and research" (P8).

1-1-4) Job security and earning a secure income

Working in the private sector creates a long-term job security margin, and in any case, makes it easier to *get guaranteed income* or so-called hand-to-mouth income" (P15).

1-1-5) Using the other benefits of working in the public sector

"In addition to being motivated to work in the academic environment, working with colleagues, the other motivation may be that there are challenges and tensions, for example, in dealing with patients, which can be better managed. For example, if the patient complains about a procedure, the doctor might be better able to handle the problem if he has a position in the government system and therefore prefers to have a role in the public sector" (P34).

1-2) Motivation for work in the private sector

1-2-1) Financial incentives and earning more

"The most important motivation is material incentives. We have no income threshold in our country, so, everyone wants to earn as much money as possible without any predefined threshold for internal specialists, surgeons, etc. There is no limit to monetization. So, she/he counts on it considering her/his potential, and as much energy as she/he can put into it. Let she/he get as much revenue as possible" (P7).

"Because they want money, and the fixed salary does not satisfy their needs" (P21).

1-2-2) Insufficient capacity in the public sector

"Suppose Dr. X, a professor who also works as a subspecialty in my *specialized center* in this country, has to visit 10 patients in his clinic. However, when it hits 140 patients and his work ends at 4 pm, do I have to keep he/she until 9 pm? I have no clinic, no space, no staff, and no money to give her/him."(P1)

"The surgeon wants to hospitalize her patient, but the state hospital capacity is full. If she/he does not work in a private hospital, where does she want to hospitalize her/his patient?" (P30)

1-2-3) Increasing job independence and reducing restrictions

"There are no restricting public sector laws in the private sector. You want to apply the very strict and restrictive employment laws and regulations to a physician who is a member of the elite community. When do you come? When are you going? You don't even have to come half an hour late. You really cannot force a doctor to visit a large number of patients from the time he/she gets to the hospital until he/she leaves the hospital, and overall, he/she works less than one hour. Finally, some of this character should be respected. These restrictions are less in the private sector" (P22).

1-2-4) Timely Payment

"... Unlike the public sector, the private sector tries to pay wages on time to keep doctors, especially invited physicians. Well, this could be a motivating factor for doctors to be interested in this sector" (P21).

1-2-5) Using the other benefits of working in the private sector

Some respondents pointed other issues that are important in the tendency of physicians to the private sector. These include the desire to acquire private hospital stocks, attractive working environments, and dealing with the upper-middle classes of society.

1-3) Motivation to work in the office

1-3-1) Office as a physician's identity and prestige

"... Besides these, some might say that working in the private sector such as her/his own office is an identity and if we do not have our own office, then the path we started is incomplete. That is, at first, we step into the clinical practice aimed at having an independent office, and our work would be incomplete if we could not achieve that goal ..." (P7).

The results of this study showed that structural factors are most important ones in the tendency of physicians to dual practice in the public and private sectors.

1) Structural factors

1-1) Inappropriate service tariffs in public and private sectors

"The question posed by university professors in the public sector is why her wage differs from that of a private practitioner, for example, she/he gets 100 Rial for an operation while her/his counterpart in the private sector gets 1000 Rial?" (P1).

"Dual Practice occurs where there is a class gap. The gap between sectors is particularly high in terms of revenue. This is where dual practice makes sense ..." (P21).

1-2) Problems governing the Public Sector

"See dual practice means a major flaw in the public sector. This is a sign indicating the poor performance of the government. The one says to himself that they are getting a person *injured* in a road *traffic accident*, I do her surgery, I stop her bleeding, I am in the operating room for three hours, and finally, I get a merit pay of 1,200,000 Rial six months later. He/she doesn't satisfy, but when she/he steps into the private sector, she finds there a better world, it feels better, it makes him/her *less nervous* ..." (P15).

"When we give the wage of someone who's doing well in the government system six or seven months later in a quarter yet abject him/his, and then his/her student earns his/her mater's six-month income just in one day. What do you expect? " (P20).

