

AN EXAMINATION OF DIABETES POLICY IN TURKEY:
A QUALITATIVE DOCUMENTARY ANALYSIS

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AN EXAMINATION OF DIABETES POLICY IN TURKEY:
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DECLARATION OF ORIGINALITY

I, Ekin Ekici, certify that

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ABSTRACT

An Examination of Diabetes Policy in Turkey: A Qualitative Documentary Analysis

The World Health Organization (WHO) reports that Diabetes Mellitus is the 9th leading cause of death globally, accounting for about 2 million annual deaths as of 2019. Turkey is one of the countries with the highest prevalence of diabetes. Turkey's position in diabetes outcomes worldwide needs explanation as it has a relatively strong healthcare system and allocates a significant budget to the management of diabetes and its complications. In this context, this thesis explores the policy factors explaining Turkey's failure. Using Walt and Gilson's policy triangle framework, this thesis presents a comprehensive analysis of diabetes policy in Turkey by examining Turkey Diabetes Programme 2015-2020 and the transcriptions of Diabetes Parliament meetings held between 2015-2018. The thesis reveals a wide gap between policy and implementation, the lack of cooperation among diabetes actors and inadequate recognition of social determinants of health (SDoH) in Turkey's national diabetes programme. Turkey's adoption of a vertical-like, disease-centred, treatment-focused and group-based approach in the management of diabetes may have contributed to the failure of its diabetes policy.

ÖZET

Türkiye'de Diyabet Politikasının İncelenmesi: Nitel bir Doküman Analizi

Dünya Sağlık Örgütü, Diabetes Mellitus'un dünya genelinde ölüm nedenleri arasında 9. sırada yer aldığını ve 2019 yılı itibariyle, yılda yaklaşık 2 milyon diyabet kaynaklı ölüm gerçekleştiğini bildirmektedir. Türkiye, diyabet prevalansının en yüksek olduğu ülkelerden biridir. Nispeten güçlü bir sağlık sistemine sahip olması ve diyabet ve komplikasyonlarının yönetimine ayrılmış önemli miktardaki bütçesi göz önüne alındığında, Türkiye'nin dünya çapındaki diyabet çıktıları açısından konumu açıklanmaya ihtiyaç duymaktadır. Bu bağlamda, bu tez Türkiye'nin diyabet politikasındaki başarısızlığını açıklayan politika faktörlerini incelemektedir. Walt ve Gilson'ın politika üçgeni çerçevesini kullanan bu tez, Türkiye Diyabet Programı 2015-2020'yi ve 2015-2018 yılları arasında gerçekleştirilen Diyabet Parlamentosu toplantılarının dökümlerini inceleyerek Türkiye'deki diyabet politikasının kapsamlı bir analizini sunmaktadır. Bu tez, politika ve uygulama arasındaki geniş boşluğu, diyabet aktörleri arasındaki işbirliği eksikliğini ve Türkiye'nin ulusal diyabet programında sağlığın sosyal belirleyicilerinin yeterince tanınmadığını ortaya koymaktadır. Türkiye'nin diyabet yönetiminde dikey yaklaşım benzeri, hastalık merkezli, tedavi odaklı ve grup temelli bir yaklaşımı benimsemesinin, diyabet politikasının başarısız olmasının altında yatan sebepler arasında olduğu sonucuna varılmıştır.

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ABBREVIATIONS

| | |
|--------|--|
| CDoH | Commercial Determinants of Health |
| CGM | Continuous Glucose Monitoring |
| DP | Diabetes Parliament |
| EAG | Expert Advisory Group |
| ER | Emergency Room |
| GDP | Gross Domestic Product |
| GHI | General Health Insurance (Tr: GSS) |
| HTP | Health Transformation Programme |
| IDF | International Diabetes Federation |
| MoH | Ministry of Health |
| MoNE | Ministry of National Education |
| NGO | Non-Governmental Organisation |
| PHC | Primary Healthcare Centre |
| SDoH | Social Determinants of Health |
| SSI | Social Security Institution (Tr: SGK) |
| SUT | Health Applications Communiqué (Tr: Sağlık Uygulama Tebliği) |
| T1D | Type 1 Diabetes |
| T2D | Type 2 Diabetes |
| TURDEP | Turkish Diabetes Epidemiology Study |
| UN | United Nations |
| US | United States |
| USD | United States Dollar |
| WHO | World Health Organization |

CHAPTER 1

INTRODUCTION

Diabetes mellitus is a chronic disease that occurs when the body cannot regulate the blood sugar due to either lack of or inability to use the insulin hormone, which lets glucose (blood sugar) from the bloodstream into cells to produce energy (International Diabetes Federation [IDF], 2020). There are three main types of diabetes. Type 1 diabetes (T1D) develops due to the inability of the pancreas to produce insulin. In this case, insulin needs to be received from the outside by regular injections every few hours. It is an autoimmune disease that cannot be prevented through any currently known measure. It can affect people of any age, but more typically it occurs in children. Type 2 diabetes (T2D) occurs when the body does produce but cannot effectively use insulin. It is more common among the adult population. T2D makes up about 90% of all diabetes cases worldwide. The last one is gestational diabetes which occurs during pregnancy as increased blood sugar. It usually disappears when the pregnancy is over, but both the mother and the child remain at increased risk of developing T2D in the future (IDF, 2020).

At advanced stages, diabetes may lead to serious cardiovascular, ocular, renal and neuropathic complications that can severely impair a person's life, such as organ failures, loss of body parts and death. These complications are most likely to negatively influence the patient's work, school, and social lives. Creating excessively increased healthcare costs and loss of labour-power, diabetes and its complications are detrimental to not only individuals but also national economies.

