THE EFFECT OF DIAGNOSIS-RELATED GROUPS ON CLINICAL AUTONOMY IN TURKEY: THE PHYSICIAN'S PERSPECTIVE

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DECLARATION OF ORIGINALITY

I, Püren Aktaş, certify that

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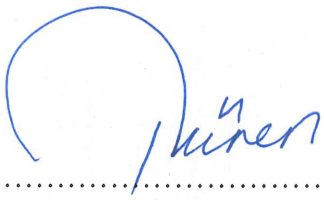

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ABSTRACT

The Effect of Diagnosis-Related Groups on Clinical Autonomy in Turkey: The Physician's Perspective

Since the 2003 Health Transformation Programme, Turkey's health care system has been subjected to significant changes in financing, provision, and regulation. The diagnosis-related groups (DRGs) is among these regulations, which was fully introduced in 2013 to control increasing health care spending and secure efficient utilization of resources through standardization of reimbursement for medical services. This thesis explores physician perceptions of the impacts of the Health Transformation Programme and more specifically of the DRGs on their clinical autonomy. The thesis relies on an exploratory qualitative study that includes 14 in-depth semi-structured interviews with physicians from different specialities working at public and private hospitals (excluding university hospitals). The findings of this research reveal that physicians perceive clinical autonomy as key to appropriately performing their profession based on scientific evidence, and they feel that the reform and the DRG model negatively affected their clinical autonomy. The thesis argues that the implementation of the diagnosis-related group transformed medical practice into an optimization problem that involves balancing incomes and expenses of the hospitals and meeting the medical needs of patients. While the thesis demonstrates that physicians still enjoy a partial autonomy in navigating the DRG model by resorting to formal and informal strategies to serve the patients, the overall impact that these strategies have may remain limited unless the problems of the DRG model are addressed systematically.

ÖZET

Tanıya Dayalı Fiyat Uygulamasının Tıbbi Özerkliğe Etkileri: Hekim Perspektifi

Türkiye'nin sağlık sistemi, 2003'te hayata geçirilen Sağlıkta Dönüşüm Programı ile birlikte sağlık hizmetlerinin finansmanı, sunumu ve regülasyonu alanlarında önemli değişiklikler geçirmiştir. Bu kapsamda tam anlamıyla 2013 yılında yürürlüğe konulan Tanıya Dayalı Fiyat Uygulaması, sağlık hizmetlerine yapılan geri ödemelerin standartlaştırılması yoluyla, artan sağlık harcamalarını kontrol altına almayı ve kaynakların verimli kullanımını sağlamayı amaçlamaktadır. Bu tez çalışması, Sağlıkta Dönüşüm Programı özelinde Tanıya Dayalı Fiyat Uygulaması'nın hekimlerin tıbbi özerkliklerine etkisi hakkında hekimlerin görüşlerini incelemektedir. Bu amaç doğrultusunda devlet hastaneleri ve özel hastanelerde (üniversite hastaneleri hariç) çalışan, farklı branşlardan 14 hekim ile yarı yapılandırılmış derinlemesine mülakatlar yapılmıştır. Araştırma sonucunda hekimler, mesleklerini bilimsel kriterlere uygun şekilde icra edebilmek için tıbbi özerkliği gerekli görmekte, sağlık reformunun ve Tanıya Dayalı Fiyat Uygulaması'nın tıbbi özerkliklerini olumsuz etkilediğini düşünmektedirler. Bunun yanında Tanıya Dayalı Fiyat Uygulaması sonucunda tıbbi pratiğin, hastanelerin gelir-gider dengesini sağlamak ve hastaların tıbbi ihtiyaçlarını karşılamak arasında bir optimizasyon sorununa dönüştürdüğü görülmüştür. Bu tez, hekimlerin Tanıya Dayalı Fiyat Uygulaması kapsamında hastalara sağlık hizmeti sunmak amacıyla geliştirdikleri formel ve enformel stratejiler sayesinde kısmi bir tıbbi özerklikten yararlanmaya devam ettiklerini gösterirken, bu stratejilerin Tanıya Dayalı Fiyat Uygulaması'nın sorunları çözülmediği sürece uzun vadede yetersiz kalacağını ortaya koymaktadır.

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"Everything was beautiful and nothing hurt."
Kurt Vonnegut

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CHAPTER 1

INTRODUCTION

"Why do you conduct research on clinical autonomy, while we have more important problems in our work as physicians?"

A physician asked me this question right after I finished the interview with him for this study. He was more concerned about the increasing violence towards physicians in Turkey. Given that the number of studies on clinical autonomy diminished in the last decade, this question was understandable. Especially with the growing impact of medical sociology, patient perspectives attract increasing attention in the literature. The process of decision-making about treatments, and the roles of physicians and patients in this process have been explored (e.g. Charles, Gafni, & Whelan, 1997; Edwards & Elwyn, 2006; Makoul & Clayman, 2006; McMullen, 2012; Wirtz, Cribb, & Barber, 2006).

As a critique of paternalistic model implementing physician's ultimate decision over patient's treatment, scholars started to put more emphasis on the importance of informed choices of patients in clinical decisions (e.g. Emanuel & Emanuel, 1992). Scholars also looked for a "middle ground" between paternalism and informed choice in the form of "shared decision-making" (e.g. Makoul & Clayman, 2006, p. 301). Charles et al. (1997) proposed four essential features of shared decision-making: (1) involves patient and physician; (2) both parties share information; (3) both parties attempt to develop a consensus on the preferred treatment; and (4) a decision is made about the treatment. However, scholars acknowledged that the reality does not always fit into this ideal, and different circumstances determine the extent of an appropriate shared decision-making process

(Charles et al., 1997; Wirtz et al., 2006), which is validated by several studies (Edwards & Elwyn, 2006; McMullen, 2012; Wirtz et al., 2006). Hence, the literature emphasized the importance of a symbiotic relationship between patients and physicians in the provision of health care services.

Since the late 1980s, health care policies in many countries have undergone significant changes targeting improvements in health care policy objectives and outcomes, as well as efficiency in financing and/or organizational structure. Countries aimed to increase individuals' access to health care services while reducing the resulting costs to public budgets (Huttin & Andral, 2000; Reibling & Wendt, 2008). With regard to the largest share of hospital spending on the overall expenditure of health care provision (World Health Organization, 2010), governments have introduced different cost-containment measures, including changes in hospital reimbursement models. Among these measures, the diagnosis-related group became widespread, with their emphasis on efficiency in the healthcare provision and on hospital budget controls (Busse et al., 2013). The diagnosis-related group is a patient classification system which categorizes patients based on diagnosis, treatment and length of stay in order to standardize expected reimbursements of hospitals (Blank & Burau, 2007). Therefore, physicians confront increasing external financial pressures on their medical practice with the intensification of cost-containment measures on health care systems.

In addition to social, economic and political challenges to the medical profession, new developments such as surgical robots that use machine learning and artificial intelligence (AI) technologies are considered as recent challenges to the medical profession as increasing automation changes the concept of work (Segal, 2018). However, research demonstrates that the replacement of the medical

professionals with AI is problematic because AI (i) does not inherit professional ethics and norms which align with public interest, and (ii) lacks legal and professional accountability mechanisms (Mittelstadt, 2019). Moreover, considering the importance of experience in medical observations and interpretations, the optimization of medical practice would have unintended consequences affecting patient and physician satisfaction in health care (Cabitza, Rasoini, & Gensini, 2017).

The literature demonstrates that the provision of good quality health care services depends partly on the motivation of health workers, especially physicians (Fritzen, 2007; Kabene, Orchard, Howard, Soriano, & Leduc, 2006; Warren, Weitz, & Kulis, 1998). For this reason, I argue that the clinical autonomy of physicians and their subjective evaluation of their clinical autonomy after these health care reforms continue to be an important research issue. Focusing on the significance of the clinical autonomy for the medical profession, I explore physician perceptions of their clinical autonomy after the 2003 health care reform in Turkey. Therefore, the main research question of this thesis is the following: How do medical doctors in Turkey perceive the impact of the Health Transformation Programme—particularly the introduction of diagnosis-related groups—on their clinical autonomy?

The concept of "autonomy" is one of the central concepts in the social sciences literature on professions. Freidson (1970), defining medicine as a text-book example of a profession in the modern society, argued that physician autonomy is characterized by the profession's control over medical work in social, economic, and organizational terms. Engel (1969), on the other hand, divided professional autonomy into two categories: (1) autonomy at the group level, and (2) autonomy at the individual level. While autonomy at the group level is defined as "the control an occupational group possesses over its decisions and activities in the community in

which it functions", autonomy at the individual level is defined as "the professional's self-control over both his decisions and his work activities within a particular work setting, or his freedom to deal with his client" (Engel, 1969, p. 31). In response to these definitions of autonomy, some scholars also argued that these definitions are abstract and do not allow any space for any comparative empirical studies (Randall & Williams, 2009; Schulz & Harrison, 1986). According to Schulz & Harrison (1986), the concept of autonomy refers to (1) social and economic work freedoms, and (2) clinical freedoms. While social and economic work freedoms consist of choice of specialty and practice location, control over earnings, control over the nature and volume of medical tasks, clinical freedoms are defined as acceptance of patients, control over diagnosis and treatment, control over evaluation of care, and control over other professionals (Schulz & Harrison, 1986).

Several scholars have examined the diminishing clinical autonomy of physicians under different social, political, and economic challenges (Harrison & Dowswell, 2002; Haug, 1972; McKinlay & Arches, 1985). With respect to the importance of the clinical autonomy in job satisfaction and the outcome of work, the diminishing clinical autonomy of physicians stands out as an important issue for the medical profession (Schulz & Schulz, 1988) and for the provision of good quality health care services (Warren et al., 1998).

The impact of the health care reform in Turkey on the working conditions of physicians has been subjected to extensive research (Agartan, 2015b, 2019; Erdem & Atalay, 2016; Ökem & Çakar, 2015). While physician perceptions of the medical professionalism have been subjected to research (Mıdık, 2012), the impact of the reform on physicians' clinical autonomy has not yet been explored. The diagnosis-related group was incorporated to Turkey's health care system along with other

policies that concern physicians such as Full Day Law[1] (2010). Since the ratification of Full Day Law, most physicians in Turkey work only at public or private hospitals; most do not have a private practice. The implementation of universal health coverage increased access to health care services and resulted in increasing public satisfaction with the health care system. However, the populist discourse of the government towards health care professionals (Agartan & Kuhlmann, 2019) has resulted in increasing violence towards physicians (Pinar et al., 2017). Within this context, physician perceptions of their profession and clinical autonomy stand out as an important research issue. There is limited research examining physician perceptions of the current health care system in Turkey (Agartan, 2019; Erdem & Atalay, 2016; Kart, 2013). Thus, this thesis aims to contribute to the literature on physician perceptions of the health care reform in Turkey by focusing on the DRG as a policy that shapes the clinical autonomy of physicians.

1.1 Research methodology

I selected two cities of Turkey, Istanbul and Balıkesir, to recruit the respondents for my study. Purposive snowball sampling was chosen since this sampling method facilitates hard-to-reach populations (Biernacki & Waldorf, 1981). Physicians in Turkey have a high workload that causes serious difficulties for researchers, who must put demands on their limited free time for interviews. In addition, physicians consider talking about policy regulations as a sensitive political issue. For these two reasons, the purposive snowball sampling method was selected as the appropriate method to reach to physicians.

[1] The Full Day Law prohibits doctors who work at public hospitals from working at private hospitals and/or private clinics for physicians.

In this thesis, fourteen semi-structured in-depth interviews were conducted. Semi-structured interviews were chosen in order to facilitate the dialogue between the researcher and the respondent, and to explore in-depth the perspectives of physicians about the impact of the introduction of diagnosis-related groups on their clinical autonomy. Equal numbers of physicians from public and private hospitals were included in the study. In Turkey, in addition to public hospitals, there are also public research and training hospitals and university hospitals. Due to the special features of the debate around university hospital reimbursement, physicians from public university hospitals were excluded from this research. The interviews were conducted in Istanbul and Balıkesir, since I have contacts with physicians in these two cities. Physicians working in one private and two public hospitals in Istanbul, and one private, three public hospitals in Balıkesir are included in this study. Physicians in clinical and surgical branches[2] were chosen so as to reflect the different experiences of medical practice specific to different types of medical speciality. The breakdown of specialities of medical doctors included in this study is as follows: five paediatricians, three oncologists, two internists, two general surgeons, and two obstetricians. The study was approved by the Committee on Ethical Conduct in Extramural Academic Relations at Boğaziçi University on March 2019. The interviews were carried out between March – May 2019. The interviews took place at the clinics of physicians in the hospitals they work at. Table 1 demonstrates the profiles of the physicians in the field study.

[2] Physicians in surgical branches have the training to perform surgery. Physicians in clinical branches do not have this training.

Table 1. The Profiles of the Physicians in the Field Study

Specialization	Hospital Type	City	Gender	Years of Experience
General surgeon 1	Public	Istanbul	Female	21 – 25 years
General surgeon 2	Private	Istanbul	Male	21 – 25 years
Internist 1	Public	Balıkesir	Female	21 – 25 years
Internist 2	Private	Istanbul	Female	26 – 30 years
Paediatrician 1	Public	Istanbul	Male	26 – 30 years
Paediatrician 2	Public	Balıkesir	Female	36 – 40 years
Paediatrician 3	Public	Balıkesir	Male	26 – 30 years
Paediatrician 4	Private	Balıkesir	Male	21 – 25 years
Paediatrician 5	Private	Istanbul	Female	21 – 25 years
Obstetrician 1	Public	Balıkesir	Male	11 – 15 years
Obstetrician 2	Private	Balıkesir	Male	26 – 30 years
Oncologist 1	Public	Balıkesir	Male	11 – 15 years
Oncologist 2	Private	Istanbul	Male	26 – 30 years
Oncologist 3	Private	Istanbul	Male	31 – 35 years

1.2 Outline of the chapters

The thesis continues with Chapter 2, which provides a literature review on the interplay between health care policies and the clinical autonomy of physicians. It begins with a review of sociological literature on the medical profession, and the contemporary changes in the medical professionalism. Then, policy challenges to the medical profession such as the standardization of medical care through the introduction of evidence-based medicine, performance indicators, and the diagnosis-

related groups are discussed, and physicians' strategies to overcome the restrictions of reimbursement policies are mentioned.

Chapter 3 reviews the contemporary policy framework for hospital reimbursement in the Turkish health care system. Two consecutive subsections offer insights into the particular characteristics of hospital reimbursement in public and private hospitals working with the public insurance agency. Following this, the literature on the changes in the health care system and health care policies in Turkey is examined. Provider perceptions of the contemporary health care policies and physician perceptions of the changing dynamics of medical practice are discussed at separate subchapters.

Chapter 4 provides an analysis of physician perceptions of the introduction of new remuneration models in healthcare provision, particularly DRGs, and their impact on physicians' perceived clinical autonomy in the Turkish case. The findings of the research are discussed under four major themes: physicians' characterization of their clinical autonomy, financial implications of the DRG, medical implications of the DRG, and physicians' strategies of navigating within the DRG regulations.

Finally, Chapter 5 offers a discussion of the findings of this study with reference to the existing literature.

CHAPTER 2

HEALTH CARE POLICY AND THE CLINICAL AUTONOMY OF PHYSICIANS

Health care policies in several countries have undergone reforms to improve efficiency, equity and quality in the provision of health care services. Physicians have a central role in health care provision. The policies introduced with these reforms affect physicians, their clinical autonomy and more broadly, their medical practice, in various ways. This chapter offers an overview of the literature on the contemporary changes in medical practice with a special focus on clinical autonomy of physicians.

Section 1 provides sociological discussions on medicine as a profession and discusses contemporary changes in medical professionalism by referring to current trends in different country cases. Section 2 presents an overview of policy challenges to medical profession with an emphasis on cost-containment policies emerged in the 1970s. Standardization of medical care through the introduction of evidence-based medicine, performance indicators, and diagnosis-related groups is discussed, and physicians' strategies to overcome the restrictions of reimbursement policies are mentioned. Section 3 concludes the chapter.

2.1 Medicine as a profession: Sociological perspectives

Freidson (1970), a pioneer of the literature on medical professionalism, makes a distinction between an occupation and a profession in his seminal work *Profession of Medicine: A Study of the Sociology of Applied Knowledge*. According to Freidson (1970, p. 82), a profession is characterized by its legitimate authority over its work and its control over other occupations' work practices, which fall into the sphere of

the profession's work. The legitimate authority of a profession is sustained by the state protection and the society's approval of work practices, taking into account the provision of the profession's beneficial services. Hence, a professional is an individual who puts their clients' interests first and who is subject to supervision by their colleagues (Haug, 1972). With respect to these characteristics of a profession, Freidson suggests that contemporary medicine is a textbook example of a profession in modern society (Freidson, 1970, p. 4). To refer the medical profession's position within the healthcare system, Freidson (1970) uses the term "professional dominance," which takes into account the relationship between the medical profession and other healthcare occupations.