1-3) Integrated Ministry of Health and *medical schools*

"In my opinion, one of the consequences of the integrated Ministry of Health and *medical schools* and introducing a faculty member whose main work is not providing health services, is dual practice. They temporarily entered the Ministry of Health, neither of them had an idea of entering the sector, and then they returned to their original job, which was not again the university but the private sector. So, you have loosened the foundation of the country's health system management. One consequence of this integration was the weakened foundation of health system management. Well, here are the consequences" (P33).

1-4) Private sector development

"... You see, until a few years ago that private hospitals had not grown like *mushrooms* in big cities, the dual practice was not so popular among public sector doctors, and many of these pests didn't exist (...). Well, that is what the private sector is hoping for. That means all the hope of the private sector is for patients to be sent from the public sector to the private sector" (P5).

1-5) Income inequality and the absence of proper tax mechanism

"You see, in the developed countries such as the US, if a doctor wants to do a lot of work, they are allowed to do, but at a rate that goes up, the tax he has to pay goes up a proportion to his increased income and eventually he gets to point where he says to himself that I am just working for the government, at the expense of losing the peace in my life, and staying away from studying and training, to gather wealth for the government. So, she/he does not do this and gets convinced to some extent to work less. The satisfaction limit is not set in our country. Where is your saturation point? So, it is a race that doesn't have an end line and everybody wants to get ahead in this race. Well, this is an issue that doesn't justify working only in the public sector at all" (P2).

Third main factor affecting the physicians' dual practice in Iran corresponds to historical and cultural factors and consists of three classes.

1) Historical and cultural factors

1-1) The importance of the office for the physician from the public's viewpoint

"... The culture of our country, the view that people have on are all influential. For example, I am a doctor who does not have an office, I do not do clinical work, but for example, relatives who do not know what we are doing and are not very familiar with health policy, when we say we do not have an office, they say hopefully you will set up an office (laughing). That is, they look at it as a deficiency. Well, such a look imposes much pressure on someone who is doing a normal task that he may not even enjoy it and doesn't get high wages for doing that" (P3).

1-2) The desire of the majority of society to have *alternative revenue sources*

"... There is something in our culture that is being reinforced, and doctors benefit from it like everybody, which is rooted in our economic system and is not just about the health sector. Now you see, many people who work at several jobs are out of the health sector. In our economic system, people have learned that they should not put all their eggs in one basket. Because if all of their eggs are in one basket and the basket is broken their wealth will be lost. That is to say, someone who is already an employee is looking for a way to have another revenue resource. Now, if his/her finance is low he works as a taxi driver, or invests somewhere like a stock exchange to have some extra income because he knows it will not to subsistence with *employee wages*. The doctor thinks the same ... "(P9).

1-3) The historical record of physician' dual practice in the country

"Doctors have been active in two or more medical centers in the country from the past, which has a very long history and we cannot prevent this multifaceted context just with a very simple law" (P14).

Discussion

This study aimed at investigating the factors affecting the physicians' dual practice in Iran. Based on the findings, the most important factors affecting the physicians' dual practice in the country are personal, structural, historical, and cultural motivational factors.

Individual motivational factors refer to the willingness of individuals to enjoy the benefits of working in different sectors. In this section, our findings are justified by the job complementarity hypothesis and portfolio hypothesis. According to the job complementarity hypothesis, one of the main reasons for people's willingness to simultaneously employment is to take advantage of the benefits induced by job complementarity. For example, while one job is considered to be the main source of income, another job (s) increases the prestige, professional relations, and other benefits. On the other hand, according to the portfolio hypothesis, the main reason for people's tendency to work in more than one job is the distribution of risks associated with money earned from each job. That means, while one job generates low but permanent and secure income for a person, the second job generates high yet variable income [12]. In different studies, financial incentives have been cited as the main reasons for physicians' dual practice [6, 8, 10, 13].