In terms of economic burden, the global direct cost of diabetes is estimated as 760 billion USD in 2019 (IDF, 2019, p. 56), over half of which corresponds to the

costs of diabetes complications' treatment (IDF, 2019, p. 93). With the highest comparative diabetes prevalence in the Europe region (11.1%), Turkey has a significant share in the financial burden of diabetes on its economy. The 9th Diabetes Atlas reports that, in 2019, Turkey spent 1,404 USD per person, over 9.2 billion USD in total on diabetes-related healthcare, which makes about a quarter of Turkey's total health expenditure (IDF, 2019).

Diabetes mellitus is the 9th leading cause of death globally, accounting for about 2 million annual deaths as of 2019 (WHO, 2020). Today, about half a billion adults (between 20-79 years of age), and over a million children and adolescents (below 20) are living with diabetes (IDF, 2019). While IDF's projections for 2025 global diabetes prevalence have long been surpassed by 25 million already in 2019, it is estimated that the number of persons living with diabetes worldwide will reach up to 700 million by 2045 (IDF, 2019).

As the exact causes of T1D are still not fully determined, T2D is most commonly associated with genetics and lifestyle choices, especially regarding diet and physical activity habits, as risk factors. The general "lifestyle choices" discourse has a connotation of arbitrariness and gives the impression of diabetes being a personal problem that emerges as a result of personal failures. However, the underlying causes of T2D and its rising global prevalence could not be reduced to individual behaviour only.

The conditions surrounding the lifestyle choices are shaped by several socioeconomic, environmental, and demographic factors. Income, purchasing power, education level, access to healthcare and employment conditions can closely affect individual behaviours. Additionally, external factors, such as growing urbanisation, poor environmental planning, inadequate food safety and security are also effective

in diabetes prevalence (Hill-Briggs et al., 2021). Therefore, although diabetes may seem to be a merely medical problem at the first glance, it is also a product of social and economic policies.

Because diabetes is a complex disease that necessitates complicated, multifaceted and multisectoral interventions to be prevented and managed, and has affected so many people that it was declared a pandemic decades ago, it ideally requires special attention within healthcare policies. Therefore, at the end of a conference organised by WHO and International Diabetes Foundation (IDF) in 1989, the St. Vincent Declaration was introduced as an international initiative consisting of goals and targets to address diabetes and its complications (WHO-IDF, 1989). Over time, many countries have adopted their own national diabetes plans and programmes. IDF defines national diabetes programmes as “a systematic and coordinated approach to improving the organisation, accessibility, and quality of diabetes prevention and care which is usually manifest as a comprehensive policy, advocacy and action plan” (IDF, 2010, p. 6). The importance of diabetes policies is highlighted both by the IDF and through the 2006 United Nations (UN) Resolution on Diabetes encouraging member states to develop national diabetes policies as the only way an effective fight against diabetes can be fully achieved (IDF, 2010; UN General Assembly, 2006).

Against this background, Turkey presents a controversial case in point. Since the signing of the St. Vincent Declaration in 1992, Turkey seems to have always been a part of the global effort to combat the diabetes pandemic. It has developed a national diabetes programme as early as 1994, and these programmes have been regularly updated. Turkey also has a relatively strong healthcare system, with considerable amounts of public and private funding allocated to diabetes

management. However, despite all these factors, figures point out an overwhelming rise in diabetes prevalence and mortality over the years, and eventually, Turkey is placed among the countries with the highest rates and number of people with diabetes in the world, future projections signalling only the worsening of the situation (IDF, 2019). Therefore, in an attempt to explain this controversy, this study intends to examine Turkey's latest diabetes policy, Turkey Diabetes Programme 2015-2020, seeking to answer why it fails to improve the situation regarding diabetes prevalence, incidence, diabetes-related mortality, and cost containment. It also seeks to unravel how diabetes is approached and handled at political discourse and implementation levels. As the literature offers very limited studies on Turkey's diabetes policy, this study aims to contribute to the literature by addressing this gap with a comprehensive analysis and bringing about a social science perspective to the discussions surrounding diabetes policy and management.

1.1 Research methodology

This thesis relies on qualitative documentary analysis of the Turkey Diabetes Programme 2015-2020 and the transcriptions of Diabetes Parliament meetings held between 2015-2018. It employs Walt and Gilson's policy triangle framework (1994) as an analytical tool and explores the respective programme by a thorough analysis of the following four dimensions; 1) content (key objectives, areas of focus), 2) actors (stakeholders involved in/responsible for various stages of the programme), 3) context (the healthcare context surrounding the policymaking and implementation) and 4) processes (course of implementation, gaps and challenges).

Previous studies using Walt and Gilson's policy triangle framework mostly benefited from key informant interviews to collect the information regarding the

“processes” dimension of the analysis. Alternatively, this study used the transcriptions of Diabetes Parliament meetings (obtained from the Turkey Diabetes Foundation as hard copies) as a source of qualitative data on the policy implementation processes, because it would not be possible to collect this amount of retrospective information through in-depth interviews.