However, developments such as the rise of managed care in healthcare systems to control increasing costs, and the emerging patients' rights movements stand out as contemporary challenges to the traditional autonomy of the medical profession (e.g. Haug, 1972; McKinlay & Arches, 1985; McKinlay & Marceau, 2002; McKinlay & Stoeckle, 1988). To define these recent challenges towards medical professionalism, Haug (1972) proposes the thesis of "deprofessionalization," arguing that the monopoly of physicians is decreasing due to increasing computerization and education levels in society, which facilitate access to the medical knowledge for lay people. As a result, patients became more questioning and demanding, thus posing a challenge to physicians' authority over patients' healthcare decisions to some extent (Haug, 1972). In her subsequent work, Haug (1988) argued that "deprofessionalization" is merely a hypothesis, and the existing evidence neither fully supports nor completely rejects deprofessionalization. Hence, further evidence is needed to validate this hypothesis.

Discussing the challenges to professionalism, McKinlay and Arches (1985) discuss the expansion of capitalism into medicine proletarianized physicians. They suggest that physicians have gradually lost their economic independence and have become subject to wage-labour. Additionally, bureaucratic control over their work practices has intensified due to the profit-making motives in managed healthcare organizations. Because of these developments, they claim that physicians are slowly being reduced to a proletarian function (McKinlay & Arches, 1985). In further studies, McKinlay, with his colleagues Stoeckle (1988) and Marceau (2002), argues for the same thesis, using the concept of "corporatization" as an alternative to the Marxist conceptualization – proletarianization. However, according to the scholars, these two words explain the same thesis without changing its essence (McKinlay & Marceau, 2002).

Criticizing the theses of loss of professional dominance and proletarianization, Navarro (1988) argues that loss of professional autonomy does not equal to proletarianization, and actually, professionals have never had the dominance that Freidson described. Historically, the bourgeoisie selected, reproduced and established the professions, and the emergence of the medical profession corresponds with the interests of the bourgeoisie (Navarro, 1988).

Taking into account new theories, Freidson (1984) criticizes the deprofessionalization and proletarianization approaches and elaborates on his theory of professional dominance. In his subsequent work, Freidson (1985) describes the recent developments in medicine such as increasing administrative regulations that pose challenges to individual physicians' practice. However, he believes that the medical profession is stratified, which means that, while elite members of a profession have an active role in policy-making and administration, the rest are

subject to the tighter regulations and the control imposed by this elite stratum. Thus, he suggests that despite tighter controls imposed on individual professionals, the profession as a community maintains the control over its domain through the elite control.

2.2 Contemporary changes in medical professionalism: Examples of current trends

The theories on professionalism aim to explain the emergence of professions and their transformations over time. Some scholars apply these theories to explain the changes in the medical profession in country-specific contexts (Allsop, 2006; Calnan & Williams, 1995; Lewis, Marjoribanks, & Pirotta, 2003; Lupton, 1997; Marjoribanks & Lewis, 2003; Tousijn, 2002).

Two different studies in Australia examined physicians' perspectives on the medical professionalism and the doctor-patient relationship (Lewis, Marjoribanks, & Pirotta, 2003; Lupton, 1997). While Lupton (1997) examined this issue through interviews, Lewis et al. (2003) conducted focus groups for this purpose. These two studies demonstrated coherent results which suggested that while physicians do not necessarily perceive increasing patient demands as a challenge to their medical autonomy (Lupton, 1997), they are concerned about increasing accountability demands of the managerial authorities (Lewis et al., 2003). According to Lupton (1997), the theses of deprofessionalization and proletarianization have to move beyond their focus on macrostructural issues to micro dimensions of everyday practices of physicians. This argument is also corroborated by the study of Lewis et al. (2003).

Tousijn (2002) conducted a policy analysis within the context of the Italian healthcare system in order to understand the status of medical dominance. According

to Tousijn (2002), health care reforms focusing on cost-containment measures, increasing consumerism among patients, and the development of a "multi-professional" organisational model in the health care sector with the emergence of new health professions have caused a decline in medical dominance. With regard to the changes in Italy based on these challenges mentioned by Tousijn (2002), a decline in medical dominance could be observed to some extent in the Italian healthcare system (Tousijn, 2002).

Calnan and Willams (1995) examine physician perspectives on the introduction of "managerialism" into the NHS and the increasing emphasis on patient demands by conducting interviews with a sample of 40 GPs. The results were mixed. While some GPs were concerned with increasing administrative workload, some of them perceived these changes in a positive way. Additionally, some physicians stated that increasing patient demands had transformed their medical practice into a "defensive" routine (Calnan & Williams, 1995, p. 239). The authors argued the evidence from their research does not fully support the thesis of deprofessionalization (Calnan & Williams, 1995).

Studies from several countries provide mixed results about physicians' perceptions of the current state of medical autonomy. In the search for the reasons behind this outcome, the literature suggests that the sociological explanations mentioned above are vague and do not provide the necessary analytical framework to examine changes in the position and practice of medical profession (Calnan & Williams, 1995; Lewis et al., 2003; Lupton, 1997). In addition, Marjoribanks and Lewis (2003, p. 2237) emphasize that "a more complete understanding of GP autonomy can only be gained through context-specific research, and by taking seriously the perspectives of GPs about the different dimensions of autonomy".

Hence, while these approaches could be useful to understand changes in physician autonomy in different countries, the lack of their analytical sharpness reduces their explanatory power.

2.3 Policy challenges to medical profession

Health care policies are established to achieve three main objectives: equity, quality, and cost-containment or efficiency (Blank & Burau, 2007). Equal access to high-quality healthcare services and efficient use of resources in the provision of healthcare characterise successful health care policies in democratic countries (Blank & Burau, 2007).

During the period following the Second World War, health care policies targeted primarily equity and quality in most of the developed countries, with the exception of the United States, despite the different social welfare regimes established across countries. European states aimed to provide universal access to healthcare services, not only in National Health Service (NHS) system in the United Kingdom, but also in Social Health Insurance systems in continental European countries by the 1950s (Reibling & Wendt, 2008). While the NHS provides universal health coverage for each citizen that is funded through taxation, the SHI covers citizens through social insurance schemes (Blank & Burau, 2007). Unlike European countries, the United States has failed to achieve universal health coverage. In the US model, healthcare services are provided by the private sector, and expenditures are covered by a combination of private health insurance and the publicly-funded and means-tested Medicare/Medicare.

However, by the early 1970s, the cost-containment objective started to override other objectives of health care policies. Increasing costs of healthcare

services, the increased pressure on fiscal balance in developed countries, which occurred due to the OPEC oil crisis and the emergence of neoliberal economic model, pushed numerous countries to reform their healthcare systems. For that purpose, many were obligated to reconsider the extent of provided healthcare services to citizens under universal health coverage schemes in order to ease the financial pressures on their budget (Huttin & Andral, 2000). As a result, cost-containment measures in health care are seen as necessary by some policymakers and scholars for the maintenance of access to healthcare services that are affordable both for individuals as users of services and for the state or social insurance funds as the financing agent (Reibling & Wendt, 2008).

Spending on hospitals, in addition to spending on pharmaceuticals, generally comprises of the largest share of the overall expenditure of healthcare provision (World Health Organization, 2010). Therefore, governments introduced diverse sets of measures to control the spending on hospitals. These measures include different reimbursement schemes such as global budgets, fee-for-service, and diagnosis-related groups (Mathauer & Wittenbecher, 2012). Diagnosis-related groups are especially presented as the best measure to increase efficiency in healthcare provision and to control the budget of hospitals (Busse et al., 2013).

2.3.1 Hospital reimbursement through diagnosis-related group and its possible negative implications for patients

The diagnosis-related group (DRG) is a patient classification system which groups patients based on their diagnosis and their treatment and length of stay in order to standardize reimbursements that hospitals receive (Blank & Burau, 2007). The DRG was first implemented in the United States in 1983 to control increasing costs of its

public health coverage schemes – Medicare/Medicaid. Through the standardization of reimbursement for particular diagnoses, illnesses and treatments, the DRG aims to put a limit on physicians' incentives to provide more services to increase their income or hospital revenue. The DRG also aims to increase the financial responsibility of the providers—physicians and hospitals. Hence, increasing efficiency and cost-containment in the healthcare provision are expected as main outcomes of this reimbursement model (Busse et al., 2013; Cheng, Chen, & Tsai, 2012).

Concerns about increased health care expenditures are not limited to the US, but are common for the most countries, regardless of their level of economic development (Mathauer & Wittenbecher, 2012). Thus, several European countries such as Switzerland (Busato & von Below, 2010; Leu, Wepf, Elger, & Wangmo, 2018) and the Netherlands (Tummers & Van de Walle, 2012), Hungary (Kroneman & Nagy, 2001), and also some Asian countries such as Thailand (Annear et al., 2018; Cheng et al., 2012), Japan and Korea (Annear et al., 2018) have introduced the DRG in order to increase efficiency and to contain costs in the healthcare provision.

The main rationale behind the development of the DRG was that it would have positive impacts on cost-containment within the context of increasing healthcare expenditures of Medicare/Medicaid in the USA. However, it was revealed that the DRG was not successful in containing Medicare costs in the medium term because of the "revolving door" effect, that is, the readmission of patients (Blank, 1997, p. 142). While the experience of the DRG in the US did not result in containing the healthcare costs as it was expected by the policymakers, studies focusing on the experiences of the DRG in several countries provide evidence supporting its success in this objective (Annear et al., 2018; Cheng et al., 2012;

Kroneman & Nagy, 2001; Mathauer & Wittenbecher, 2012).

The categorization of patients and the standardization of hospital reimbursement provide incentives for healthcare providers to reduce costs in order to stay within the budget and to make profits by staying within the reimbursement levels, as in the case of for-profit hospitals. As a result, one of the common outcomes of the DRG is the reduced length of hospitalization period (Annear et al., 2018; Busato & von Below, 2010; Cheng, Chen, & Tsai, 2012; Kroneman & Nagy, 2001). However, the literature demonstrates mixed evidence on this across countries. In Hungary, the DRG resulted in reduced length of hospitalization (Kroneman & Nagy, 2001). However, in Switzerland, one study shows that this consequence might not be the outcome of the DRG, since the length of stay in non-DRG areas is also reduced and reached the value observed in DRG areas (Busato & von Below, 2010). In addition, the DRG decreases the length of hospitalization in Japan, Korea, and Thailand, and these countries' overall experiences with the DRG are positive (Annear et al., 2018).

In addition to cost control and efficiency, the literature discusses the impacts of DRG on other dimensions of healthcare systems, such as the quality of healthcare services, equity in access to healthcare services, and the clinical autonomy of physicians (e.g. Annear et al., 2018; Busato & von Below, 2010; Busse et al., 2013; Cheng et al., 2012; Kroneman & Nagy, 2001; Leu et al., 2018). According to a comparative study on the experiences of the DRG in different European countries, the consequences of the DRG vary across these dimensions and countries and demonstrate mixed results (Busse et al., 2013). While the DRG results in significant positive impacts on the cost-containment in health care systems in some countries, this positive outcome might result in negative consequences in other dimensions of

healthcare systems such as quality of healthcare services, patients' access to healthcare services in equity, and the clinical autonomy of physicians. The "revolving door" effect, which was observed in the USA (Blank, 1997, p. 142), is a significant negative consequence of the DRG that also manifests itself in other countries (Busse et al., 2013; Leu, Wepf, Elger, & Wangmo, 2018).

The benefit of reduced hospital stay because of the DRG is contested in the literature. In a study conducted on the experiences of the DRG in Japan, Korea and Thailand, Annear et al. (2018) demonstrate that reduced hospitalization rates might result in premature discharge of patients in order to save costs. Busse et al.'s comparative study on the use of DRGs in European countries (2013) demonstrates that premature discharge results in reduced quality in the provision of healthcare services. While the study found that the DRG's impact on rehospitalization in European countries has remained limited, it found that readmission rates after the implementation of the DRG increased in France (Busse et al., 2013) and in Switzerland (Busato & von Below, 2010).

Premature discharge raises concerns especially about the health outcomes of individuals that are particularly vulnerable due to their health status, age, and socio-economic situations (Leu et al., 2018). In Switzerland, Leu et al. (2018) explored hospital experts' opinions about the DRG and its impacts on vulnerable groups and reveal that hospital experts are concerned about the health outcomes of vulnerable individuals since the DRG does not address their special treatment needs. In addition, since the provision of healthcare services for these individuals is not profitable or sustainable within the DRG model, there is a risk that hospitals might refrain from providing necessary treatment. In order to overcome these problems, a new instrument was introduced to provide access to healthcare institutions for acute and

transitional care (ATC), especially for vulnerable individuals. When the hospital care is no longer necessary for an individual but the needed care is more than conventional home care, individuals could apply for ACT to demand specialized care at home for up to 14 days. However, the authors also emphasize the experts' concerns about the failure of ACT to protect these individuals from the negative impacts of the DRG (Leu et al., 2018).

2.3.2 Standardization of medical care and clinical autonomy of physicians

Healthcare is a labour intensive sector and its performance depends heavily on well-trained and motivated health workers (Kabene et al., 2006). Due to the influence of health workers on the overall health care system performance, they are arguably considered the most significant input of the healthcare system (Fritzen, 2007). Additionally, they are strategic actors who can individually or collectively shape policies and regulations (Dussault & Dubois, 2003; Rigoli & Dussault, 2003). For that reason, supporting health workers and providing necessary incentives to motivate them are essential steps for guaranteeing higher quality in provision.

Healthcare reforms present challenges and opportunities simultaneously in addressing the problems of the healthcare sector (Martínez & Martineau, 1998). In a context where there is increasing emphasis on cost-containment, healthcare reforms and regulations in several countries involve policies which affect the working conditions of physicians and their clinical autonomy. The emphasis on evidence-based medicine and the introduction of performance indicators, clinical practice guidelines and managed care aims to improve efficiency through regulating the practices of the central component of the healthcare provision—physicians. The DRG also regulates medical practice by standardizing reimbursement for service in

hospitals.

Evidence-based medicine is the use of clinically proven evidence which is obtained through systematic research by physicians who provide healthcare to individual patients (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). The increasing use of evidence-based medicine sparked discussions about whether this practice circumscribes physician autonomy (Armstrong, 2002; Britten, 2001; Timmermans, 2005). According to Timmermans (2005), the standardization of clinical practice through evidence-based medicine cause a threat to professional autonomy. The imposition of clinical practice guidelines on physicians by the state and third party insurers results in increasing accountability of physicians, which restricts their clinical autonomy (Timmermans, 2005). On the contrary, Armstrong (2002) argues that evidence-based medicine enables physicians to resist the pressure of cost containment measures. However, he argues that, while evidence-based medicine can sustain the autonomy of medical profession as a community, it undermines traditional norms of individual medical practice (Armstrong, 2002). In addition, Britten (2001, p. 492) suggests that among the recent challenges to clinical autonomy of physicians, the most formidable one is increasing "peer group pressure in the form of clinical governance."

An in-depth study in Chile examined physician perceptions of the standardization of clinical guidelines and benefit packages with the country's 2005 health reform (Lemp & Calvo, 2012). The results demonstrate that physicians' acceptance of these guidelines depends on their years of clinical experience and the type of instrument evaluated. To elaborate, fewer years of clinical experience result in a greater acceptance of standardization. While there is not a shared view about the standardization trend among physicians, they voice important criticisms. First, some

physicians emphasize the artisanal character of medicine, which requires flexibility in treatment. Second, the benefit packages were criticized for not financing the best available care and for not providing an alternative solution in case of a complication (Lemp & Calvo, 2012). Hence, some physicians perceive negatively the restrictions in their clinical practice because of the guidelines and the standardized benefit packages.

Another standardization tool that uses clinical evidence is the performance indicators, which enables assessment of the clinical performance of physicians by managerial authorities such as the state and/or the managers of hospitals. In a study conducted primary healthcare provision in the United Kingdom, performance indicators are found to diminish the trust in physicians for managerial authorities (Calnan & Williams, 1995). However, the diminishing trust does not necessarily result in an erosion in clinical autonomy, but they cause it to be re-defined according to a context of increased managerial control upon physicians. Hence, clinical autonomy is redefined as physicians' tactics to preserve their autonomy under managerial control (Exworthy et al., 2003).