Our findings show that although the experts believe that primary goal of practitioners' dual practice is to make more money, other nonfinancial incentives such as greater job independence, insufficient public sector capacity, timely payment, and the benefits of working in the private sector also affect their decision to practice in the private sector. These findings align with the findings of Ashmore, Humphrey, Jampa, Berman, Frinio, and Aberra [2, 8, 10, 14–16]. On the other hand, our findings indicate that despite low wages and poor working conditions in the public sector, factors such as acquiring a faculty status, the demand for private services, the interest in education and research, and job and income security, financial independence, management efficiency, and other benefits make physicians reluctant to leave this sector. These findings are in line with the findings of Frinio, Chawella, Ashmore, Jioi, Aberra, Lindello, Jampa [15–21].

Structural factors refer to a set of factors related to the structure and system of service delivery, which play an important role in creating opportunities for dual practice as well as driving physicians towards the private sector. According to experts, the most important factors in this regard are inappropriate tariffs in public and private sectors, problems in governing the public sector, integration of Ministry of Health and *medical schools*, expanded private sector, and the absence of revenue transparency and proper tax mechanism in the private sector.

Unfortunately, in recent years, inappropriate and unrealistic tariffs on health services in the public and private sectors in Iran have led to a profound income gap between physicians practicing in these sectors so that according to the experts, the difference can be 10 times, and even several hundred times in some

treatment cases. This means that the physician wages for doing the same thing in the private sector are several times higher than that of the public sector, while the difference between the tariff in the public and private sector should only be considered in the technical part, and be constant in the professional part related to the physician. As the results of other studies support our findings, this large discrepancy causes public-sector physicians to become highly motivated to practice in the private sector (even though illegally) [2, 3, 6, 10, 22–27].

The income gap between specialists in the public and private sectors is the main reason for encouraging physicians to leave the public sector or dual practice in the public and private sectors. Other factors driving this trend and several jobs may be factors such as the low likelihood of career advancement in the public sector, higher independence in the private sector, and adequate infrastructure in public facilities [26]. According to the literature on the dual practice, one of the factors contributing to this phenomenon is the problems in the public sector such as inadequate and late service compensation, inadequate space and facilities, rigid and inflexible hierarchical system, insufficient attention to human dignity, and the absence of appropriate motivators [10, 13] which is consistent with our results.

According to the experts, the integrated Ministry of Health and *medical schools* and the transferring of a significant portion of health affairs to faculty members were also other factors intensifying dual practice. This is due to the higher income expectations of the professors (due to their scientific status) and their greater opportunity to practice in the private sector (due to their prestige and the nature of their work). These people with high incomes from private practicing along with other non-faculty physicians in the public sector can also increase their willingness and motivation to work in the private sector at the same time. On the other hand, as the Ministry of Health has expanded after integrating with medical school, it has become even harder to focus on improving the status of health centers and monitoring the workers, which is one of the contributing factors to the physicians' dual practice. As noted earlier, one of the unintended side effects of this integration was the expansion of the phenomenon. From Freino's point of view, the dual practice of health workers is sometimes one of the unintended consequences of health care reform [2].

Concerning the impact of the expansion of the private sector on the creation and intensification of dual practice among physicians, it should be noted that the need for manpower has increased by ever-expanding of this sector, and, on the other hand, private centers are seeking to attract public-sector prominent doctors and well-known professors by intensifying competition for client (patient) acquisition. Therefore, the managers of these centers try to attract these doctors (and consequently patients) by offering them high-quality services such as high income and special benefits. Some studies, such as ours, have noted the effect of the private sector's expansion on dual practice growth [10, 28, 29].

Finally, the absence of transparency in revenues gained from private activities and the absence of a proper tax mechanism were structural factors that motivate the dual practice of public doctors in the private sector. According to experts, these conditions have led people to have no threshold for their

earning and start an endless race for making more money. In this case, our findings are also consistent with those of some existing studies [23, 30, 31].