The Diabetes Parliament meeting transcriptions offer a rich source of information as these meetings were attended by a broad range of actors. In these meetings, gathered under the Presidency’s aegis, there have been representatives from the Grand National Assembly of Turkey, Ministry of Health (MoH) and some of its sub-branches, Ministry of National Education (MoNE), Ministry of Labour and Social Security, several non-governmental organisations, including but not limited to Turkey Diabetes Foundation, Turkish Diabetes Society, Federation of Family Physicians' Associations, Turkey Family Medicine Foundation, Turkey Dietitians Association Life with Diabetes Association, as well as Association of Research-Based Pharmaceutical Companies (AIFD). In addition to these institutions, the meetings were also attended by individual experts, patients and patient families. While the diversity of institutional actors has been maintained in the Diabetes Parliament meetings, it is interesting that it does not offer an exactly inclusive or accurately representative platform in terms of individual patients. Despite the broad difference in T1 and T2D patients’ presence in the society (about a 10% to 90% ratio, respectively) the Diabetes Parliament meetings host only T1D patients, their families and patient organisations. T2D patients are not mentioned in the participants list and have not been observed as a speaker in any of the Diabetes Parliament meetings reviewed for this study. Although Diabetes Parliament meetings have been conducted on a regular basis between 2011-2018, only transcriptions of the meetings

in the 2015-2018 period are included in the analysis in this thesis in order to have a chronologically parallel understanding with Turkey's 2015-2020 national programme for diabetes prevention and control.

Qualitative analysis of the transcriptions of the Diabetes Parliament meetings was a labour-intensive process that consisted of examining 400 pages of text in total. These texts are voluminous verbatim transcriptions of all discussions that took place in annual meetings. To analyse these texts, I first converted the hard copy booklets (covering the given period, namely Diabetes Parliament (DP) 7, 8, 9, and 10) to the digital media format. Then, at the coding stage, I used the NVivo 12 qualitative data analysis software. The codes are built through a mixed method of both deductive and inductive coding processes¹. Initially, the prominent themes (such as implementation gap, SDoH or commercial determinants of health (CDoH)) based on the literature were coded, then as the patterns and new themes (such as problems with devices or reimbursement) concerning social policy matters started to reveal throughout the DP transcripts, new codes were added along the way. Coding was completed at two stages. Following an open coding stage, the initial codes were coded again during which some of them are eliminated and some are merged into single codes. Eventually, the final codes are grouped under four overarching categories for a neater presentation of the findings.

1.2 Outline of chapters

Including this "Introduction" chapter, this thesis is composed of five chapters in total. The introductory chapter provided brief information on diabetes mellitus and

¹ Please see Appendix A for more information on the coding process.

presented the overall trends. It, then, introduced the research question, methodology and the organisation of the thesis.

Chapter 2 starts with the literature review on health policy analysis and then narrows down to diabetes policy analysis. Then, it presents key policy approaches to diabetes derived from the literature.

Chapter 3 describes the diabetes landscape in Turkey. It briefly overviews Turkey's diabetes interventions and takes a closer look at the diabetes context in terms of healthcare, food and social/physical environments.

Chapter 4 offers a qualitative analysis of Turkey's national diabetes policy. For this purpose, it examines 1) Turkey Diabetes Programme 2015-2020 as a policy document, 2) the actors involved in and their positions vis-à-vis the diabetes-related policy processes, and 3) the process of implementation through the Diabetes Parliament discussions. Finally, Chapter 5 presents the findings in relation to the literature on diabetes policy.

CHAPTER 2

LITERATURE REVIEW

2.1 Health policy analysis

Health is an inseparable part of social welfare and personal identity. It pertains to a wide range of domains in human lives from employment to citizenship (Carpenter, 2012). As rather a younger area of research, health policy analysis has well benefited from the framework and tools of broader public policy literature. As much as these two policy domains can be complementary and in correspondence to one another, it is important to identify and acknowledge what distinguishes health policy from other areas of public policy.

Health policy is defined as “an agreement or consensus on the health issues, goals and objectives to be addressed, the priorities among those objectives, and the main directions for achieving them” by the WHO (WHO, 1999 as cited in Collins, 2005). However, health policy decisions are not always made at the end of straightforward processes of consensus, instead, the context surrounding health policymaking is highly political, in different ways and degrees compared to other public policy areas (Collins, 2005).

Carpenter (2012) explains the distinguishing characteristics of health politics in reference to three following dimensions: 1) public conception of access to healthcare as an issue of equality, 2) health’s relation to personal identity, and 3) the core position of technology and expertise in healthcare. According to Carpenter (2012), while other forms of inequalities are more likely to be tolerated and legitimised, societies tend more to reduce the inequalities in access to healthcare services. Second, health policy’s close relation to personal identities resembles that

of social class. Who happens to be healthier than whom and its political implications are influential in shaping health politics. Some major social disparities also depend on particular kinds of health conditions people live with. While some patient groups enjoy greater political organisation, social and cultural legitimacy, others such as those living with human immunodeficiency virus (HIV) are sometimes kept private due to stigmatisation. Regarding the last distinguishing characteristic of health politics, Carpenter notes that healthcare services are usually provided, organised and managed by professionally and socially accepted experts holding considerable legal and cultural authority and granted with higher levels of income in return for their services. The collaboration of expertise and state power is unique to health policy as the coevolving roles of these two components are very rarely, or never, duplicated in other domains (Carpenter, 2012).

Thanks to advances in medicine and medical technology offering easier diagnosis and better treatment, the period between the 1940s and mid-1970s was marked by increased public trust in medical science. In accordance with that, the health policy was significantly dominated by medical professionals both at national and international levels. However, this over-medicalised position of health policy started to be challenged by professionals from other disciplines, especially by social scientists who started to examine the social and political determinants of health outcomes (Walt & Gilson, 1994).

Significant changes in the development context that have taken place around the late 1980s and 1990s have had important implications for health policy. As the central position of the state in health policy started to be challenged, the consensual ground that the health policy debates were based on left their place to conflict among different actors (Walt & Gilson, 1994).