Last but not least, DRG have an impact on medical practice through the categorization of patients based on diagnosis and treatment, as I explained above. Several studies have explored the perceptions of physicians about the DRG and the system's impact on the medical practice (Exworthy et al., 2003, p. 1502). For instance, in Switzerland, while most physicians think that managed care tools have a positive impact on cost-containment, they are concerned about their professional autonomy and the quality of healthcare provision (e.g. Deom, Agoritsas, Bovier, & Perneger, 2010; Tummers & Van de Walle, 2012; Warren et al., 1998). Tummers and Van de Walle (2012), in a study in the Netherlands to understand the reasons for

physicians' resistance to policy changes, focus on the implementation of the DRG for psychological care provision. They reveal that physicians resist the implementation of DRG because they think that this reimbursement model does not contribute to the quality of care nor does it result in cost containment (2012). Finally, Warren et al. (1998) suggest that depriving physician autonomy in diagnosis and prescription results in decreased physician satisfaction in managed care environments. With respect to the central role of physicians in the provision of healthcare services, the perception of physicians is important in the successful implementation of new health care policies.

2.3.3 Physician strategies to protect clinical autonomy in the context of new reimbursement models

While countries implement new policies to control healthcare costs, physicians do still have the capacity to control the distribution of resources and employ strategies to protect and practice their clinical autonomy informally. Morreim (1998) argues that physicians may manipulate the cost-containment rules within a healthcare system through the ambiguity of regulations and the ability to bypass rules when the physicians believe that the economic constraints hinder the provision of adequate healthcare services. Morreim (1991) describes these physician tactics as "gaming the system." Several studies have explored physician strategies of gaming the system in managed care in the US to determine whether physicians manipulate cost-containment regulations to improve access to healthcare services for patients. In order to understand the frequency of physicians' manipulation of reimbursement regulations, Wynia et al. (2000) asked physicians how often they (1) over-diagnosed, (2) changed patients' billing diagnoses, and (3) reported symptoms that were other

than what the patients had in order for treatment to be covered. The results show that between 10% and 27% of physicians manipulate reimbursement rules through these three methods. While physicians who manipulate these rules argue that gaming the system is necessary in order to provide adequate healthcare to patients, the majority of physicians in the USA argue that this is an unethical practice (e.g. Freeman, Rathore, Weinfurt, Schulman, & Sulmasy, 1999; Hurst, Hull, DuVal, & Danis, 2005; Wynia, Cummins, VanGeest, & Wilson, 2000; Wynia, VanGeest, Cummins, & Wilson, 2003).

In a similar study, Hurst et al. (2005) conducted interviews with specialists in the US, and asked them about recent ethical dilemmas they confronted in their medical practice, and obstacles regarding resource allocation. The most mentioned issues are limits on individuals' insurance coverages, and decision-making process about the appropriateness of using an expensive treatment. When confronting these dilemmas, the most of the physicians work within the parameters of the healthcare system in order to negotiate, and only 2% of physicians manipulate the reimbursement system (Hurst et al., 2005).

Finally, Freeman, Rathore, Weinfurt, Schulman, & Sulmasy (1999) examined the use of deception by physicians in the context of managed care in the US. For that purpose, the authors asked physicians about six different vignettes with changing clinical severity: coronary bypass surgery, arterial revascularization, intravenous pain medication and nutrition, mammography screening, emergent psychatric referral, and cosmetic rhinoplasty. Generally, the reimbursement of patients in the vignettes were denied by a third-party payer. The results reveal that as the severity of the medical condition increases, physicians are more likely to commit deception in order to provide healthcare services to patients which they consider necessary (Freeman et

al., 1999).

As the studies on the US case demonstrate, physicians' use of deception tactics increase when they practice in managed care, have larger numbers of Medicare patients, and have patients with severe medical conditions (Freeman et al., 1999). The studies reveal that a limited number of physicians manipulate reimbursement rules in cases when they believe that the existing reimbursement scheme prevents them from providing necessary treatments (Bogardus Jr., Geist, & Bradley, 2004). Hence, some scholars conclude that physicians are gaming the system for "altruistic Hipocratic reasons" (Freeman et al., 1999; Wynia et al., 2000). Other scholars suggest that despite its positive implications for individual patients, deceiving the healthcare system might be hazardous to society and violates the principles of distributive justice (Tavaglione & Hurst, 2012, p. 11). Thus, in order to address physician deception for reasons of coverage restriction, additional policy responses are required to eliminate, or at least to reduce, the factors leading to deception while emphasizing cost-containment target (Morreim, 1991).

2.4 Conclusion

To sum up, governments have implemented several policies to control increasing health care costs and to improve efficiency in health care provision in the last couple of decades. DRG and performance indicators with an increasing emphasis on evidence-based medicine have become central components of health care policies today. However, these policies have a significant impact on physicians' clinical autonomy, as the literature suggests. Evidence from studies examining the impact of the DRG demonstrates that, although the DRG is sometimes effective in containing costs, it nevertheless limits the clinical autonomy of physicians, sometimes resulting

in their inability to provide desired health care procedures. In response, physicians may adapt deception tactics to overcome the limitations of the DRG, thus undermining the efficiency target of the DRG.

The use of DRG in Turkey's health care system became common practice with the 2003 health care reform. This reimbursement scheme is applied to public hospitals in combination with the global budget, and also to private hospitals which provide public services to the beneficiaries of the public insurance scheme. The next chapter focuses on the health care system in Turkey in detail, with an overview of physician perceptions of the medical profession with respect to clinical autonomy.

CHAPTER 3

HEALTH CARE POLICY AND THE CLINICAL AUTONOMY OF PHYSICIANS IN TURKEY

Turkey's health care system entered an extensive reform process in 2003—the Health Transformation Programme (HTP). After the electoral victory of the Justice and Development Party (JDP) and the formation of a single-party government after years of unstable coalitions, the government found a window of opportunity to implement an extensive health care reform (Agartan, 2015a). The HTP introduced several regulations that aimed to improve the core domains of the health care system, including financing, provision, and organization. One of the first steps of the HTP was the establishment of a purchaser-provider split to improve efficiency in financing. In order to achieve equitable access to health care services, the previous three public insurance schemes with different regulations of entitlements and benefits were unified in 2006, which paved the way for the introduction of compulsory health insurance and universal health coverage. As the result of the unification of the three insurance schemes, the Social Security Institution (SSI) was founded in 2006 and has become the only purchaser of health care services from public and most private providers (Yilmaz, 2017). A compulsory health insurance scheme was implemented in Turkey in 2012. Additionally, a "stewardship" role was attributed to the Ministry of Health (MoH) in the new system.

With this reform, the MoH aimed to address shortages in the health workforce, absenteeism of physicians, imbalances in geographical distribution and in skills-mix, and low quality provision (The Ministry of Health, 2003c). Among these new regulations that the reform has brought forward, the performance-based

payment system for physicians has been one of the most controversial ones. The performance-based payment system was introduced in 2004 to improve the productivity of physicians in public hospitals. With this new remuneration model, health workers such as physicians and nurses were given additional payments each month to top up their salaries, the rate of which was to be calculated according to the services they provide. These additional performance payments are paid to health workers from the hospital budgets allocated by the MoH. The performance-based payment system was successful in increasing the income of health workers and reducing dual employment of physicians, which was a significant problem in Turkey's healthcare system until to the implementation of the HTP (Vujicic, Sparkes, & Mollahaliloglu, 2009). Additionally, the performance-based payment system partly accounted for the increase in the number of patients examined, since this remuneration model provides incentives for physicians to increase their productivity (Akinci, Mollahaliloğlu, Gürsöz, & Öğücü, 2012).

The HTP also promoted private investment to the health care sector and provided incentives to private health care investors. As part of this policy, the SSI started purchasing health care services from private providers. As a result, the number of private hospitals increased from 275 to 571 between 2002 and 2017, which raised the share of the private sector in the health care provision from 23% to 38% (The Ministry of Health, 2018, p. 113). Thus, the number of patient consultations at private hospitals also increased from 5.7 million to 72.2 million between 2002 and 2017, which consisted of 4.6% of total patient consultations in 2002 and 15.5% in 2017 (The Ministry of Health, 2018, p. 161). Hence, according to Agartan (2012) and Yilmaz (2013), the HTP introduced universal health coverage

and market elements with the same reform, and the HTP led to the increased private sector activity in Turkey's health care system (Yilmaz, 2017).

While facilitating patients' access to health care services, the government also introduced co-payments to eliminate the problem of moral hazard. Different types of co-payments were introduced for public hospital services and public services that provide private hospital services. While patients pay a fixed amount of co-payment for each visit to public hospitals, the amount of co-payments changes in public service providing private hospital services.

In order to guarantee the financial sustainability of Turkey's health care system, the reimbursement model of public hospitals was rearranged, and a new reimbursement model for private hospitals was introduced with the expansion of private sector which is supported by the state. The following section elaborates on the reimbursement models of public and private hospitals by SSI within the contemporary health care system in Turkey.

3.1 Hospital reimbursement in turkey's health care system

3.1.1 Public hospital reimbursement

Despite the increasing number of consultations to private hospitals since the implementation of the HTP, patients still mostly continue to admit to public hospitals for their health care needs (The Ministry of Health, 2018, p. 161). In line with the emphasis on efficiency during the implementation of the HTP, controlling overall spending in public hospitals was considered key to the guarantee financial sustainability of Turkey's health care system (The Ministry of Health, 2003a). For this purpose, mixed reimbursement schemes involving the global budget and the DRG were introduced. While the global budget means the determination of the total

budget the hospitals for a specific time period by the insurance institutions (Dredge, 2004, pp. 5–6), the DRG is a patient classification system which categorizes patients based on diagnosis, treatment and length of stay in order to standardize expected reimbursements of hospitals. In Turkey's health care system, a limited version of the DRG was introduced in 2003 before the establishment of the SSI, but the current model of the DRG was fully introduced to Turkey's health care system in 2013. In addition, the global budget was introduced in 2006 as the reimbursement scheme of the MoH hospitals.

To begin with, the SSI allocates a global budget to the MoH at the beginning of each year for the purchase of health care services for beneficiaries of the public health insurance scheme. The global budget amount allocated to public hospitals is determined at the end of each year according to previous year's budget, plus expected increases in the number of services provided, planned investments and the inflation rate for the upcoming year. Based on these data, the MoH prepares the budget for the coming year and negotiates the budget with the SSI and the Ministry of Treasury and Finance. After the determination of the budget for the MoH by these three state institutions, the MoH distributes the global budgets to public hospitals according to the number of services they are expected to provide, which is determined in line with the number of services provided the previous year. Public hospitals are obliged to remain within the global budgets allocated to them in order to prevent over-expenditure.

In addition to the global budget, the DRG is also used by the SSI to control public expenditures on health care provision. Historically, the DRG [Tanıya Dayalı (Paket) Fiyat Uygulaması] was introduced in 2003 by the MoH for public hospitals that provided services to the beneficiaries of the Retirement Fund for Civil Servants

(Emekli Sandığı) and the Pension Fund for the Self-Employed (BAĞ-KUR). During that period, the DRG applied only to the following specific speciality services: cardiology, general surgery, ophthalmology and haemodialysis. The reasons for the implementation of the DRG are described by the MoH as follows (The Ministry of Health, 2003b):

> The social security institutions which purchase services from the hospitals owned by our Ministry do not pay for treatment bills within the time period stated by the regulations, or pay them with significant cutbacks on the grounds of over-billing and over-expenditure. This situation causes financial resource constraints for our hospitals, which meet their expenses through revolving funds, affects the quality of the services provided and the efficiency, and results in controversies between purchasing institutions and providing institutions.[3]

The introduction of the DRG was considered a solution to these issues between insurance schemes and the MoH mentioned by the MoH (2003b) above.

After the introduction of the purchaser-provider split to Turkey's health care system in 2006, the SSI has continued to apply the DRG ("Teşhis İlişkili Gruplar" in Turkish since 2005) more strictly to public hospitals and private hospitals that provide public service. Furthermore, in 2005, research on the DRG in Turkey was conducted under the auspices of the Hacettepe University Research Project on the Strengthening and Restructuring of Health Care Financing (Hacettepe Üniversitesi Sağlık Hizmetleri Finansman Yapısının güçlendirilmesi ve Yeniden Yapılandırılması İçin Altyapı Geliştirme Projesi). Australian Redefined Diagnosis Related Groups (AR-DRG) v5.1 was used as the benchmark of this project, which was conducted in cooperation with the Health Insurance Commission of Australia until the end of the

[3] Bakanlığımıza ait hastanelerden sağlık hizmeti alan sosyal güvenlik kuruluşları tahakkuk ettirilen tahakkuk ettirilen tedavi faturaları, abartılı olduğu ve gerçeği yansıtmadığı gerekçesiyle ilgili mevzuatta öngörülen ödeme süreleri içerisinde ödenmeyerek iade edilmekte veya önemli miktarlarda kesinti yapılarak ödenmektedir. Bu durum sağlık hizmeti üreten ve birçok giderini kendi döner sermaye imkanları ile karşılamak durumunda bulunan hastanelerimizi finansal kaynak sıkıntısıyla karşı karşıya bırakmakta, sunulan hizmet kalitesini ve maliyet etkililiğini olumsuz yönde etkilemekte ve hizmet satın alan ve hizmet sunan kurumlar arasında ihtilaflara sebebiyet vermektedir.

licensure in 2013 (Beylik, 2014, pp. 64–68). Since 2010, the reimbursement regulations of the DRG have been published by the SSI in the form of Social Security Institution Health Implementation Statements (HIS) (Social Security Institution, 2019). The HIS identifies the medical services that are reimbursed and announces the reimbursement amounts for each diagnosis and treatment. In 2012, the Department of Diagnosis-Related Groups was instituted under the Ministry of Health to conduct data collection from public hospitals across Turkey, to provide analysis of these data and to determine reimbursement rates accordingly.

Since 2010, global budgets are distributed to the MoH hospitals according to the DRG regulations. Hence, in the current context, the SSI reimburses public hospitals from the global budget and the DRG simultaneously in order to ensure the financial sustainability of Turkey's health care system by ensuring that health care providers comply with these reimbursement mechanisms. Health care providers are offered incentives to comply with these regulations to ensure their financial soundness and to secure budget surpluses, which is necessary to make performance payments to health workers in public hospitals. If physicians provide health care services to patients that exceed the DRG regulations, the SSI does not reimburse these services and hospitals have to pay for these services from their own budget. Further reductions in hospitals' own budgets cause diminishing performance-based payments for physicians and other health workers. Hence, health care providers' compliance with the SSI's reimbursement regulations results in financial benefits not only for hospitals, but also for physicians.

3.1.2 Private hospital reimbursement

The share of private sector activity in Turkey's health care system, as demonstrated above, significantly expanded with the HTP. This development was made possible

by the SSI's purchasing of health care services from the private sector. The SSI applies the DRG reimbursement scheme also to private hospitals. The process between the SSI and private hospitals functions as follows: The SSI annually determines and announces reimbursement amounts for health care services with the HIS. If private health providers decide to provide services to the beneficiaries of public insurance according to those reimbursement amounts, they sign a yearly contract with the SSI. The contract may take various forms, depending on the extent of coverage. The contract may include all services provided by the private hospital, only specific speciality services, or only services by specific physicians. In addition, since 2010, all private hospitals are prohibited from charging patients for specific services such as emergency services; intensive care; burn injury treatments; cancer treatments including radiotherapy, chemotherapy and radioisotope therapy; neonatal care; surgery for congenital anomalies and organ transplantation (Social Security Institution, 2019). This regulation means that all such services by all private hospitals are reimbursed on the basis of HIS rates.

In addition to the SSI reimbursements, changing amounts of co-payments are introduced for patients admitting to private hospitals using their public insurance. The SSI also sets the maximum amount of co-payment which the private hospitals can charge according to the SSI prices of health care services announced in the HIS. The amount of co-payment is 200% maximum. This amount also varies according to the quality ranking of private hospitals developed by the MoH. If private hospitals overcharge patients, they are subjected to financial penalties which are equal to five times the overcharged amount, as described by the contract between SSI and private providers (Social Security Institution, 2018). Additionally, private hospitals are obligated to provide a detailed invoice that lists all services provided and related co-

payments to the patients, non-fulfilment of which is also subject to fines (Social Security Institution, 2019).

3.2 A review of the literature on the health care system and health care policies in Turkey

The HTP as a 'large-scale reform' process (Agartan, 2015a) has been subjected to extensive academic research that elaborates on the reform's impacts on different dimensions of Turkey's health care system (Atun et al., 2013; Ökem & Çakar, 2015; Yilmaz, 2013) and the politics of the reform process (Agartan, 2015a, 2016; Agartan & Kuhlmann, 2019; Akinci et al., 2012; Sparkes, Bump, & Reich, 2015; Yilmaz, 2017).