According to the experts, historical and cultural factors are the third major issue affecting the physicians' dual practice in Iran. These factors refer to things that are rooted in the history, culture, and general conditions of the country and have been internalized in a large part of society. The most important issues in this area were the importance of having a personal office for the physician from the public viewpoint, the desire of the majority of the population to have alternative sources of income, and the historical background of physicians' dual practice. In the cultural context of the society, a doctor's office has a special position and the public know the doctor with his office to date. In other words, not having an office is considered a deficiency by a significant portion of the community, and may even be attributed to the physician's professional inability to practice and the poor quality of his work. Such an attitude has also greatly influenced the medical community and their behavior, so that in many cases physicians encourage their colleagues to set up offices (even though for two to three hours practice a week), as they believe this will preserve their professional prestige in the community. The latter, which points to the tendency of the majority of society to have alternative sources of income can be attributed to the country's economic conditions and high inflation in recent decades. The high and growing costs of living (especially in large cities), coupled with low wages and inadequate government staff, have led people to pursue secondary and tertiary employment. On the other hand, the inherent desire of most people to diversify their income sources is another driver of such activities.

Finally, the history of physicians' dual practice in our country can have a role in the prevalence of this phenomenon. In the past, due to the absence of specialized staff in the health sector, despite the general rules prohibiting the dual practice in the public and private sectors, especially for those with the conflict of interest, the health sector and especially physicians, was exempt from this general rule and they were allowed to practice in private sector and their private office to meet people's health needs. From the experts' point of view, as the issue gradually became popular among physicians, the phenomenon became increasingly the norm in the medical community, and later became a right. It is worth noting that due to the substantial differences among the health sector and other sectors, and the specific characteristics of relevant professions and corresponding activities in this sector, dual practice is more common among health workers than in other sectors. Discussions about the historical background of the physicians' dual practice in Iran have led physicians to prefer dual practice. A study in Spain found that five out of six office jobs in the health sector had the highest number of simultaneous employment among all jobs in the country (32). Our findings on the impact of historical and cultural factors on physicians' dual practice are in good agreement with the results reported by Berman and Acer [10, 33].

The limitations of the study include the long period of data collection due to the restricted access to a significant number of interviewees, in particular MPs and former ministers. In this case, we tried to pursue their participation in the study with follow-up calls (in some cases up to 10 times referring to their workplace) and justifying the study goals. The reasons for prolonging the period of data collection were: 1) Non-cooperation of interviewees or delayed interviews even though we had careful planning 2) The

conservatism of some of the interviewees in answering the questions, which was solved by justifying the purpose of the study and reassuring them about the confidentiality of all participants' opinions. 3) Insufficient funding to acknowledge study participants. The low response rate of the questionnaires by the physicians and their reluctance to record their actual information and opinions were attempted to decrease by periodic follow up, detailed scheduling, explaining the purpose of the study, and assuring the physicians to keep the information confidential.

Conclusion

Physicians tend to work in both public and private sectors to benefit from both. In this regard, getting a faculty position, the demand for private services and job security, and the continuous and guaranteed income are the most important motivations for physicians to work in the public sector. Greater financial and monetary incentives, more job independence, as well as private offices as a work identity and prestige were the most important motivations for working in the private sector. The former creates a large income gap between the two sectors and increases the attractiveness of practice in the private sector, and the latter reduces employees' motivation to work in the public sector leading to the willingness to work in the private sector. Finally, the importance of having a private office to the physician, the desire of the majority of the population to have alternative sources of income due to the country's economic crisis, and the historical background of the physicians' dual practice in Iran were among the most important historical and cultural factors. These illustrate the internalization of the tendency for physicians to dual practice, and the difficulty to make changes in this area. The findings from the literature review also confirm the findings of the present study in the terms of factors affecting the physicians' dual practice.

Declarations

Ethics approval and consent to participate:

This research approved in ethics committee of Tehran University of Medical Sciences. informed consent to participate in the study be obtained from participants

Consent for publication:

Not applicable

Availability of data and materials:

The datasets generated and/or analyzed during the current study are not publicly available due [REASON WHY DATA ARE NOT PUBLIC] but are available from the corresponding author on reasonable request.

Competing interests:

The authors declare that they have no competing interests

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Authors' contributions:

Conception and design of the study: JM. Concept analysis: Fk. Writing and editing the manuscript: MV. All authors read and approved the final manuscript.

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