Walt and Gilson (1994) criticize the health policy literature's technocratic mainstream and its mere focus on the content of the reforms. They argue that such an approach distracts attention from the other crucial components of policymaking and undermines our ability to explain why policy reforms sometimes fail. Given these concerns and the changing health policy context from consensus to conflict, they propose a more comprehensive framework to examine health reforms. What they offer is a simple analytical model of a highly complicated set of interrelationships, featuring the concepts of context, process, actors, as well as content. Walt and Gilson argue that these additional aspects of policymaking that are ignored by mainstream approaches may be the determinants of whether a policy choice and implementation succeed or not (Walt & Gilson, 1994).

Walt and Gilson emphasise that the policy environment is an ever-changing, dynamic landscape where various groups and institutions interact. They see policy analysis as central to examining policy outcomes, defining whether respective policies would fail or succeed intended consequences. Therefore, for them, it is essential to take actors, processes, context and content of the policies into consideration to be able to produce a comprehensive analysis of health policies (Walt & Gilson, 1994).

Nevertheless, the literature on health policy analysis is still limited. Through a review of this literature covering 164 articles in the period between 1994 and 2007, Gilson and Raphaely (2008) find out that the health policy analysis in low and middle-income countries is in a rudimentary stage. The existing body of literature, which is seemingly dominated by Global North-based authors, is both small in quantity, fragmented and only addresses the issues at hand in a limited depth.

Moreover, most of the articles are found out to be mainly descriptive, rather than analytical, of the policy change processes (Gilson & Raphaely, 2008).

Though Gilson and Raphaely's literature review was not an exhaustive one (due to language and other inclusion criteria), it seems adequate to identify certain persisting gaps in this field and conforms with the need for more comprehensive analyses in the health policy area that was initially raised by Walt and Gilson (1994). The identified gaps in the respective literature can be summarised as 1) the analytical weakness evident in the limited depth of the presented data and weak contextualisation; 2) lack of explanatory focus; 3) loose links to policy analysis theory; 4) little relevance for further policymaking; 5) although most acknowledge that policy is socially constructed, few taking the role of discourse into account in their analyses (Gilson & Raphaely, 2008, p. 303). The critical analysis put forth by Gilson and Raphaely (2008) concludes that effective policy change requires the involvement of processes, actors and discourses encompassing the policy change environment.

Picking up from where Gilson and Raphaely left, *'Doing' health policy analysis* of Walt et al. (2008), addresses some of the shortcomings in health policy analysis concerning low and middle-income countries as mentioned above (Walt et al., 2008). In response to Gilson and Raphaely's (2008) note on the lack of conceptual frameworks, elaborate research design and methodology aspects in the respective literature, Walt et al. (2008) compile three frameworks and three theories that could be of use for the researchers of this area.

The first and the most widely used one is the stages heuristic, which examines the public policy process in the four following stages: agenda setting, formulation, implementation and evaluation (Brewer & deLeon, 1983; Lasswell,

1956). The second one is the policy triangle framework, which Walt and Gilson (1994) have developed particularly for health policy analysis. From a political economy perspective, Walt and Gilson's policy triangle framework features the interplay among content, context and processes influencing policymaking where actors take the centre stage. The third one is the network framework that gained importance with the expanding array of actors in policymaking processes. This depicts the interrelation and connections among actors (Thatcher, 1998).

In addition to these frameworks, Walt et al. (2008) suggest three strands of theory. The first one is Kingdon's multiple streams theory (Kingdon, 2014), which asserts that the public policy process is composed of independent streams of problems, policies and politics. At certain points, these streams join together to create an opportunity for agenda setting and policy action to be initiated. The second theory Walt et al. (2008) mention is Baumgartner and Jones' (1993) punctuated equilibrium theory. This theory considers the policymaking process as a mostly stable period interrupted by sudden changes. Similar to Walt and Gilson's triangle, Baumgartner and Jones take policy image and policy venue as the focus of their theory which roughly correspond to context and actors, respectively. The third one is the multiple implementation theories revolving around the discussion of the direction of decision-making, whether it goes bottom-up, top-down or a combination of both (Sabatier, 1999).

As for the methodology, Walt et al. (2008) suggest that research design in health policy analysis should be specified and indicated more clearly, case studies should be improved by clarifying the reasons why that particular case is chosen, and the use of multiple cases and/or the comparative approach should be considered.

Lastly, the authors point out that the researchers should acknowledge their reflexivity more, incorporate their own position and roles into the analyses.

2.2 Diabetes policy analysis

My review of the literature on diabetes policy analysis with a particular focus on developing countries corroborates the general findings of Gilson and Raphaely's broader literature review (2008). In line with their general findings, the reviewed literature here also appears to be just as fragmented, limited in scope and still in its infancy.

Policy analysis literature specific to diabetes policies is seemingly quite narrow for it contains a limited number of studies on only a few countries. It is also pretty young literature, given that all the related articles are published over the past decade. Moreover, most of these studies examine different aspects of respective policies. Despite all the limitations and the fragmented nature of this literature, it is still possible to compare and contrast these analyses at some mutual points they address or common characteristics they share. In fact, these points can be reviewed through Walt and Gilson's policy triangle model as all the related studies address the four components of this model either completely or partially.

This literature review does not claim to reflect every aspect of the respective governments' responses to diabetes. It should also be noted that these responses might have changed over time and acquired new dimensions since the reviewed papers were published. I use these papers to provide an analytical categorisation of diverse diabetes policies in different countries.

2.2.1 Content

Promotion of healthy lifestyles through increased physical activity and healthy dietary habits are the first measures that come to mind regarding T2D. Hence, several countries focus on these strategies, but in different ways. While some, like Turkey, encourage healthy living through improving health awareness (Kilic, Kalaca, Phillimore, & Zaman, 2014), others, such as Kenya and Singapore, intend to build partnerships with food and beverage producers to facilitate the production of healthier foodstuff or with pharmaceutical industries and healthcare service providers to subsidise diabetes treatment and encourage the use of non-standard drugs (Ow Yong & Koe, 2021; Shiroya, Neuhann, Müller, & Deckert, 2019).