The success of the HTP in achieving equity in access to health care services was emphasized by several scholars in the literature (Atun et al., 2013; Ökem & Çakar, 2015; Özgen, Şahin, Belli, Tatar, & Berman, 2010). First, the HTP addressed the issue of informal payments for patients' access to drugs and physicians, which were undermining equity (Tatar, Ozgen, Sahin, Belli, & Berman, 2007, pp. 1034–1035). The elimination of informal payments improved equity (Ökem & Çakar, 2015; Özgen et al., 2010). Second, Atun et al. (2013) suggest that the introduction of universal health coverage was also successful in the achievement of equity. However, even after the introduction of the HTP, access to public health insurance has been based mostly on the regular contribution of premiums to the insurance fund. While the state pays the premiums for the poor and recently unemployed individuals who benefit from unemployment insurance up to six months, the continuation of unemployment sometimes leads to gaps in health insurance coverage (Ökem & Çakar, 2015). Hence, some scholars argue that the HTP partly failed to achieve

universal health coverage due to the structure of the Turkish economy (Ökem & Çakar, 2015; Yasar, 2011).

The HTP created a division of labour between the public and private sectors in health care since the state has gradually disengaged from providing healthcare services and has enabled increased private sector engagement, while enhancing its role in financing and regulation (Yilmaz, 2013). Additionally, while the unification of three previous public insurance schemes eliminated occupation-based inequalities, the increased private sector activity in Turkey's health care system and the introduction of co-payments lead to income-based inequalities in access to health care services in the Turkish context, where income distribution is more unequal than in other OECD member states (Yilmaz, 2013).

The performance-based payment system was also extensively criticized in the literature. Despite the limited positive impacts of the performance-based payment system on the productivity of physicians, concerns about this model are raised by several scholars and also by the Turkish Medical Association (Agartan, 2015b; Elbek & Adaş, 2009; Ökem & Çakar, 2015; Turkish Medical Association Ethical Committee, 2009). With the introduction of the performance-based payment system, a significant component of the salaries of physicians now depend on the number of services provided. For that reason, some scholars argued that this situation might lead to a supplier-induced demand (Tatar et al., 2011), which results in overdiagnosis and overtreatment (Kart, 2013, p. 116; Kılıçarslan & Kılıçarslan, 2013, p. 188). Supplier-induced demand causes unnecessary usage of services and waste of resources, which are in contrast with the cost-containment target. Another reason which causes overdiagnosis and overtreatment is the increasing number of malpractice cases. As a result, physicians adopt defensive medicine, and reluctantly

apply precautionary and sometimes unnecessary medical procedures to protect themselves from malpractice lawsuits (Kılıçarslan & Kılıçarslan, 2013, p. 192).

In addition, since physicians have to increase the number of their patients examined to top-up their salaries, the examination period given for each patient was significantly reduced. This consequence raised concerns about patients' health outcomes, increased work stress and job dissatisfaction among physicians (Agartan, 2015b; Elbek & Adaş, 2009; Turkish Medical Association Ethical Committee, 2009). Therefore, Agartan (2015b) suggests that while the HTP addressed some of the health workforce problems, the reform aggravated others and created new ones, resulting in an increased burden on the health workforce.

Finally, controlling health care expenditures was among the main targets of the HTP (The Ministry of Health, 2003a). However, the ratio of public health care spending to GDP in Turkey has continued to increase since the late 1980s, and the HTP did not change the direction of this trend (Yılmaz & Yentürk, 2017). Yılmaz and Yentürk (2017) explain this situation with other policies implemented with the HTP through emphasizing the increasing expenditures of the SSI in covering treatments and medication of patients. They maintain that increasing SSI reimbursements to hospitals—and therefore increased access to health care—is the main reason behind the increasing ratio of public health care spending to GDP (Yılmaz & Yentürk, 2017). This increased access may take three not-mutually-exclusive forms. First, patients access to health care services is facilitated by the unification of the three insurance schemes and the introduction of universal health coverage, which resulted in an increased number of consultations. Second, the contracts between private hospitals and SSI resulted in increased reimbursement amounts to private hospitals by SSI. Finally, the trends of overdiagnosis and

overtreatment (Kılıçarslan & Kılıçarslan, 2013) are other factors which have an impact on public health care spending.

3.3 Provider perceptions of the contemporary health policies in Turkey

The transformation of the health care system in Turkey after the implementation of the HTP has led to extensive academic research about provider perceptions of the various dimensions of the new health care policies (e.g. Aksoy, 2017; Çetin, 2014; Demir, 2013; Erdem & Atalay, 2016; Ersoy, 2014; Kart, 2013; Nesanır, Ali, Bedri, & Saltık, 2006; Yüzden, 2013). The literature focuses mainly on physician perceptions of the performance-based payment system in parallel with the concerns about this remuneration model, as mentioned in this chapter (e.g. Çetin, 2014; Demir, 2013; Kart, 2013; Nesanır et al., 2006; Yüzden, 2013). These studies demonstrate consistent results on physicians' high level of dissatisfaction with the performance-based payment system, which occurs because of reduced examination periods, increased workload, job stress and financial competition among physicians, and decreased quality of health care provision (Çetin, 2014; Kart, 2013; Nesanır et al., 2006; Yüzden, 2013). Additionally, resident physicians criticize the inability to obtain adequate training in medical schools after the reform, because professors prefer to spend their time with patient consultations in order to earn more performance points to increase their income (Erdem & Atalay, 2016). Finally, some physicians mentioned an increased number of unethical practices among physicians in order to obtain more performance points (Kart, 2013; Nesanır et al., 2006; Yüzden, 2013). For these reasons, physicians demand the abolishment or the transformation of the performance-based payment system, citing medical ethics which prioritizes patient wellness (Çetin, 2014; Demir, 2013; Yüzden, 2013).

Despite the substantial amount of research demonstrating physician perceptions of the performance-based payment system, physicians' self-experiences about the DRG have not been the subject of academic research. Two quantitative studies were conducted to explore hospital managers' opinions on the use of DRG in Turkey (Aksoy, 2017; Ersoy, 2014). While Ersoy (2014) conducted her research in public hospitals in Ankara, Aksoy (2017) explored the case in public hospitals in Istanbul. Both of these studies used the same questionnaire, developed by Ersoy (2014). These studies show that hospital managers generally have positive perceptions of the cost-containment effect of the DRG due to the standardization of the reimbursement amounts and the resulting facilitation of invoicing procedures (Aksoy, 2017, p. 43; Ersoy, 2014, pp. 128–129). However, hospital managers did not think that the DRG would reduce the period of hospitalization. Additionally, they recognize the possibility of a decrease in physicians authority on the clinical decision-making after the implementation of the DRG (Ersoy, 2014, p. 126). Finally, Aksoy (2017, p. 38) demonstrates that hospital managers think that the DRG would lead to more complicated diagnoses in order to increase the reimbursement of hospitals by SSI.

Briefly, while the literature on physician perceptions of the health care policies in Turkey focuses mainly on the performance-based payment system, provider perceptions of the DRG have been explored only with hospital managers so far. Therefore, there is a significant gap in the literature about physician perceptions of the reimbursement schemes in Turkey. Since health care is a labour-intensive sector and financial regulations guarantee the sustainability of a country's health care system, it is vital to explore physician perceptions of the new financial regulations for the functioning of a health care system.

3.4 Physician perceptions of the changing medical profession in Turkey

The literature on physician perceptions of the changing medical profession in Turkey is quite limited. While the literature mainly focuses on the analysis of the working conditions of physicians after the implementation of the HTP and the introduction of the performance-based payment system (e.g. Çetin, 2014; Demir, 2013; Nesanır et al., 2006; Yüzden, 2013), physicians' self-narratives on the medical profession and their clinical autonomy are subjected to limited research (Agartan, 2019; Başkavak, 2016; Erdem & Atalay, 2016; Kart, 2013; Mıdık, 2012; Terzioglu, 1998). In these studies, Terzioglu (1998) and Başkavak (2016) respectively focus on the historical development and the transformation of the medical profession and the surgical craft. Erdem and Atalay (2016), Kart (2013), and Agartan (2019) especially examine physician perceptions of the health care policies implemented with the HTP. Finally, Mıdık (2012) explores how physicians conceptualize medical professionalism and which factors shape their conceptualizations.

Başkavak (2016) examines surgical work and "the transformation of its craft character" in parallel with technological developments in medicine and changes in the social organization of healthcare. She suggests that surgical work is changing due to new technologies such as laparoscopy, and different generations of surgeons demonstrate different patterns of adaptation or resistance to these changes. While older generations, "traditional surgeons," experience difficulties adapting to closed surgery techniques, they are the most advantageous group since they are familiar with both open and closed surgical practices. However, newcomers, who are in the phase of apprenticeship, have the least familiarity with open surgery techniques, but they are mastering closed surgery. Additionally, technological developments undermine the previous master-apprenticeship relationship between different

generations of surgeons because of the individualistic practising character of closed surgical techniques (Başkavak, 2016, p. 210). However, Başkavak (2016, p. 211) argues that the craft nature of surgical work persists because technological developments have brought a new dimension of expertise to surgical work.

In line with the increasing concerns about the working conditions of physicians after the HTP, Erdem and Atalay (2016) examined resident physicians' perceptions of the medical profession. The sample of this study was quite limited, covering only resident physicians working at the paediatrics department at a training and research hospital. The results of their study demonstrate that increased workload, insufficient training and development opportunities provided to resident physicians because of high performance concerns of professors, and increased acts of violence against physicians by patients and patient relatives, which was also emphasized by Pinar et al. (2017) elsewhere, negatively affects physicians' motivation and their perception of the medical profession (Erdem & Atalay, 2016). Hence, Erdem and Atalay (2016) argue that the HTP has led to the deprofessionalization of the medical profession in Turkey.

Kart (2013) explores how the performance-based payment system affects working conditions and the autonomy of physicians. The interviews conducted with physicians revealed that the performance-based payment system undermines physician autonomy through the introduction of new public management tools. Additionally, they argue that this remuneration model has created new income inequalities between physicians and introduced a marketized competition among them to increase their income (Kart, 2013, p. 113). The study of Kart (2013, p. 130) demonstrates that, according to the physicians she interviewed with, the prestige of

the medical profession and the trust of their patients has rapidly decreased, which has resulted in the loss of medical autonomy of physicians.

Agartan (2019) researched physicians' responses to health care reforms in Turkey with respect to their experience in changing working conditions. Her study demonstrates that performance indicators and remuneration models cause tension for physicians. They perceive the erosion of their material interests such as their autonomy over the organization of their work. Therefore, she suggests that public sector physicians find it necessary to reconstruct professionalism, and the HTP poses a challenge for the medical profession because of the reform's populist and consumerist discourses (Agartan, 2019).

Finally, Mıdık (2012) examines physician conceptualization of the medical profession through qualitative and quantitative studies in Samsun. The results show that, while physicians clearly give importance to professional authority, medical unionisation, and professional autonomy, they assert that they do not have these features in their medical practice (Mıdık, 2012, p. 146). However, while 74.3% of physicians in this study expressed positive opinions on the sustainability of medical ethical behaviours (Mıdık, 2012, p. 145), they also criticise the existing health care policies, especially those that stimulate marketized competition among physicians for negatively affecting medical profession (Mıdık, 2012, p. 164). To conclude, Mıdık (2012, pp. 167–168) argues that the medical profession as conceptualized by physicians does not correspond to their daily experiences in reality, and according to physicians, this discrepancy is a product of the contemporary health care policies in Turkey.

3.5 Conclusion

The HTP introduced an extensive reform package encompassing financing, provision and organization of the health care system in Turkey. The reform expanded health care coverage through the unification of the three previous public insurance schemes and also provided incentives for the expansion of the private investment to health care. In order to contain increasing public spending, the global budget and the DRG reimbursement models were introduced for public hospitals. Additionally, the DRG is applied to private hospitals which sign contracts with the SSI for their provision of services to public health insurance beneficiaries. Despite the significant reform package introduced with the HTP, the literature on physician perceptions of the medical profession and their clinical autonomy is quite limited (Agartan, 2019; Erdem & Atalay, 2016; Kart, 2013; Mıdık, 2012). In addition, while hospital managers' opinions on the DRG is examined by scholars such as Ersoy (2014) and Aksoy (2017), physicians' self-narratives about the reimbursement schemes are overlooked by the literature. Therefore, this study aims to address this gap in the literature by exploring physician perceptions of the DRG and the impact of this reimbursement model on the clinical autonomy of physicians.

CHAPTER 4

PHYSICIAN PERCEPTIONS OF DIAGNOSIS-RELATED GROUPS (DRGS) AND THE IMPACT OF DRGS ON PERCEIVED CLINICAL AUTONOMY

This chapter explores physician perceptions of the introduction of new remuneration models in healthcare provision, particularly DRGs, and their impact on physicians' perceived clinical autonomy in the Turkish case. The study relies on 14 semi-structured face-to-face in-depth interviews with physicians working at public and private hospitals in Istanbul and Balıkesir. To incorporate differences in medical practices specific to each speciality, physicians from surgical and clinical branches were chosen. The breakdown of specialities of medical doctors included in this study is as follows: five paediatricians, three oncologists, two internists, two general surgeons, and two obstetricians. This chapter offers a thematic analysis of interviews transcribed verbatim. Four major themes emerged from the analysis: physicians' definition of their clinical autonomy, financial implications of the DRG, medical implications of the DRG, and physicians' strategies of navigating the DRG regulations.

4.1 Physicians' definition of their clinical autonomy

With respect to clinical autonomy, I asked physicians about their definition of the concept, and then, if they find clinical autonomy an important value in practising medicine. While a few physicians stated that they had no idea about the meaning of clinical autonomy, most expressed interesting opinions. Regardless of how they defined clinical autonomy, with the exception of a few, they emphasized the importance they attach to the protection of their clinical autonomy.

Physicians stated a number of problems, mostly related to their working conditions, as obstacles to their clinical autonomy. These included but were not limited to long working hours, on-call duties, and working as an "employee" at public/private institutions. For example:

> Clinical autonomy does not apply to the current employment system. Working conditions are not completely determined by physicians, rather they are imposed upon us. Physicians work overtime. They cannot spend enough time with their families, and are not socially independent because of night shifts and on-call duties.
> (Obstetrician 1, public)

> I conceptualize the clinical autonomy as being independent in decisions related to diagnosis and treatment procedures, but we are not independent anymore since we don't work at [our own] private clinics. The state sets the maximum examination period [per patient], which is limited. The medical tests you can ask for, the treatment procedures are limited. The medicine you prescribe is limited or is not reimbursed by the state.
> (Paediatrician 2, public)

Working as employees at public/private institutions, the overwhelming majority of physicians in Turkey today are financially dependent on their employers in terms of reimbursement and remuneration. As the two quotations above show, some physicians consider these working conditions, which are set by their employers, as obstacles to their clinical autonomy.

In Turkey, the remuneration of physicians depends partly on hospital budgets due to the performance-based payment system. The DRG, which is not directly related to physician remuneration, has an impact on hospital budgets. Its impact on hospital budgets makes it indirectly yet significantly influential in physician remuneration. Regarding the connection between remuneration and reimbursement models, some physicians consider these financial dependencies as restrictions on their clinical autonomy, and they conceptualize their clinical autonomy in terms of

independence from these financial concerns. For instance, some physicians stated as follows:

> It [clinical autonomy] is planning the most suitable treatment procedures both for the physician and the patient without any outside pressure – like not thinking about whether the treatment will be reimbursed by the SSI or not – without disregarding the financial situation of the country, of course.
> (Oncologist 1, public)

> No physician would normally want the DRG. But in this healthcare system, given the current situation of physician wages [implying that wages are low], when they (the state, hospital managers) tell physicians "we will pay you more but you have to work according to the DRG", the clinical autonomy of physicians is directly limited.
> (Paediatrician 2, public)

> After all, the SSI is one of the financial regulators. If the regulator says that "I introduce some limitations to the medications you prescribe, and I only reimburse them if you follow these rules.", you have to follow these rules in your medical practice.
> (Paediatrician 1, public)

Physicians associate the reimbursement regulations of the DRG, which determine the extent and content of physicians' use of diagnosis and treatments, and the performance-based payment system, and see them as one composite system. They consider this system as a direct limitation upon their clinical autonomy.

With respect to the impacts of the financial regulations on the clinical autonomy, an internalist and a paediatrician stated restrictions in their clinical autonomy because of limitations on the reimbursement of medications and medical examinations, and problems in the purchase of medical devices and equipment. An internist suggested that these limitations intensify over time because of the worsening economic conditions of the country.