Remarkably, social determinants of diabetes are an overlooked dimension of diabetes policy analyses. This is not to say that respective countries' diabetes programmes do not acknowledge or contain measures regarding SDoH. Nevertheless, it could mean that it is not a prominent feature or area of focus within these policies. For instance, the articles examining policies of Ireland, Turkey and New Zealand do not mention SDoH at all (de Bruin, Stayner, de Lange, & Taylor, 2018; Kilic et al., 2014; Mc Hugh, Perry, Bradley, & Brugha, 2014), while those analysing Singapore, Kenya and Spain do recognise the relevance and significance of SDoH (especially poverty), but these do not seem to have a prominent place in the policy content (Agudelo-Suárez, Ruiz-Cantero, González-Zapata, Restrepo-Medrano, & Ortiz-Barreda, 2012; Ow Yong & Koe, 2021; Shiroya et al., 2019).

Though fewer in number, some studies acknowledge and focus on the close link between SDoH² and chronic diseases. One of these is the study conducted by

² Social determinants of health are “the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life.” (WHO, n.d.).

Raphael et al. (2012) on the impact of weak social policies on the health outcomes of Canadians with T2D, who are living in poverty. Inspired by Starfield's (2007) model, Raphael et al. (2012) point to the pathway from political context to health outcomes and equity. As per their suggestion, the overall political and policy context influences health care, social assistance and housing policies. These policies, in return, shape the health services, economic resources and housing which eventually have an impact on social support, food security, diet and stress factors all manifest in T2D health outcomes. They claim that the welfare retrenchment Canada had been through in the mid-1980s has significantly increased the T2D prevalence and mortality among the poorer sections of the society. Even though all participants of this study have been receiving high-quality healthcare services that are also supported by community-based training programmes on diabetes management, T2D continues to be a critical health problem among people with lower socioeconomic status in Canada. Raphael et al.'s study (2012) indicates that some specific causes of this situation are limited income, high housing costs and unaffordability of the proper diet. As a fair proportion of the research participants have been living in government-supported housing, the most important factor impeding successful management of diabetes turns out to be food insecurity. Although the majority of the participants were well-informed about an appropriate diet, 72% of these people were unable to obtain healthy foodstuff. All these unfavourable SDoH also negatively affect the psychosocial wellbeing of people, which contributes to diabetes outcomes as well. Many of the respondents are reported to be deprived of close family ties and other social networks. This is especially the case for newcomers to Canada (Raphael et al., 2012).

Another key study is the one examining Australia's health policy documents from an SDoH perspective (Fisher, Baum, MacDougall, Newman, & McDermott, 2016). According to Fisher et al. (2016), though they differ in scope, Australian health policy documents are mostly addressing SDoH and health equity. However, the study shows that, despite a reasonable level of acknowledgement of SDoH, Australian politics persist in offering solutions based on individual behavioural changes and medical interventions (Fisher et al., 2016).

Last but not the least, Gómez (2018, 2020) shows that Brazil's former governments had acknowledged that poverty and diabetes were interrelated, and one could not be efficiently dealt with without addressing the other. As the high out-of-pocket payments for T2D treatment were identified to be a significant factor contributing to poverty, former governments under Lula da Silva and Dilma Rousseff presidential administrations (through 2002-2010 and 2010-2015, respectively) reconceptualised their poverty-alleviation policies around diabetes treatment. Brazil's anti-poverty programmes addressing poverty and malnutrition, such as Bolsa Família and Zero Fome, had, in return, positive spillover effects as increasing political support for non-communicable disease programs, especially diabetes (Gómez, 2018, 2020). However, Temer and Bolsonaro governments who came to power one after the other following Rouseff have gradually withdrawn the government support for policies addressing non-communicable diseases and eventually fewer people with T2D have had access to medication and treatment (Gómez, 2020).

2.2.2 Actors

In this newly emerging stream of literature, as mentioned above, studies are quite diverse and examine separate parts of given countries' diabetes policies through different approaches. Therefore, the actors they examine also vary. Besides the local governments, international and inter-governmental institutions (e.g. UN agencies), policy elites and healthcare services providers, studies also consider the roles of academics, civil society organisations, food, beverage and pharmaceutical industries, media and professional associations in decision/policymaking, implementation or management of diabetes policies.

One of the recurring themes concerning actors in diabetes policy is the lack of coordination and cooperation between different policy stakeholders. For instance, the article analysing New Zealand's policy identified a very fragmented and disintegrated map of actors involved in policymaking despite the manageable size of the identified network (de Bruin et al., 2018). Lack of cooperation and communication among relevant stakeholders is identified to be a significant weakness of Turkey and Tunisia's diabetes policies as well (Kilic et al., 2014; Romdhane, Tlili, Skhiri, Zaman, & Phillimore, 2014). In the case of Tunisia, especially the growing divide between the public and private sector in healthcare provision, coupled with the absence of coordination is significantly damaging the efficiency of the health sector and health policy implementation (Romdhane et al., 2014).

Gómez (2018) asserts that Mexico also suffers from a lack of communication and support between the MoH and state governments. Being a federal country, Gómez (2018) notes that the MoH both deprives state governments of financial and implementation support of diabetes self-management programs and is also

sometimes challenged by them when it wants to get involved in policy design and management at the state level. According to Gómez (2018), collaboration not only at the governance level but also among other parties involved in diabetes response such as primary care teams, patients, civil society and families is an essential component of effective diabetes self-management. Non-governmental elements of this network are particularly important in poorer settings where people usually lack time and money to efficiently participate in diabetes self-management programs (Gómez, 2018).