> There are limitations in the reimbursement of some medications and medical tests – especially in medications. About this issue, how can I say, I think that our autonomy has been taken away. This issue intensified with the recent exchange rates.

(Internist 1, public)

> When you start to think in detail, I mean when you encounter these issues, you feel restrictions. Inability to purchase a medical device, inability to provide a medical service, and our inability to use all of our competence demotivate us, of course. Especially in a subspecialty such as neonatal care with invasive procedures, the issues which interrupt my interventions like non-supply of the equipment I use, or non-supply of good quality, new technology equipment occur as a source of demotivation for me. This situation makes me very sad since I have the competence to provide these services, but I confront difficulties in providing them.
> (Paediatrician 1, public)

While the provision of medical services is regulated by the DRG, they are also influenced by the country's economic conditions. The internist argues that the restrictions on reimbursement of medications has worsened because of the decreasing value of Turkish lira. In addition, the inability to purchase new technology medical devices and equipment limits physicians' abilities, and this situation demotivates some physicians. The paediatrician perceived the budget restrictions as limitations on his capability to provide good-quality health care services.

Physicians consider financial independence as a core component of their clinical autonomy. One paediatrician attributes the requirement of financial independence to medicine's artisanal character.

> Medicine is an art, and the limitations on it are disturbing. It is disturbing that this art is measured with the performance-based payment system.
> (Paediatrician 2, public)

Sharing the opinion mentioned above, a general surgeon also suggests that the artisanal character of medicine requires clinical autonomy.

> You can do small manipulations even in surgery techniques because through time and increased experience, you acquire the more practical and the less

> painless methods to guarantee the patients' fastest recovery. If you believe in the effectiveness of these methods, and it is you who will assess the outcomes, of course… I find the clinical autonomy important in that sense. (General surgeon 2, private)

The paediatrician and the general surgeon quoted above argue that the medical practice has an artisanal character, and the artisanal expertise flourishes through practice. However, physicians argue, the current external limitations imposed upon the medical practice contradict the medicine's artisanal character.

In addition to medicine's artisanal character, the scientific basis of medical practice is another notion that physicians refer to in explaining their understanding of clinical autonomy. Some physicians, for example, determine the extent of clinical autonomy with reference to their ability to apply scientific knowledge without being limited by managerial pressures.

> I understand clinical autonomy as independence from external factors such as political or managerial pressures, as doing your job in accordance with science. It is also having the necessary assistance from the political and/or managerial authorities to facilitate our job.
> (Internist 1, public)

> You have to work without any pressure in order to use your [scientific] knowledge appropriately. I mean, there might be some pressures if your opinions and those of the managers' conflict; otherwise, medicine is an autonomous profession. Of course, we can always consult our superiors—when I say superiors, I mean our professors—other than that, medicine is a profession without any external pressure.
> (Paediatrician 5, private)

As these quotations demonstrate, political and managerial pressures are considered as hindrances to the practice of medicine in accordance with its scientific basis. The paediatrician quoted above, for example, notes that it is acceptable to consult their professors only when it is necessary. Other than that, all forms of authority might interrupt the appropriate usage of medical knowledge.

Finally, some physicians associate clinical autonomy with the protection of patients' confidentiality by referring to the emerging threats originating from recent technological developments and the collection of patients' health data by relevant authorities.

> When we examine a patient, we learn all about their personal information. It is obligatory not to share any of this information with other people. The concept of clinical autonomy first reminds me of this issue, and it is important. In the last few years, the Ministry of Health has been collecting the data of patients, and have access to all of them. I think it is not the right thing, it is very inappropriate.
> (Oncologist 3, private)

> There has to be clinical autonomy for the patient and for myself. The diagnoses and treatments must be confidential. If not, I don't think that we are autonomous in our working conditions. Because we record all the information to software programmes, many people can easily access this data.
> (Paediatrician 4, private)

These physicians mentioned the collection of patients' health data such as diagnoses, medical tests, treatments through health information software programmes by various non-clinical authorities, and they raised concerns about potential breaches of patients' privacy. Thus, the confidentiality between themselves and the patients also appears to be important to the physicians' definition of clinical autonomy.

4.2 Financial implications of the DRG

Hospital reimbursement models have financial implications for both hospitals and physicians. In order to understand the implications of the DRG for physicians in Turkey, I asked physicians about whether the DRG has any impact on them financially, and if so, what those impacts are.

The answers of physicians reflect a high degree of financial awareness among them about the costs of medical interventions and hospital budgets. Physicians who work at public hospitals narrated stories of cost-benefit calculations, and their efforts to meet the needs of patients while remaining within the hospital budget. Therefore, the narratives of some physicians reflect an optimization effort as part of their daily work after the introduction of the DRG, and emphasize the substantial impact of the SSI regulations. Most physicians who complain about the financial impact of hospital reimbursement model criticize low amounts of reimbursement, and emphasize how these low reimbursement amounts negatively affect hospital budgets.

> Simply put, if the SSI reimburse 25 liras for a patient, this cost might increase up to 50 liras when you demand a medical test. This causes a loss of 25 liras from the hospital's budget.
> (Paediatrician 3, public)

> The reimbursement amounts applied by the SSI through the DRG and the HIS have not been updated since 2007. The SSI does not take the responsibility for hospital expenditures by saying things like "If you do this medical intervention, I cannot reimburse it at all/at this hospital." Despite all of their efforts and high workload, physicians cannot get the worth of their labour, because the reimbursement amounts [for hospital services] are very low. The SSI definitely exploits physicians.
> (Obstetrician 1, public)

> The SSI reimburses 21 liras for a patient, maybe even less. Let's say that you consult me for menstrual irregularities. I would normally demand 6-7 hormonal tests, which cost approximately 14 liras per test. The total sum comes to 100 liras. We invoice the SSI 21 liras for this diagnosis. So, the hospital begins to lose money, and face imbalance of income and expenditures. This situation affects our financial situation as physicians. But can you say that "I won't demand these medical tests for that patient"? No, you can't.
> (Obstetrician 1, public)

According to the physicians quoted above, low reimbursement amounts of the SSI affect physician incomes as it limits hospital budgets. Limited hospital budgets, as mentioned by Obstetrician 1, leads to lower remuneration for physicians through the

performance-based payment system. Because of the low reimbursement amounts of the SSI for hospital services, hospitals have to cover additional expenditures from their own budget assigned to them by the MoH from the global budget. As a result, the loss of money in hospitals' budget causes reductions in physicians' performance payments. A paediatrician argues that hospital managers demand that physicians follow the regulations of the DRG by emphasizing potential losses in performance payments.

> Previous chief physicians were telling us that, for instance, an internist demanded x number of medical tests, but another physician demanded fewer medical tests than this internist. The physician who demands fewer medical tests is considered more successful because s/he reduces the hospital's expenditures.
> (Paediatrician 3, public)

> I don't feel any financial pressure on myself. The hospital has a limit, you can exceed it, but you shouldn't. The more expenditures you cause, the less performance payments you get. Regarding physician wages, I am not sure that is there any physician who wants to have less income. This is another question, of course. Since physicians generally want to get their rights, they sometimes consider demanding fewer medical tests in order to get more performance payments. Of course, this situation causes financial pressure.
> (Paediatrician 3, public)

As the quotations above show, some physicians confront a financial dilemma in their medical practice. While they are obligated to provide the necessary medical service to their patients based on their scientific knowledge and artisanal insights, they have to follow the DRG regulations in order to stay in the hospital budget and receive better performance payments. In other words, physicians are squeezed between two conflicting pressures: practising good medicine and getting better pay by protecting the hospital's financial interests.

While Paediatrician 3 mentioned about hospital managers' warnings for physicians to reduce the number medical tests in order to stay within the budget, an

oncologist stated that he does not confront this type of warnings due to the nature of his speciality, and relatively high amounts of the SSI reimbursements for oncological interventions.

> As a medical oncologist, I don't feel any financial pressure. The reason is, to be fair, medical oncology provides significant profits both for public and private hospitals. Therefore, the management does not put any pressure on us like "Do not demand these tests, do not do these interventions." Because first of all, medical oncology deals with a malignant disease, and second, the medications we prescribe are extremely costly. A PET/CT test we demand for a patient—it is one of the costliest medical tests right now—costs 1200 TL, but a medicine I give to a patient for 15 days costs the state 4000-5000 liras . For that reason, we do not confront any managerial pressure for medical tests. (Oncologist 1, public)

Dealing with a malignant disease with high medical costs, this oncologist stated that he face any financial pressure, unlike his colleagues. In fact, the relative generosity of the DRG reimbursement for oncology services exempts this speciality from the negative financial implications of the DRG model. Hence, the extent of the SSI reimbursement amounts regulated by the DRG clearly shapes how different specialities experience the financial impacts of the DRG.

The standardization of reimbursement amounts for each diagnosis and treatment for a particular disease causes financial issues when a complication occurs for a patient. Two physicians who work at different types of hospitals mention this issue as follows:

> Let's say that a complication develops. Normally, you have to hospitalize patients who have had a C-section for 2 days, and normal deliveries for 24 hours. The package reimburses it. However, a patient with a complication might be hospitalized for a week. This is when a problem occurs. In the final analysis, I think that the DRG is not a good thing.
> (Obstetrician 2, private)

> You cannot apply the DRG packages to every patient. There are patients with serious issues or complications. The reimbursement package of a patient with diabetes, hypertension or cardiovascular disease cannot treated in the same

> way as a regular patient. These issues have to be regulated, and it is outside of my control.
> (General surgeon 1, public)

Especially surgical specialities have a higher risk of complications, and sometimes, they have to operate on patients with multiple health conditions. In these cases, the SSI reimburses the standardized amount, but the patient requires additional medical care, so expenditures accrue to the hospital. These cases exacerbate the dilemma that physicians face: practising good medicine and getting better paid by protecting the hospital's financial interests. Despite the different types of hospitals they work at, both surgeons confront this dilemma in their medical practice, and they raise concerns about the standardization of reimbursement amounts for these patients in the DRG model.

A paediatrician mentioned the recent managerial roles assigned to physicians, and argued that the meaning of the DRG could be analysed through the lens of different responsibilities of physicians—their medical and managerial responsibilities.

> The impact of the DRG has two dimensions—positive and negative. First, I argue that it has positive impacts on the medical profession. Why? The DRG is not a new policy in Turkey; it is very common for the neonatal department. The DRG means that the medical tests, diagnoses, treatments you apply for a patient is paid at a single rate. As a physician, you don't have any concern about the reimbursement. But this only applies to the medical profession. If you think about the financial responsibilities of a physician in the context of managerialism, it has a negative impact. If the medical procedures you practice cost 1,000 liras, and the reimbursement amount is 800 liras, the work you do does not make a profit, but leads to loss of money. It might seem like it is only for the hospital's loss, but in the long term, it also affects your income through performance payments.
> (Paediatrician 1, public)

The financial pressures that emerged with the introduction of the DRG are common to physicians working at public hospitals. Nevertheless, some physicians working at

private hospitals stated that they do not confront any financial pressures related to the DRG.

> Generally speaking, the medical interventions and treatments we make are quite costly. So, some financial cuts introduced by the SSI do not affect us. We can get all of the procedures reimbursed [due to the relatively higher reimbursement rates for oncological services], so we don't confront any trouble like other departments.
> (Oncologist 2, private)

Like Oncologist 1, Oncologist 2 attributed the non-existence of financial pressures to the nature of their speciality, and the wide extent of the reimbursement package of the SSI for oncological services. Since the SSI covers almost all of the expenditures for oncological interventions, oncologists working at public and private hospitals do not usually confront any negative financial impact of the DRG on their medical practice. However, an obstetrician employed in a private hospital stated that the DRG and reimbursement rates of the SSI have negative financial implications.

> For instance, let's say I did a C-section, and the patient suffered a haemorrhage. I am not in a situation to wait for a blood count test. I would demand two or three units of blood. It has a cost for the hospital, but the SSI does not reimburse it. As far as I know, the HIS prices are the same as those from 9 years ago. The SSI reimburses the same amount as they did 9 years ago. If you transfuse blood to the patient, you unwillingly have to charge the patient. It is said, "Blood cannot be sold." But it has a cost for the hospital. This is a private hospital, not a public institution.
> (Obstetrician 2, private)

As stated by Obstetrician 2 above, the financial implications of the DRG can also be observed at private hospitals with a SSI contract, even for vital needs such as blood transfusions. Working at a for-profit provider, the obstetrician felt the need to consider the financial situation of the hospital in his daily medical practice. Hence, even though the obstetrician does not have any managerial responsibilities, he has internalized cost considerations in his daily medical practice. In another interview,

however, a paediatrician working at a private hospital stated that she does not feel any financial pressure caused by the DRG, because at private hospitals, the medical procedures additional to the DRG packages can be covered through out-of-pocket payments.

> Maybe it is related to my speciality, but I don't feel any financial pressure. There is no such thing as the state does not reimburse any medication. If a private insurer does not cover medications and treatments which are necessary for a child, they must be conducted under the authorization of the parents.
> (Paediatrician 5, private)

The statements of physicians demonstrate that the experiences of the financial impacts of the DRG vary across specialities. The content of the reimbursement packages for specific health conditions appears as a determinant in these different experiences of the DRG between physicians. Additionally, while few physicians internalize cost considerations, most express the conflicting pressures of cost considerations and practising good medicine because of the current reimbursement model.

4.3 Medical implications of the DRG

To examine the medical implications of the DRG, I asked physicians if and how the DRG affects their medical practice. The responses of some demonstrate that the budget constraints caused by the DRG have some negative impacts on the medical service provision. Physicians argue that the DRG at times puts limitations on the reimbursement of medications and medical examinations, and the purchase of medical devices and equipment. The reimbursement of medical tests is one of the shared concerns of physicians.

> For instance, we have problems when we demand medical tests. You have to wait for a specific period before repeating a medical test. Also, some medical tests can only be demanded by specific specialities.
> (Paediatrics 2, public)

As this quotation shows, physicians are obligated to follow several DRG regulations in order to conduct medical tests. Paediatrician 2 considered time and speciality restrictions negative influences on her medical practice.

A paediatrician who had recently retired from a public provider and currently works at a private hospital mentioned that the SSI reimbursement of some medications requires specific diagnoses. He referred to his experience at the public hospital to explained this point:

> We confront difficulties in some medications, which are not reimbursed. Additionally, some medications require specific diagnoses to be reimbursed.
> (Paediatrics 4, private)

Similar to the varied financial implications of the DRG across specialities, the medical implications also differ. Physicians with specialities such as oncology, the services of which are relatively reimbursed more comprehensively and generously, do not report any negative implication of the DRG on their medical practice.

> In the medical oncology speciality, there is not a clear-cut DRG package. When I diagnose a patient with cancer, I can order whatever medical test or radiological test I want. I don't experience any restriction currently, but when I was an internist, I wasn't able to order some medical tests because of the DRG.
> (Oncologist 1, public)

While Oncologist 1 mentions that he currently does not confront any reimbursement restriction, he refers to his experience as an internist when he confronted limitations on his medical practice due to the DRG. Finally, he emphasized the significance of a

physician's competence in the DRG reimbursement model. He suggested that the DRG's limiting the medical tests for a specific diagnosis might lead to misdiagnosis.

> If a physician thinks that the medical tests reimbursed by the DRG are sufficient for the diagnosis, it is fine. However, if a physician is not competent enough, he might not foresee the insufficiency of the medical tests reimbursed by the DRG, and might misdiagnose a patient. He might say that "I ordered these medical tests for the patient, the state reimburses these, and the patient does not have any additional symptoms" and therefore miss out some issues. For instance, a patient with abdominal pain might be diagnosed with urethritis after the conduction of blood tests. However, the cause of the symptoms might be a tumour. Since the DRG does not cover USG for urethritis, the patient might be misdiagnosed.
> (Oncology 1, public)

Oncologist 1 raises an important concern about the potential negative impact of the physicians' unquestioned reliance on regulations of the DRG on the practice of medicine. He is worried that the DRG regulations might induce a feeling of professional sufficiency to physicians about the medical tests and interventions they perform. He argues that this feeling of comfort originating from compliance with the regulations might cause a physician to overlook of a symptom, leading to a misdiagnosis.

4.4 Physicians' strategies of navigating the DRG regulations

The previous sections of this chapter demonstrate that physicians confront financial restrictions imposed by the DRG and that these sometimes have an effect on both medical practice and their remuneration. Most physicians interviewed in this study do not willingly accept the DRG model or feel comfortable in practising medicine in such institutional context. Therefore, in order to understand how they deal with these restrictions, I asked them what they do when the medical procedures they think they have to follow do not overlap with the DRG regulations. As a result, I found that

physicians adopted several strategies—both formal and informal—in order to provide the necessary medical services to patients.

A general surgeon working at a public hospital, for example, stated that he asks patients to buy additional equipment in the cases when the SSI does not cover the equipment he thinks are required.

> Let's say I perform a mastectomy, but I can't use silicone implants. I make them [the patients] buy a special mastectomy bra instead.
> (General surgeon 1, public)

Patients, however, may not always be able to compensate for the DRG limitations due to their own financial difficulties. When patients cannot afford co-payments in private hospitals, for example, physicians in private hospitals interviewed in this study suggested that they sometimes recommend them to perform medical tests and/or medical procedures at other health care providers such as lower-priced private hospitals or public hospitals. Three examples of this strategy is as follows:

> I prepared a list of the medical tests which needed to be conducted—hospital managers do not know about this. I say to the patients, "Take this list, go to a primary health care centre and bring me the results." In fact, you know that at private hospitals, some procedures such as laboratories work on premiums.
> (Obstetrician 2, private)

> The patient is not obligated to have all the medical tests conducted here. People who do not want to have them in here can go to a public hospital or their family physician, and bring me the results.
> (Internist 2, private)

> You try to perform the most necessary procedures for the patient in here, but if you can't conduct them here, you recommend the patients' relatives to go to a public hospital or to a research and training hospital [one type of public hospital]. Because you are tied hand and foot in here.
> (Paediatrician 5, private)

Physicians working at private hospitals generally have the chance to direct the patients to public health care institutions and/or to recommend them to cover the

additional expenses and thus rely on these formal strategies to bypass the DRG regulations. However, in public hospitals, neither the reimbursement regulations introduced by the SSI nor the patient profile leaves space for employing these formal alternative ways. Hence, physicians sometimes resort to informal strategies such as manipulating the existing reimbursement regulations in order to provide the health care services they consider as essential for the patients. One of the informal strategies commonly mentioned by physicians interviewed in this study is registering outpatients as inpatients.

> For instance, when we examine a patient, the SSI pays a small amount of money to the hospital. But the medical tests we demand exceed the package price by five or six times. What do we do in these cases; we hospitalize the patients for one day [implying registering the patients as inpatients rather than actually hospitalizing the patient], and charge the SSI. But this is not legal. (Obstetrician 1, public)

> Regarding the diagnosis, hemodialysis service sometimes has difficulties ordering medical tests. But we have clinical guidelines which determine them. Honestly, we try to overcome these issues through daily hospitalization of patients or demanding additional consultations.
> (Internist 1, public)

As these quotations demonstrate, when physicians want to demand a high number of medical tests that exceeds the DRG package, some physicians register outpatients as inpatients in order to receive the necessary reimbursement from the SSI. Thus, they get these done and reimbursed by the SSI instead of causing a loss of money for the hospital.

Employing informal strategies by bypassing the DRG regulations requires extensive knowledge of the reimbursement regulations of the SSI. For instance, the SSI reimburses all the expenses for emergency patients. A physician mentioned a colleague who directs patients to the ER in order to get all the medical tests reimbursed by the SSI.

> For instance, at the cardiology department, when the medical tests exceed the package, the cardiologist directs the patient to the ER. The SSI fully reimburses the expenses of the patient who consults to the ER.
> (Paediatrician 3, public)

Another "alternative" way, as defined by one physician, is to make changes in patients' health data in their registration in the health information software programmes. In this way, physicians get the medical required procedures covered by the SSI. One example to this strategy is as follows:

> The SSI determines the reimbursement amounts, but we might use some alternative ways when we consider the patients' benefit. For example, the SSI reimburses Medication A before a specific pregnancy week, but sometimes, you might confront situations like a patient is beyond this specific week just for a few days or a week. If you write this information exactly, the SSI doesn't reimburse it. But you know that the patient has to take this medication for her health. As a consequence, we, as a physician, change the patient's health information to benefit her. This practice exists everywhere in the world.
> (Paediatrician 1, public)

When the DRG regulations interrupt the reimbursement of a medication for a patient in need, as the example demonstrates, changing patient's health data in accordance with the DRG regulations appears as a valid strategy, as mentioned by Paediatrician 1.

4.5 Conclusion

To improve efficiency and cost containment in the healthcare provision, the DRG model was incorporated into Turkey's healthcare system. The DRG model aims to deliver on these promises through the standardization of reimbursement amounts for particular patient types based on diagnoses. This chapter explored how physicians in Turkey experience the DRG in their medical practice with a focus on their clinical autonomy. Four themes emerged from the analysis of the interview data: physicians'

definition of their clinical autonomy, financial implications of the DRG, medical implications of the DRG, and physicians' strategies for navigating the DRG regulations.

To begin with, physicians have diverse understandings of clinical autonomy. Most physicians associate clinical autonomy with their working conditions. They argue that their clinical autonomy is non-existent since their work environment, work schedule and shifts are managed by authorities such as hospital managers and the MoH. In addition, some physicians underlined financial concerns related to their remuneration and the reimbursement of healthcare services as factors that limit their clinical autonomy. These physicians' emphasis on the importance of working without managerial and financial pressures reveals two issues: the artisanal character of the medical practice and the scientific basis of medicine. While some defined clinical autonomy based on medicine's artisanal character, others emphasized the potential conflicts between the managerial and financial requirements and good medical practice based on scientific knowledge. The protection of patients' confidentiality in the context of the increasing reliance on health data software programmes also emerged as a concern related to clinical autonomy.

The major finding of this study, with respect to the financial implications of the DRG, is that the practice of medicine has been transformed into an optimization process for physicians in which they are obligated to balance patients' health care needs and financial issues such as hospital budget and their performance payments through continuous cost-benefit calculations. While the DRG model is a reimbursement model, it also operates as a remuneration model for physicians due to its link to the hospital budget that determines performance payments for physicians. This situation causes concerns among physicians about the conflicting values of

medical practice and the financial sustainability of the healthcare system or cost considerations of providers. While most physicians expressed criticisms of the intrusion of financial concerns into their medical practice, few physicians internalized these concerns to adopt a managerial attitude as part of their job. Hence, new managerial practices are increasingly becoming an inherent part of everyday medical practice. Another major finding of this study is that the financial implications of the DRG vary across specialities. This variance originates mainly from the particular design of the DRG model in the Turkish healthcare system, which created cost control exemptions for specific speciality services such as oncology and emergency services.

With respect to the medical implications of the DRG, physicians are concerned about the negative impacts of the reimbursement regulations on practising medicine. The reimbursement regulations on medications and medical tests are seen at times as limiting good medical practice. Additionally, because of the strong connection between following the DRG regulations and sustaining the hospital budget, physicians noted that they sometimes face problems in the purchase of new technological devices and high-quality equipment, which hinders their ability to use all competences. However, similar to the financial implications of the DRG, the medical implications of the DRG differ across specialities. Specialitie, which have comprehensive coverage for their services in the reimbursement regulations do not report any significant medical effects. For instance, the oncology department, dealing with a malignant disease with high health care expenditures, is an exception in the current DRG system and it has an extensive reimbursement package.

To navigate the DRG regulations, physicians adopted several strategies to compensate for these restrictions and to establish an autonomous space for their

medical practice. The strategies of physicians differ according to the type of hospital they work in. While physicians working at private hospitals adopt formal strategies such as demanding that patients cover additional expenses and/or recommending them to apply public health institutions, physicians working at public hospitals use informal strategies to bypass the DRG regulations in order to practice good medicine. These physicians mentioned strategies such as registering outpatients as inpatients, referring non-emergency patients to the emergency services, and making small changes in patients' health data to allow more room for out-of-package medical tests and treatments. They justify the informal strategies by addressing medical ethics and patients' benefit. Therefore, despite the strict regulations of the DRG, physicians find ways to create a space of agency for themselves through a number of formal and informal strategies.

CHAPTER 5

CONCLUSION

This thesis addresses the following research question: “How do medical doctors perceive the impact of the Health Transformation Programme and more particularly of the introduction of the DRG on their clinical autonomy?” For this purpose, 14 semi-structured face-to-face interviews were conducted with physicians working at public and private hospitals. Physicians from different specialities were chosen in order to incorporate the differences in the medical practices specific to each speciality and the variety of reimbursement schemes as they apply to different specialist services. This study addresses the gap in the literature on health care policies in Turkey by offering a deeper understanding of physician conceptualization of the clinical autonomy and physician perceptions of the reimbursement regulations after the 2003 reform.

The narratives of physicians imply that clinical autonomy stands out as an important value for physicians, which they perceive as sine qua non for appropriately performing their profession. As the literature suggests, some physicians perceive that the standardization of clinical practice (Timmermans, 2005), and increases in administrative control over their medical practice caused by the DRG regulations (Lewis et al., 2003; McKinlay & Arches, 1985) has diminished their clinical autonomy. With respect to the concerns of some physicians, the performance-based payment system and the DRG stand out as control mechanisms over physicians’ work which undermine the clinical autonomy and the artisanal character of the medical profession. This study demonstrates that physicians would like to perform their profession in line with scientific criteria without being restricted by

reimbursement and performance assessment mechanisms. This finding confirms the previous research with Chilean physicians (Lemp & Calvo, 2012).

The fieldwork shows that all physicians oppose the accountability demands of managerial authorities in order to perform the best medical practice, but they do not equally experience accountability demands in their daily work. While some physicians have complaints about their managers' demands that interfere with the medical responsibilities, others do not confront this issue. Therefore, my findings are in line with the studies of Warren et al. (1998) and Lewis et al. (2003), which show that the accountability demands of managerial authorities cause concern and dissatisfaction among physicians about their work. In addition, some physicians I interviewed perceive the accountability demands of managerial authorities as negative indicators on their clinical autonomy. This finding is in contrast with the study of Exworthy et al. (2003), who state that the performance indicators which diminish trust in managerial authorities do not result in the erosion of clinical autonomy. My findings are consistent with the study of Deom et al. (2010), who demonstrate that the DRG causes concerns among physicians about clinical autonomy, and the quality of health care provision.

With respect to the financial implications of the DRG, the findings of this study indicate that the reliance on the DRG transformed the medical practice into a process of optimization for some physicians, especially for those working in public hospitals. This optimization process includes balancing the financial concerns of hospital budgets (and performance payments for physicians) and the medical needs of patients. This situation causes an ethical dilemma for physicians in their daily work practices. While physicians are ethically obligated to provide the necessary care to patients in light of the scientific knowledge they have, with the new

reimbursement model they are also expected to conform to the DRG model and protect hospital budgets. For physicians in public hospitals, the fiscal sustainability of hospitals is essential in order to secure further provision of health care services and for them to receive performance-based payments that top up their flat-rate salaries.

The DRG standardizes reimbursements to hospitals by categorizating patients based on diagnosis, treatment, and length of stay. This study highlights some experiences on the problems of this standardization process in cases of complications and patients with multiple health conditions, as previous studies have demonstrated (Lemp & Calvo, 2012; Leu et al., 2018). Some physicians in my study share concerns about limited reimbursement amounts of the DRG when a patient with multiple health conditions is admitted and/or a complication occurs, which places a financial burden on the hospital budget. In addition, some physicians complain about the reimbursement amounts determined by the SSI, arguing that low reimbursement amounts create a financial burden. The problem of low reimbursement amounts was expressed by private hospital managers in the study of Yilmaz (2017, p. 223). I argue that the emphasis of physicians on the low reimbursement amounts also demonstrates that physicians have become aware of the incomes and expenses of the hospitals they work for and poses an interesting case of the internalization of the financial pressures they face.

Physicians working at public hospitals raised concerns about financial losses in hospital budgets because of exceeding the DRG amounts to provide necessary care to patients. However, they did not mention premature discharge of patients because of the DRG regulations, which has been documented in some studies (Annear et al.,

2018; Kroneman & Nagy, 2001). I did not encounter any evidence on the "revolving door" effect such as what is seen in the USA (Blank, 1997, p. 142).

While my findings do not reveal any sign of premature discharge and/or revolving door effect, limited reimbursement of medications and medical tests stand out as important concerns for some physicians, especially for those working at public hospitals. Inability to provide adequate care as envisaged by physicians has been the subject of extensive research (e.g. Freeman et al., 1999; Hurst et al., 2005; Lemp & Calvo, 2012; Leu et al., 2018; Wynia et al., 2000). In addition to these findings, I also explore whether some physicians problematize the limited purchase of new technology medical devices and equipment because of the financial constraints in hospital budgets caused by the DRG regulations.

Another key finding of this study is that physicians perceptions of the DRG vary according to their speciality. For instance, physicians with specialities such as oncology, the services of which are relatively reimbursed more comprehensively and generously in the current benefits package, do not report any negative implication of the DRG on their medical practice. This finding emphasizes that the extent of the benefit packages and reimbursement levels stands out as a determining factor in physician perceptions of and experiences with the DRG model.

Finally, my findings demonstrate that some physicians in Turkey manipulate the reimbursement regulations in order to provide the necessary care to patients and/or to increase the reimbursement amounts by adopting formal and informal strategies. While formal strategies are generally preferred by private hospital physicians such as referring the patient to a public hospital, informal strategies are used by public hospital physicians who do not have any regulatory space to adopt formal mechanisms. The strategies of physicians to navigate the DRG model while

protecting and practising their clinical autonomy is conceptualized as "gaming the system" (Morreim, 1991). In addition to the strategies listed in the literature, I find that some physicians in Turkey use the following mechanisms: (1) registering outpatients as inpatients and (2) directing the patients to the ER. Thus, this study also contributes to the "gaming the system" literature by exploring new physician strategies.

To conclude, this study offers evidence on the erosion of the clinical autonomy of physicians with the introduction of the DRG in Turkey in the eyes of physicians. I argue that the analysis of physician narratives about their clinical practice after the DRG implies that the definition of good medical practice is now open to discussion. Previously defined as skilled artisanship, the medical practice might be now defined as an optimization process between the medical needs of patients and financial pressures. Therefore, contemporary medical practice in Turkey involves an ethical dilemma. The findings indicate that some physicians sometimes feel obligated to prioritize the financial sustainability of the institutions they work at over the medical needs of patients. In the DRG model, physicians sometimes see this prioritization as necessary in order to provide health care services for future patients. Nevertheless, given the limitations of this study, more research is needed to delve further into the current understanding of medical practice from physicians' perspectives.

This study shows that almost all physicians adopt strategies to manipulate the DRG regulations in order to provide the needed care to patients. Informal mechanisms were adopted by most of the physicians who work at public hospitals, and they justify these strategies by referring to medical ethics and patients' needs. The outcome of this research highlights the significance of physician agency

considering the increasing managed care environment and technological optimization processes through automation. Physicians often adopt these strategies considering medical ethics and the humane values that lie at the foundation of medicine. This study thus provides insight to the importance of studying physicians' clinical autonomy in the era of increasing automation.

This study also indicates that the DRG model may require reform, especially to provide exceptions for patients with multiple diseases and/or complications. There was a consensus among physicians that the current reimbursement amounts have to be increased. Finally, physician participation in health care policymaking, implementation and evaluation is a key to increasing their motivation for the provision of good quality health care services and self-perception of their profession.

This qualitative study was conducted with 14 physicians with different specialities and working in both public and private hospitals. It contributes to the literature by exploring physician perceptions of the DRG regulations in Turkey. However, the findings cannot be generalized to the general physician population in Turkey. Further research with a representative sampling could be conducted in order to understand broader patterns in physician perceptions of the reimbursement regulations in Turkey. However, such quantitative research would not be appropriate for exploring the in-depth perceptions of physicians about the DRG regulations and especially their narratives about informal strategies, which forms the strength of this research and increases its contribution to the literature.

APPENDIX A

SEMI-STRUCTURED INTERVIEW QUESTIONS

A.1 Physicians Working at Public Hospitals

1. How long do you work as a physician? Since when do you work at this hospital?

2. What does the concept of clinical autonomy connotate you?

3. Do you find the protection of physicians' clinical autonomy important? (If yes or no) Why?

4. Do you think that policies of health care financing institutions (i.e. Social Security Institution or private insurers) which regulate the decision-making process of physicians affect your clinical autonomy? (If yes or no) Why?

5. As you know, hospital reimbursement by Social Security Institution has been standardized through the diagnosis-related groups, and reimbursement amounts are determined by the global budget. Did your clinical practice change with the introduction of the DRG? (If yes) Could you mention about these changes?

6. Do you think that your treatment options are reduced limited with the introduction of this regulation? (If yes) From which perspective do you feel like your options are reduced or limited? Could you please provide examples by comparing the period before the introduction of the DRG?

7. In the medical profession, your opportunity to make accurate decisions for the well-being of patients is important for the success of the treatment. Do you feel yourself as free to make the right decisions for the patients after the introduction of the DRG? As a physicians, is your freedom to make clinical decisions

restricted? (If yes or no) Could you please provide any example from your daily work routine?