Another important case study is on Singapore's 'War on Diabetes' (Ow Yong & Koe, 2021), which presents a good example in terms of strong cooperation among stakeholders in diabetes policy. In order to provide more targeted services for diabetes patients, Singapore's government collaborated with the primary care networks and subsidised basic screening tests and non-standard drugs to foster early detection and treatment. Government also established systems to support and encourage healthy lifestyles. Moreover, Singapore's MoH partnered with the food and beverage industry to encourage and support major companies in this line of business to make necessary adjustments and transformations to reduce sugar content in their products (Ow Yong & Koe, 2021).

2.2.3 Context

Policy guidance and calls put forth by the UN and WHO seem to have been influential in facilitating or accelerating national plans and policy developments on diabetes in many countries. Rising worldwide prevalence and mortality rates related to the disease and especially rising costs to healthcare systems, national economies and individuals have been significant elements of the contexts pushing governments

to develop policy responses to diabetes. Domestic politics also matter. In Spain, for example, although diabetes has been on the political agenda since the late 1980s, the first parliamentary initiative was only approved in 2006 (Agudelo-Suárez et al., 2012).

Context-wise, one of the emerging themes in the literature is the decentralisation of health systems and governance. Kenya, for instance, had its MoH divided into two separate bodies as the Ministry of Public Health and the Ministry of Medical Services by two opposing coalition parties, and the healthcare management was divided between the health ministries of 47 semi-autonomous county governments (Shiroya et al., 2019). Mexico and Brazil also have been through different kinds of decentralisation, where healthcare services were progressively managed at the local level. Although decentralisation may seem like an impediment in the effective management of diabetes, the key determinant and the difference between these countries is the level of cooperation and communication among these separate actors and government bodies. Brazil's relative success, for example, is due to its ability to maintain strong communication and coordination among the related institutions, as well as to ensure that sub-national governments were provided with reliable funding and other resources despite having a decentralised governance structure in healthcare (Gómez, 2018).

2.2.4 Processes

The gap between diabetes policies and implementation is the most emphasised issue in the reviewed literature concerning processes surrounding the development and implementation of diabetes policies. Nolte, Knai and Saltman (2014) explain that the objectives of policies concerning chronic diseases may seem clear, but in reality, the

translation of these policies into effective policy actions is very challenging. It is mainly because chronic diseases require long-term and complicated interventions and necessitate strong healthcare system capacity. What they suggest to overcome this implementation gap is an efficient integration of the disconnected parts of the healthcare system, such as public health and social care, supported by regulatory frameworks. Another point they draw attention to is that the chronic disease interventions are mainly limited within the existing structure and restricted by the existing capacity of the systems. In order to bridge the gap between policy and implementation, obstacles between institutions, sectors and providers should be overcome through reforming the whole system (Nolte, Knai, & Saltman, 2014).

In Kenya, for example, one of the most prominent problems identified in diabetes policies is the implementation gap. Low ownership and take-up of diabetes strategies are far from fulfilling the diabetes interventions as addressed in the policy documents (Shiroya et al., 2019). Tunisia is also one of the countries suffering from the gap between non-communicable disease policies and implementation, disintegrated health system, lack of investment in information systems enabling following up and monitoring patients which is very crucial in the case of chronic diseases and understaffed healthcare sector. Tunisian public sector falling short in meeting demands led to the growing importance of the private sector which created more favourable conditions for medical staff. As a result, the key health workforce gradually shifted to the private sector, leaving the public healthcare environment even more neglected and inadequate. This is especially problematic in an environment with very scarce monitoring systems in place. Under such limited regulation and communication, MoH guidelines are not properly followed and the private sector is acting rather more independently (Romdhane et al., 2014).

In a study on Ireland (Mc Hugh et al., 2014), it is asserted that Ireland's diabetes interventions suffer from declining health service management, organisational and financial capacity, which can be interpreted as a disintegrated policy environment lacking accurate cooperation. The study shows that diabetes is acknowledged as a priority and there is consensus on what to do and how to do it, but the policy environment is not favourable to take action effectively. The analysis of Ireland's diabetes intervention points out a very fragmented policy context, concomitantly one where there is a significant gap between policy and implementation. As mentioned in the respective study, despite the establishment of an Expert Advisory Group (EAG) for Diabetes and their various recommendations and reports, there is no government-led national strategy specific to diabetes management. Although the proposals and guidelines put forth by the EAG were approved, the anticipated changes were not implemented due to internal and external barriers, such as lack of authority and funding allocation, declining support, organisational changes, or as expressed by the interviewees, "non-movement, non-commitment and non-support" (Mc Hugh et al., 2014). This corroborates the findings of Downs (1972) that suggest the reason why problems usually fade out from the public agenda is that early optimism and awareness lead to a realisation of the financial and social costs of action at later stages.

The analysis of Australian health policies by Fisher et al. (2016) also suggests that there is a gap between the political discourses and policy actions in the country. Although they seem to recognise SDoH in policy documents, this emphasis has not been translated into implementation. Authors explain this based on two factors: 1) the dominant approach in Australian health policy, which sees individual lack of initiative and irresponsibility leading to social disadvantages and accompanying

unhealthy behavioural patterns, 2) health sector agencies preferring individual health promotion programmes as simple solutions over more comprehensive and cross-sectoral preventive programmes (Fisher et al., 2016).