8. Do you feel any financial restriction on your daily work routine caused by the determination of hospital budget earlier and your obligation of not to exceed this budget?

9. Does hospital management take any measure to keep physicians within the hospital budget? (If yes) What are these measures? Are they binding for you? How do you assess these measures regarding your clinical autonomy?

10. How do you act when the medical measures you have to take for the well-being of patient do not match with the DRG? Could you give any example?

A.2 Physicians Working at Private Hospitals

1. How long do you work as a physician? Since when do you work at this hospital?

2. What does the concept of clinical autonomy connotate you?

3. Do you find the protection of physicians' clinical autonomy important? (If yes or no) Why?

4. Do you think that policies of health care financing institutions (i.e. Social Security Institution or private insurers) which regulate the decision-making process of physicians affect your clinical autonomy? (If yes or no) Why?

5. As you know, hospital reimbursement by Social Security Institution has been standardized through the diagnosis-related groups, and reimbursement amounts are determined by the global budget. Did your clinical practice change with the introduction of the DRG? (If yes) Could you mention about these changes?

5. As you know, hospital reimbursement by Social Security Institution has been standardized through the diagnosis-related groups, and reimbursement amounts

are determined by the global budget. Did your clinical practice change with the introduction of the DRG? (If yes) Could you mention about these changes?

6. Do you think that your treatment options are reduced limited with the introduction of this regulation? (If yes) From which perspective do you feel like your options are reduced or limited? Could you please provide examples by comparing the period before the introduction of the DRG?

7. In the medical profession, your opportunity to make accurate decisions for the well-being of patients is important for the success of the treatment. Do you feel yourself as free to make the right decisions for the patients after the introduction of the DRG? As a physicians, is your freedom to make clinical decisions restricted? (If yes or no) Could you please provide any example from your daily work routine?

8. Do you feel any financial pressure on your daily work routine caused by the determination of co-payments by the SSI?

9. Does hospital management has any policy to increase the revenue coming from the patients which affects your clinical autonomy? (If yes) What are these policies? Are they binding for you? How do you assess these policies regarding your clinical autonomy?

10. How do you act when the medical measures you have to take for the well-being of patient do not match with the DRG? Could you give any example?

APPENDIX B

SEMI-STRUCTURED INTERVIEW QUESTIONS (TURKISH)

B.1 Devlet Hastanesi Hekimleri

1. Kaç yıldır hekimlik yapıyorsunuz? Kaç yıldır bu hastanede görev yapıyorsunuz?
2. Hekimlerin tıbbi özerkliği kavramı size neler çağrıştırıyor?
3. Hekimlerin tıbbi özerkliklerinin korunmasını önemli buluyor musunuz? (Cevap evetse ya da hayırsa) Neden?
4. Sağlık hizmetlerini finanse eden kurumların (örneğin Sosyal Güvenlik Kurumu ya da özel sağlık sigortaları) hekimlerin tanı ve tedavi kararlarını şekillendirmeye yönelik uygulamalarının tıbbi özerkliğinizi etkilediğini düşünüyor musunuz? (Cevap evetse ya da hayırsa) Neden?
5. Bildiğiniz gibi Sosyal Güvenlik Kurumu'nun hastanelere yaptıkları geri ödemeler Tanıya Dayalı Fiyat Uygulaması (Paket Program) ile birlikte standartlaştırıldı ve hastanelere yapılan ödemeler global bütçe ile belirlenir oldu. Paket Program uygulamasının hayata geçirilmesi ile birlikte hastalara hizmet sunma biçiminizde ya da sunduğunuz hizmetlerde herhangi bir değişiklik oldu mu? (Cevap evetse) Bu değişikliklerden bahsedebilir misiniz?
6. Bu düzenleme sonucunda hastalara tedavi sunarken seçeneklerinizin azaldığını veya kısıtlandığını hissediyor musunuz? (Cevap evetse) Hangi açılardan seçeneklerinizin azaldığını ya da kısıtlandığını hissediyorsunuz? Paket Program uygulamasının hayata geçirilmesinden öncesi ile kıyaslayarak örnek verebilir misiniz?

7. Hekimlik mesleğinde sizlerin hastaların iyiliği için en doğru kararları verebilmeniz, gerekli tedavileri uygulama imkânınızın olması tedavi başarısı açısından çok önemli. Paket program ile birlikte gelen geri ödeme kuralları sonucunda hastalar için doğru kararları vermekte özgür olduğunuzu düşünüyor musunuz? Bir hekim olarak, tıbbi karar alma özgürlüğünüz kısıtlanıyor mu? (Cevap evetse ya da hayırsa) Gündelik çalışma rutininizden örnek verebilir misiniz?
8. Çalıştığınız hastanenin bütçesinin önceden belli olması ve bu bütçenin dışına çıkmama zorunluluğu nedeniyle gündelik çalışma rutininizde üzerinizde finansal bir baskı hissediyor musunuz?
9. Hastane yönetimi hekimlerin global bütçe uygulamasının içinde hareket etmelerine yönelik herhangi bir önlem alıyor mu? (Cevap evetse) Bu önlemler ne tür önlemler? Bağlayıcılıkları güçlü mü? Bu önlemleri tıbbi özerkliğiniz çerçevesinde nasıl değerlendiriyorsunuz?
10. Tıbbi değerlendirmeniz ışığında hastanın faydasına yapmanız gereken işlem ya da işlemler Paket Program uygulaması ile uyuşmadığı durumda nasıl hareket ediyorsunuz? Örnek verebilir misiniz?
11. Son olarak eklemek istediğiniz bir şey var mı?

B.2 Özel Hastane Hekimleri

1. Kaç yıldır hekimlik yapıyorsunuz? Kaç yıldır bu hastanede görev yapıyorsunuz?
2. Hekimlerin tıbbi özerkliği kavramı size neler çağrıştırıyor?
3. Hekimlerin tıbbi özerkliklerinin korunmasını önemli buluyor musunuz? (Cevap evetse ya da hayırsa) Neden?

4. Sağlık hizmetlerini finanse eden kurumların (örneğin Sosyal Güvenlik Kurumu ya da özel sağlık sigortaları) hekimlerin tanı ve tedavi kararlarını şekillendirmeye yönelik uygulamalarının tıbbi özerkliğinizi etkilediğini düşünüyor musunuz? (Cevap evetse ya da hayırsa) Neden?
5. Bildiğiniz gibi Sosyal Güvenlik Kurumu'nun hastanelere yaptıkları geri ödemeler Tanıya Dayalı Fiyat Uygulaması (Paket Program) ile birlikte standartlaştırıldı ve hastanelere yapılan ödemeler global bütçe ile belirlenir oldu. Paket Program uygulamasının hayata geçirilmesi ile birlikte hastalara hizmet sunma biçiminizde ya da sunduğunuz hizmetlerde herhangi bir değişiklik oldu mu? (Cevap evetse) Bu değişikliklerden bahsedebilir misiniz?
6. Bu düzenleme sonucunda hastalara tedavi sunarken seçeneklerinizin azaldığını veya kısıtlandığını hissediyor musunuz? (Cevap evetse) Hangi açılardan seçeneklerinizin azaldığını ya da kısıtlandığını hissediyorsunuz? Paket Program uygulamasının hayata geçirilmesinden öncesi ile kıyaslayarak örnek verebilir misiniz?
7. Hekimlik mesleğinde sizlerin hastaların iyiliği için en doğru kararları verebilmeniz, gerekli tedavileri uygulama imkânınızın olması tedavi başarısı açısından çok önemli. Paket program ile birlikte gelen geri ödeme kuralları sonucunda hastalar için doğru kararları vermekte özgür olduğunuzu düşünüyor musunuz? Bir hekim olarak, tıbbi karar alma özgürlüğünüz kısıtlanıyor mu? (Cevap evetse ya da hayırsa) Gündelik çalışma rutininizden örnek verebilir misiniz?
8. Hastalara verdiğiniz hizmetlere karşılık alabileceğiniz fark ücretlerinin önceden SGK tarafından belirlenmiş olması nedeniyle gündelik çalışma rutininizde üzerinizde finansal bir baskı hissediyor musunuz?

9. Hastane yönetimi SGK'lı hastalardan elde edilecek gelirin arttırılması için sizin tıbbi özerkliğinizi etkileyen herhangi bir çalışma yapıyor mu? (Cevap evetse) Bunlar nasıl çalışmalar? Bağlayıcılıkları güçlü mü? Bu çalışmaları tıbbi özerkliğiniz çerçevesinde nasıl değerlendiriyorsunuz?
10. Tıbbi değerlendirmeniz ışığında hastanın faydasına yapmanız gereken işlem ya da işlemler Paket Program uygulaması ile uyuşmadığı durumda nasıl hareket ediyorsunuz? Örnek verebilir misiniz?

APPENDIX C

CONSENT FORM (TURKISH)

Araştırmayı destekleyen kurum: Boğaziçi Üniversitesi

Araştırmanın adı: Hekimlerin Gözünden Türkiye'nin Değişen Sağlık Sisteminin Hekimlerin Tıbbi Özerkliklerine Etkileri: Tanıya Dayalı Fiyat Uygulaması Örneği

Proje Yürütücüsü: Dr. Öğretim Üyesi Volkan Yılmaz

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Sayın katılımcı,

Boğaziçi Üniversitesi Sosyal Politika Anabilim Dalı öğretim üyesi Dr. Öğretim Üyesi Volkan Yılmaz ve Sosyal Politika Yüksek Lisans öğrencisi Püren Aktaş tarafından "Hekimlerin Gözünden Türkiye'nin Değişen Sağlık Sisteminin Hekimlerin Tıbbi Özerkliklerine Etkileri: Tanıya Dayalı Fiyat Uygulaması Örneği" adı altında bilimsel bir araştırma projesi yürütülmektedir. Bu çalışma sizin bir hekim olarak Tanıya Dayalı Fiyat Uygulaması hakkında görüşlerinizi almak ve bu sistemin sizin çalışma şartlarınıza olan etkileri hakkında bilgi edinmek amacı taşımaktadır. Görüşme yaklaşık bir saat sürecektir. Bu araştırmaya katılmak tamamen isteğe bağlıdır ve çalışmaya katılımınız karşılığında herhangi bir ücret veya ödül verilmeyecektir. Bu çalışmaya katılmaya onay verdiğiniz takdirde çalışmanın herhangi bir aşamasında herhangi bir sebep göstermeden çalışmadan çekilme hakkına sahipsiniz. İstemediğiniz soruları cevaplamak zorunda değilsiniz.

Aktardığınız deneyimlerin ve görüşlerin doğru yansıtılması için ses kaydına ihtiyaç duyulmaktadır. Ses kayıtları yazıya aktarılırken gizliliğin korunması açısından isimler ve kişisel bilgiler değiştirilecek ve anonim hale getirilerek kodlanacaktır. Ses kayıt dosyaları ve ses kayıtlarının yazıya dökülmüş halleri çalışma tamamlandıktan sonra imha edilecektir.

Bu formu imzalamadan önce, çalışmayla ilgili sorularınız varsa lütfen sorunuz. Daha sonra araştırma projesi hakkında ek bilgi almak istediğiniz takdirde sorunuz olursa, proje araştırmacısı Püren Aktaş (e-mail: purenaktas@gmail.com) ve/veya proje yürütücüsü Volkan Yılmaz (e-mail: vyilmaz@boun.edu.tr) ile temasa geçiniz. İlgili proje hakkında sorularınız ve şikayetleriniz için Boğaziçi Üniversitesi Sosyal ve Beşeri Bilimler Yüksek Lisans ve Doktora Tezleri Etik İnceleme Komisyonu ile iletişime geçiniz.

Bana anlatılanları ve yukarıda yazılanları anladım. Bu formun bir örneğini aldım / almak istemiyorum (bu durumda araştırmacı bu kopyayı saklar).

Katılımcının Adı-Soyadı:.....

İmzası:.....

Tarih (gün/ay/yıl):...../...../.....

Araştırmacının Adı-Soyadı:.....

İmzası:.....

Tarih (gün/ay/yıl):...../...../.....

REFERENCES

Agartan, T. I. (2012). Marketization and universalism: Crafting the right balance in the Turkish healthcare system. *Current Sociology*, *60*(4), 456–471. https://doi.org/10.1177/0011392112438331

Agartan, T. I. (2015a). Explaining large-scale policy change in the Turkish health care system: Ideas, institutions, and political actors. *Journal of Health Politics, Policy and Law*, *40*(5), 971–999. https://doi.org/10.1215/03616878-3161174

Agartan, T. I. (2015b). Health workforce policy and Turkey's health care reform. *Health Policy*, *119*(12), 1621–1626. https://doi.org/10.1016/j.healthpol.2015.09.008

Agartan, T. I. (2016). Learn, frame and deploy? Cross-national policy ideas and comparisons in Turkey's health reform. *Journal of Comparative Policy Analysis: Research and Practice*, *18*(1), 54–69. https://doi.org/10.1080/13876988.2015.1059657

Agartan, T. I. (2019). Conceptualizing professional and public interest in the context of Turkey's health care reforms. *International Journal of Sociology and Social Policy, 39*(7/8), 521-534.

Agartan, T. I., & Kuhlmann, E. (2019). New public management, physicians and populism: Turkey's experience with health reforms. *Sociology of Health & Illness*, *41*(7), 1410-1425.

Akinci, F., Mollahaliloğlu, S., Gürsöz, H., & Öğücü, F. (2012). Assessment of the Turkish health care system reforms: A stakeholder analysis. *Health Policy*, *107*(1), 21–30.

Aksoy, K. (2017). *EuroDRG ve dünyadaki diğer TİG uygulamaları ışığında Türkiye'deki TİG uygulamaları ve TİG üzerinde sağlık yöneticilerinin görüşlerinin incelenmesi* (Master's thesis). Istanbul Medipol University, Istanbul, Turkey.

Allsop, J. (2006). Medical dominance in a changing world: The UK case. *Health Sociology Review*, *15*(5), 444–457. https://doi.org/10.5172/hesr.2006.15.5.444

Annear, P. L., Kwon, S., Lorenzoni, L., Duckett, S., Huntington, D., Langenbrunner, J. C., … Xu, K. (2018). Pathways to DRG-based hospital payment systems in Japan, Korea, and Thailand. *Health Policy*, *122*(7), 707–713. https://doi.org/10.1016/j.healthpol.2018.04.013

Armstrong, D. (2002). Clinical autonomy, individual and collective: The problem of changing doctors' behaviour. *Social Science and Medicine*, *55*(10), 1771–1777. https://doi.org/10.1016/S0277-9536(01)00309-4

Atun, R., Aydın, S., Chakraborty, S., Sümer, S., Aran, M., Gürol, I., … Ayar, B. (2013). Universal health coverage in Turkey: Enhancement of equity. *The Lancet*, *382*(9886), 65–99.

Başkavak, C. G. (2016). *Understanding surgical craft in the changing context of technology, transformation of healthcare and marketization: A case study on surgeons in Istanbul, Turkey (*Doctoral dissertation*)*. Middle East Technical University, Ankara, Turkey.

Beylik, U. (2014). *Sağlık kurumlarında tanı ilişkili gruplara dayalı geri ödeme modeli: Türkiye - Avustralya karşılaştırması* (Doctoral dissertation). Gazi University, Ankara, Turkey.

Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological Methods & Research*, *10*(2), 141–163.

Blank, R. H. (1997). *The price of life: The future of American health care*. New York: Columbia University Press.

Blank, R. H., & Burau, V. (2007). *Comparative health policy*. Hampshire: Palgrave Macmillan.

Bogardus Jr., S. T., Geist, D. E., & Bradley, E. H. (2004). Physicians' interactions with third-party payers: Is deception necessary? *Archives of Internal Medicine*, *164*(17), 1841–1844. https://doi.org/10.1001/archinte.164.17.1841

Britten, N. (2001). Prescribing and the defence of clinical autonomy. *Sociology of Health and Illness*, *23*(4), 478–496. https://doi.org/10.1111/1467-9566.00261

Busato, A., & von Below, G. (2010). The implementation of DRG-based hospital reimbursement in Switzerland: A population-based perspective. *Health Research Policy and Systems*, *8*, 1–6. https://doi.org/10.1186/1478-4505-8-31

Busse, R., Geissler, A., Aaviksoo, A., Cots, F., Häkkinen, U., Kobel, C., … Quentin, W. (2013). Diagnosis related groups in Europe: Moving towards transparency, efficiency, and quality in hospitals? *BMJ (Online)*, *347*(7916), 1–7. https://doi.org/10.1136/bmj.f3197

Cabitza, F., Rasoini, R., & Gensini, G. F. (2017). Unintended consequences of machine learning in medicine. *Journal of the American Medical Association*, *318*(6), 517-518.