In his 2017 study, Gómez examines the case of Mississippi, United States (US) in comparison to Rio Grande do Norte, Brazil in terms of obesity and diabetes policy responses. Being the state with the highest obesity and second-highest T2D prevalence in the US, Mississippi also demonstrates high levels of rural/urban inequality regarding economic development, poverty, unemployment, adequate primary care, medicine and healthcare services. Especially rural parts of the state have limited access to fresh, healthy food and are, instead, featured with fast-food restaurants. As a result, poorer rural counties like Holmes, Humphries and Jefferson rank the highest levels of obesity and diabetes in Mississippi (Gómez, 2017). In response, Mississippi's Medicaid program covers all the diabetic medications, placing Mississippi among the only three states in the US covering diabetes medications by state insurance. Later, in 2010, the state government put Mississippi Diabetes Prevention and Control Program in place, yet there are no references to poverty or other SDoH as far as is reported by Gómez (2017). On the other hand, in Holmes, as a county in rural parts of the state where municipal government's policy responses against obesity and diabetes are rather more limited, civil society initiatives have been supportive to compensate this gap. The West Holmes Community Development Corporation has been dealing with these prominent health conditions through supporting increased and sustainable agricultural production, youth employment, dietary awareness, agricultural skills-building, as well as opening local vegetable markets (Gómez, 2017).

In another comparison Gómez (2018) made between Brazil and Mexico's responses to the diabetes pandemic, he again refers to some of the SDoH as a part of the explanation of why Brazil outpaced Mexico. Another reason is that, according to the WHO, Brazil reportedly has a more developed healthcare infrastructure and a higher number of trained healthcare workers (as cited in Gómez, 2018). Gómez also underscores the role of international trade in these countries' dietary differences. Tariffs regulated by the North American Free Trade Agreement and the country's geographical proximity to the US and Canada resulted in Mexico's increased access to cheaper processed foods as opposed to Brazil (Gómez, 2018).

2.3 Diabetes intervention approaches

Diabetes policy analysis literature does not offer any overarching typology to categorise different countries' approaches to diabetes and intervention strategies.

Nonetheless, what can be extracted from this stream of literature are certain dichotomies. These dichotomies are not mutually exclusive but can rather be considered as intersecting axes along which diabetes is handled in different settings and under varying perspectives.

2.3.1 Vertical vs. horizontal

Concerning diabetes policy, Zaletel et al. (2015) differentiate between vertical, or stand-alone, programmes and horizontal, or integrated, ones and explain that both have their perks in particular contexts. Vertical programmes acutely address a particular disease and can be beneficial to maximise the short-term impacts where the situation is not suitable to wait for more comprehensive health system changes to occur and extra resources are available to take immediate action. Though, they are

not sustainable and may further fragment the healthcare system (Atun, Bennett, & Duran, 2008).

Horizontal programmes, on the other hand, deal with health in a broader sense, as a long-term process through coordination and cooperation of multiple institutions and resources. These programmes put forth more integrated, multifaceted interventions through a shared vision of various components of the health systems (Zaletel et al., 2015). Because diabetes policies and national plans focus on a single chronic disease, it may be assumed that they are stand-alone programmes concentrating on a very particular, isolated health condition (Zaletel et al., 2015). However, a fully-fledged diabetes care and prevention programme requires a much more complex, comprehensive and multilateral approach. Indeed, two studies on Kenya and Turkey's diabetes policies point out that the setbacks and failures of the respective country programmes partially originate from piecemeal, acute-care models and improved efficiency can be maintained through switching to a horizontal, long-term and integrated care delivery model (Kilic et al., 2014; Shiroya et al., 2019).

2.3.2 Disease-centred vs. patient-centred

The disease-centred approach is mostly a medicalised perspective of the disease and patient, concentrating on following clinical guidelines, offering a uniform treatment plan specific to the disease at hand. A disease-centred approach can be suitable for patients with a single predominant condition where the desired outcomes are clearly known and the same for everyone. It is, however, ill-fitting for those with multiple comorbidities or complications (Tinetti, Naik, & Dodson, 2016).

The patient-centred approach, on the other hand, involves patients in the decision-making and processes, consults them about their needs and considers

individual, social and cultural differences. It provides choices to the patients wherever possible. It is also transparent and acknowledges the right to be fully informed and to consent to the treatment process (IDF, 2010).

Diabetes mellitus is a disease that can potentially bring about a broad range of complications. While some patients can maintain a life similar to a non-diabetic person only by using medication, some experience much more serious consequences. Moreover, the course of different types of diabetes and, hence, the needs of the respective patients significantly differ. Therefore, it necessitates a patient-centred approach where individual needs are taken into consideration and a tailored intervention is designed with the patient's proactive participation. The Council of the European Union (2006) reports that the importance of the patient-centred approach is recognised by the European health systems and that all European countries aim to adopt such an approach. Diabetes policy analyses from some non-European countries, like Georgia and Tunisia, also draw attention to the need to develop a patient-centred approach by improving coordination among the different components of the health systems and point out the disease-centred approaches as a part of the reasons behind inadequacy in national responses to non-communicable diseases (Balabanova et al., 2009; Romdhane et al., 2014).

2.3.3 Prevention vs. treatment

Prevention and treatment of diabetes are not two opposing options of diabetes interventions, but it is often the case that national policies prioritise one over the other. Ideally, for more effective results, more of a balanced approach needs to be maintained.

Diabetes care and treatment is clearly a crucial part of the healthcare systems. Governments in different countries subsidise primary care, further treatment, medications, insulin, test strips, other tool and devices needed for diabetes monitoring and even private health insurance to foster access to healthcare services by diabetic patients to varying degrees and for different target groups (Carpenter, 2012; Ow Yong & Koe, 2021; Raphael et al., 2012).