Calnan, M., & Williams, S. (1995). Challenges to professional autonomy in the United Kingdom? The perceptions of general practitioners. *International Journal of Health Services*, *25*(2), 219–241. https://doi.org/10.2190/FNDK-RU9X-R2N8-2RVT

Çetin, N. (2014). *Kamu Hastanelerinde Hizmetlerin Pazarlanmasında Hekimlere Uygulanan Performans Sisteminin Sağlık Hizmetlerinin Kalitesi Üzerine Etkileri: Haseki Eğitim ve Araştırma Hastanesi* (Master's thesis). Beykent University, Istanbul, Turkey.

Charles, C., Gafni, A., & Whelan, T. (1997). Shared decision-making in the medical encounter: what does it mean? (or it takes at least two to tango). *Social Science & Medicine*, *44*(5), 681–692.

Cheng, S. H., Chen, C. C., & Tsai, S. L. (2012). The impacts of DRG-based payments on health care provider behaviors under a universal coverage system: A population-based study. *Health Policy*, *107*(2–3), 202–208. https://doi.org/10.1016/j.healthpol.2012.03.021

Demir, R. (2013). *Performansla İlişkili Ücretlendirme ve Kamu Hastanelerinde Uygulanan Performansa Dayalı Ek Ödeme Sistemine Yönelik Hekim Tutumlarına İlişkin Bir Araştırma* (Doctoral dissertation). Istanbul University, Turkey.

Deom, M., Agoritsas, T., Bovier, P. A., & Perneger, T. V. (2010). What doctors think about the impact of managed care tools on quality of care, costs, autonomy, and relations with patients. *BMC Health Services Research*, *10*(331). https://doi.org/10.1186/1472-6963-10-331

Dredge, R. (2004). *Hospital global budgeting*. Washington, DC: World Bank. Retrieved from https://www.who.int/management/facility/hospital/Hospital Global Bugeting.pdf

Dussault, G., & Dubois, C.-A. (2003). Human resources for health policies: a critical component in health policies. *Human Resources for Health*, *1*(1), 1.

Edwards, A., & Elwyn, G. (2006). Inside the black box of shared decision making: distinguishing between the process of involvement and who makes the decision. *Health Expectations*, *9*(4), 307–320.

Elbek, O., & Adaş, E. B. (2009). Sağlıkta Dönüşüm: Eleştirel bir değerlendirme. *Türk Psikiyatri Derneği Bülteni*, *12*(1).

Emanuel, E. J., & Emanuel, L. L. (1992). Four models of the physician-patient relationship. *Journal of the American Medical Association*, *267*(16), 2221–2226.

Erdem, F., & Atalay, M. (2016). The effect of health transformation policies on the resident physicians' perception of the medical profession in Turkey. *The International Journal of Health Planning and Management*, *32*(2), 189–216.

Ersoy, Z. (2014). *Geri Ödeme Modeli Olan Teşhis İlişkili Gruplar (TİG) ve Bu Model Üzerinde Sağlık Yöneticilerinin Görüşlerinin Değerlendirilmesi* (Master's thesis). Gazi University, Ankara, Turkey.

Exworthy, M., Wilkinson, E. K., McColl, A., Moore, M., Roderick, P., Smith, H., & Gabbay, J. (2003). The role of performance indicators in changing the autonomy of the general practice profession in the UK. *Social Science and Medicine*, *56*(7), 1493–1504. https://doi.org/10.1016/S0277-9536(02)00151-X

Freeman, V. G., Rathore, S. S., Weinfurt, K. P., Schulman, K. A., & Sulmasy, D. P. (1999). Lying for patients: Physician deception of third-party payers. *Archives of Internal Medicine*, *159*(19), 2263–2270.

Freidson, E. (1970). *Profession of medicine: A study of the sociology of applied knowledge*. New York: Dodd, Mead & Company.

Freidson, E. (1984). The changing nature of professional control. *Annual Review of Sociology*, *10*(1), 1–20.

Freidson, E. (1985). The reorganization of the medical profession. *Medical Care Research and Review*, *42*(1), 11–35. https://doi.org/10.1177/107755878504200103

Fritzen, S. A. (2007). Strategic management of the health workforce in developing countries: what have we learned? *Human Resources for Health*, *5*(1), 4.

Harrison, S., & Dowswell, G. (2002). Autonomy and bureaucratic accountability in primary care: what English general practitioners say. *Sociology of Health & Illness*, *24*(2), 208–226.

Haug, M. R. (1972). Deprofessionalization: An alternate hypothesis for the future. *The Sociological Review*, *20*(1 S), 195–211. https://doi.org/10.1111/j.1467-954X.1972.tb03217.x

Haug, M. R. (1988). A re-examination of the hypothesis of physician deprofessionalization. *The Milbank Quarterly*, *66,* 48–56.

Hurst, S. A., Hull, S. C., DuVal, G., & Danis, M. (2005). Physicians' responses to resource constraints. *Archives of Internal Medicine*, *165*(6), 639–644. https://doi.org/10.1001/archinte.165.6.639

Huttin, C., & Andral, J. (2000). How the reimbursement system may influence physicians' decisions results from focus groups interviews in France. *Health Policy*, *54*(2), 67–86. https://doi.org/10.1016/S0168-8510(00)00101-9

Jones, J. W., Barge, B. N., Steffy, B. D., Fay, L. M., Kunz, L. K., & Wuebker, L. J. (1988). Stress and medical malpractice: Organizational risk assessment and intervention. *Journal of Applied Psychology*, *73*(4), 727.

Kabene, S. M., Orchard, C., Howard, J. M., Soriano, M. A., & Leduc, R. (2006). The importance of human resources management in health care: A global context. *Human Resources for Health*, *4*, 1–17. https://doi.org/10.1186/1478-4491-4-20

Kart, E. (2013). “Sağlıkta Dönüşüm” sürecinde performansa dayalı ücretlendirmenin hekimler üzerindeki etkileri. *Çalışma ve Toplum*, *38*(3).

Kılıçarslan, A., & Kılıçarslan, Z. (2013). Aşırı tanı ve tedavi. In O. Elbek (Ed.), *Kapitalizm Sağlığa Zararlıdır*. İstanbul: HayyKitap.

Kroneman, M., & Nagy, J. (2001). Introducing DRG-based financing in Hungary: A study into the relationship between supply of hospital beds and use of these beds under changing institutional circumstances. *Health Policy*, *55*(1), 19–36. https://doi.org/10.1016/S0168-8510(00)00118-4

Lemp, S., & Calvo, E. (2012). Acceptance or rejection of clinical standardization? Chilean doctors discuss clinical practice guidelines and benefit packages. *Salud Colectiva*, *8*(1), 61–68.

Leu, A., Wepf, H., Elger, B., & Wangmo, T. (2018). Experts’ perspectives on SwissDRG: Second class care for vulnerable patient groups? *Health Policy*, *122*(6), 577–582. https://doi.org/10.1016/j.healthpol.2018.03.001

Lewis, J. M., Marjoribanks, T., & Pirotta, M. (2003). Changing professions: General practitioners’ perceptions of autonomy on the frontline. *Journal of Sociology*, *39*(1), 44–61.

Lupton, D. (1997). Doctors on the medical profession. *Sociology of Health & Illness*, *19*(4), 480–497.

Makoul, G., & Clayman, M. L. (2006). An integrative model of shared decision making in medical encounters. *Patient Education and Counseling*, *60*(3), 301–312.

Marjoribanks, T., & Lewis, J. M. (2003). Reform and autonomy: Perceptions of the Australian general practice community. *Social Science and Medicine*, *56*(10), 2229–2239. https://doi.org/10.1016/S0277-9536(02)00239-3

Martínez, J., & Martineau, T. (1998). Rethinking human resources: An agenda for the millennium. *Health Policy and Planning*, *13*(4), 345-358. https://doi.org/10.1093/heapol/13.4.345

Mathauer, I., & Wittenbecher, F. (2012). *DRG-based payment systems in low-and middle-income countries: Implementation experiences and challenges*. Geneva: World Health Organization.

McKinlay, J. B., & Arches, J. (1985). Towards the proletarianization of physicians. *International Journal of Health Services*, *15*(2), 161–195. https://doi.org/10.2190/JBMN-C0W6-9WFQ-Q5A6

McKinlay, J. B., & Marceau, L. D. (2002). The end of the golden age of doctoring. *International Journal of Health Services*, *32*(2), 379–416. https://doi.org/10.1093/nq/CC.oct.458-e

McKinlay, J. B., & Stoeckle, J. D. (1988). Corporatization and the social transformation of doctoring. *International Journal of Health Services*, *18*(2), 191–205. https://doi.org/10.2190/YEVW-6C44-YCYE-CGEU

McMullen, L. M. (2012). Discourses of influence and autonomy in physicians' accounts of treatment decision making for depression. *Qualitative Health Research*, *22*(2), 238–249.

Mıdık, Ö. (2012). *Hekimlerin Tıbbi Profesyonalizmi Kavramsallaştırması ve Kavramsallaştırmayı Etkileyen Faktörlerin İncelenmesi: Samsun İl Merkezi Örneğinde Fenomenolojik Bir Çalışma* (Doctoral dissertation) Ege University, Izmir, Turkey.

Mittelstadt, B. (2019, November). Principles alone cannot guarantee ethical AI. *Nature Machine Intelligence*, 501-507.

Morreim, E. H. (1991). Gaming the system: Dodging the rules, ruling the dodgers. *Archives of Internal Medicine*, *151*(3), 443–447.

Navarro, V. (1988). Professional dominance or proletarianization? Neither. *The Milbank Quarterly*, *66*(2), 57-75. https://doi.org/10.2307/3349915

Nesanır, N., Ali, E., Bedri, B., & Saltık, A. (2006). Manisa'da birinci ve ikinci basamak sağlık kurumlarında çalışan hekimlerin bakış açısıyla performansa dayalı döner sermaye uygulaması. *Toplum ve Hekim*, *21*(3), 231–238.

Ökem, Z. G., & Çakar, M. (2015). What have health care reforms achieved in Turkey? An appraisal of the "Health Transformation Programme." *Health Policy*, 119(9), 1153-1163. https://doi.org/10.1016/j.healthpol.2015.06.003

Özgen, H., Şahin, B., Belli, P., Tatar, M., & Berman, P. (2010). Predictors of informal health payments: The example from Turkey. *Journal of Medical Systems*, *34*(3), 387–396. https://doi.org/10.1007/s10916-008-9251-8

Pinar, T., Acikel, C., Pinar, G., Karabulut, E., Saygun, M., Bariskin, E., … Bodur, S. (2017). Workplace violence in the health sector in Turkey: A national study. *Journal of Interpersonal Violence*, *32*(15), 2345–2365.

Reibling, N., & Wendt, C. (2008). *Access Regulation and Utilization of Healthcare Services*. Mannheimer Zentrum für Europäische Sozialforschung Working Paper No. 113. Available at: http://www.mzes.uni-mannheim.de/publications/wp/wp-113.pdf

Rigoli, F., & Dussault, G. (2003). The interface between health sector reform and human resources in health. *Human Resources for Health*. https://doi.org/10.1186/1478-4491-1-9

Sackett, D. L., Rosenberg, W. M. C., Gray, J. A. M., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: What it is and what it isn't. *British Medical Journal*. https://doi.org/10.1136/bmj.312.7023.71

Segal, M. (2018). How automation is changing work. Retrieved from: https://www.nature.com/articles/d41586-018-07501-y

Social Security Institution (2018). 2018 yılı Sosyal Güvenlik Kurumu özel sağlık hizmeti sunucularından sağlık hizmeti satın alım sözleşmesi (Social Security Institution health care service purchase contract for private health care providers for the year 2018). Ankara: Social Security Institution.

Social Security Institution. Sosyal Güvenlik Kurumu sağlık uygulama tebliği (Social Security Institution Health Implementation Statement) (2019). Ankara: Social Security Institution.

Sparkes, S. P., Bump, J. B., & Reich, M. R. (2015). Political strategies for health reform in Turkey: Extending veto point theory. *Health Systems & Reform*, *1*(4), 263–275.

Tatar, M., Mollahaliloğlu, S., Sahin, B., Aydin, S., Maresso, A., & Hernández-Quevedo, C. (2011). Turkey health system review. *Health Systems in Transition*, *13*(6), 1–186, xiii–xiv.

Tatar, M., Ozgen, H., Sahin, B., Belli, P., & Berman, P. (2007). Informal payments in the health sector: A case study from Turkey. *Health Affairs*, *26*(4), 1029–1039. https://doi.org/https://doi.org/10.1377/hlthaff.26.4.1029

Tavaglione, N., & Hurst, S. A. (2012). Why physicians ought to lie for their patients. *The American Journal of Bioethics*, *12*(3), 4–12. https://doi.org/10.1080/15265161.2011.652797

Terzioglu, A. (1998). *Turkish medical doctors: Historical experience and self-narratives* (Master's thesis). Boğaziçi University, Istanbul, Turkey.

The Ministry of Health. (2003a). *Sağlıkta dönüşüm programı konsept notu*. Ankara: The Ministry of Health.

The Ministry of Health. (2003b). Tanıya dayalı paket fiyat uygulaması hakkında genelge. Ankara: The Ministry of Health.

The Ministry of Health. (2003c). *The transformation in health*. Ankara: The Ministry of Health

The Ministry of Health. (2018). *Health statistics yearbook 2017*. Ankara: The Ministry of Health.

Timmermans, S. (2005). From autonomy to accountability: The role of clinical practice guidelines in professional power. *Perspectives in Biology and Medicine*, *48*(4), 490–501. https://doi.org/10.1353/pbm.2005.0096

Tousijn, W. (2002). Medical dominance in Italy: A partial decline. *Social Science and Medicine*, *55*(5), 733–741. https://doi.org/10.1016/S0277-9536(01)00199-X

Tummers, L. G., & Van de Walle, S. (2012). Explaining health care professionals' resistance to implement Diagnosis Related Groups: (No) benefits for society, patients and professionals. *Health Policy*, *108*(2–3), 158–166. https://doi.org/10.1016/j.healthpol.2012.08.024

Turkish Medical Association Ethical Commitee. (2009). *Hekimlerin değerlendirmesi ile performansa dayalı ödeme*. Ankara: Turkish Medical Association.

Vujicic, M., Sparkes, S., & Mollahaliloglu, S. (2009). *Health workforce policy in Turkey: Recent reforms and issues for the future*. Washington DC: The World Bank.

Wallace, J. E., Lemaire, J. B., & Ghali, W. A. (2009). Physician wellness: A missing quality indicator. *The Lancet*, *374*(9702), 1714–1721.

Warren, M. G. (1998). *Managed care, deprofessionalization, and physician satisfaction* (Doctoral dissertation). Arizona State University, Glendale, USA.

Warren, M. G., Weitz, R., & Kulis, S. (1998). Physician satisfaction in a changing health care environment: The impact of challenges to professional autonomy, authority, and dominance. *Journal of Health and Social Behavior*, *39(4)*, 356–367.

Wirtz, V., Cribb, A., & Barber, N. (2006). Patient–doctor decision-making about treatment within the consultation—A critical analysis of models. *Social Science & Medicine*, *62*(1), 116–124.

World Health Organization. (2010). Health systems financing: The path to universal coverage. Geneva: World Health Organization.

Wynia, M. K., Cummins, D. S., VanGeest, J. B., & Wilson, I. B. (2000). Physician manipulation of reimbursement rules for patients. *Journal of the American Medical Association*, *283*(14), 1858. https://doi.org/10.1001/jama.283.14.1858

Wynia, M. K., VanGeest, J. B., Cummins, D. S., & Wilson, I. B. (2003). Do physicians not offer useful services because of coverage restrictions? *Health Affairs*, *22*(4), 190–197. https://doi.org/10.1377/hlthaff.22.4.190

Yasar, G. Y. (2011). 'Health transformation programme'in Turkey: an assessment. *The International Journal of Health Planning and Management*, *26*(2), 110–133.

Yilmaz, V. (2013). Changing origins of inequalities in access to health care services in Turkey: From occupational status to income. *New Perspectives on Turkey*, *48*, 55–77.

Yilmaz, V. (2017). The politics of healthcare reform in Turkey. Basingstoke: Palgrave Macmillan.

Yılmaz, V., & Yentürk, N. (2017). Türkiye'de Kamu Sağlık Harcamalarının Tarihsel Seyri. *Toplum ve Hekim*, *32*(4).

Yüzden, G. E. (2013). *Performansa dayalı ek ödeme sistemi ve hekim görüşlerinin değerlendirilmesi (Master's thesis)*. Gazi University, Ankara, Turkey.