Prevention of diabetes, however, is probably more cost-effective in the long run, but require much more thorough planning of the whole response and integration of multiple systems. It takes having systems in place to promote early diagnosis, targeting people throughout their lives, particularly risk groups, taking social, cultural, individual differences into account and establishing proper monitoring and evaluation mechanisms to follow up with programs and patients (Council of the European Union, 2006). For a prevention program to be successful on a larger scale, it should essentially recognise and address the SDoH and mitigate the impacts creating preventable health inequities. WHO asserts that the SDoH account for 55% of all health outcomes, hence focusing on them can be more effective than healthcare and lifestyle choices in shaping health status (WHO, n.d.). SDoH identified in relation to diabetes by Hill-Briggs et al. (2021) are socioeconomic status (education, income, occupation), neighbourhood and physical environment (housing, built environment, toxic environmental exposures), food environment (food security, access, availability), healthcare (access, affordability, quality) and social context (social cohesion, social capital, social support) (Hill-Briggs et al., 2021, p. 260).

2.3.4 Whole-of-government/society vs. group-based

A group-based perspective on diabetes focuses only on a group of people who are already diagnosed and seeking for a cure. In contrast, in Global Report on Diabetes (2016), WHO calls for a whole-of-government and whole-of-society approach to diabetes, in which various policies in trade, finance, transport, urban planning, agriculture, education and employment are considered in terms of their health impacts. Multisectoral collaboration along with a life course approach at the population level needs to be adopted in order to manage the diabetes risk factors and prevalence.

Another intervention modality to be executed in line with the whole-of-government/society approach to reduce or maintain the population's exposure to unhealthy lifestyle choices is to manage the CDoH. Kickbusch, Allen and Franz define CDoH as "strategies and approaches used by the private sector to promote products and choices that are detrimental to health." (Kickbusch, Allen, & Franz, 2016, p. e895) Singapore's regulations on mandatory nutrient summary labelling on the front side of the packs, advertisement of unhealthy, sugary beverages and duty on high-sugar processed products (Ow Yong & Koe, 2021); and Mexico's sugar tax imposed on sugar-sweetened beverages and ultra-processed food (Fraser, 2018) are examples of governments' managing CDoH in favour of public health.

2.4 Conclusion

While diabetes policy analysis is an emerging field of academic inquiry, health policy analysis discussions are rooted further back in history. Therefore, diabetes policy analysis literature benefits from the analytical tools of development and health policy literature. Walt and Gilson's policy triangle framework (1994) is one of the

most commonly adopted frameworks in this area of study. As opposed to the strong focus solely on policy content in analysing health policies, Walt and Gilson (1994) underscore the importance of also examining the context, actors and processes dimensions in order to better understand the factors effective in a given policy's success or failure.

Diabetes mellitus is a complicated health condition that necessitates a very comprehensive approach in which medical and non-medical causes, implications, needs and resources should be elaborately taken into consideration. The review of the literature on diabetes policy provides insight into how diabetes is addressed in different parts of the world within various political contexts, and it presents various approaches, interventions and points of focus adopted by different governments in order to reduce or maintain diabetes prevalence together with its financial and social costs.

The difference in the approaches generally stems from the resources, capacity and prioritisation of the respective country and governments. While some countries prioritise containing diabetes prevalence and mortality, others are primarily concerned with reducing direct and indirect costs. A merely medical approach to diabetes is not cost-effective in the longer run. Accordingly, as highlighted throughout the literature, the efficiency and sustainability of intervention modalities are among the core priorities for a successful policy response.

CHAPTER 3

DIABETES OUTLOOK IN TURKEY

3.1 Diabetes prevalence in Turkey

One of the most-recognised, earlier studies measuring diabetes prevalence in Turkey is the Turkish Diabetes Epidemiology Study (TURDEP) conducted between 1997-1998. This population-based, cross-sectional study conducted with the participation of 24788 people over 20 years of age found the crude T2D prevalence to be 7.2% in Turkey (Satman et al., 2002). TURDEP study was repeated in 2010 (TURDEP-II) and this time the T2D prevalence was measured to be 16.5%, corresponding to 6.5 million adults. Age-standardised prevalence to the initial study (TURDEP-I) was 13.7% and if the same diagnostic criteria were applied the new prevalence would still be 11.4%. This signifies a 90% increase rate of diabetes over a 12-year period (Satman et al., 2013).

Some other studies that have measured the crude diabetes prevalence are as follows; CREDIT (Chronic Renal Disease in Turkey, 2008) 13%, PURE (The Prospective Urban Rural Epidemiology Study, 2009) 14.7%, TEKHARF Study (Cardiac Disease and Risk Factors in Adults in Turkey, 2011) 11.1%. It should, however, be noted that diagnostic criteria and methodology are not standardised and vary across studies (Turkish Public Health Institution, 2013). Hence, it may not be accurate to directly compare the results. Nevertheless, all these studies collectively point out the severity of the diabetes situation in Turkey and the urgency of the need to act upon it.

International Diabetes Federation (IDF) provides the latest figures of diabetes in Turkey in the 9th Diabetes Atlas (2019) for the population between 20 and

79 years of age, within a time range covering from 2010 to 2045 projections. It is worth mentioning that the Diabetes Atlas presents figures of both T1 and T2D combined. Because these data are collected from respective countries that have produced them through various methods, it is not always possible to differentiate the type of diabetes they report. However, as most of the data are derived from adult populations and T2D is overwhelmingly more common in this age group than T1D (roughly 90% to 10% ratio), any given output can reasonably be attributed to T2D (IDF, 2019).

According to Diabetes Atlas, the age-adjusted comparative prevalence of diabetes has risen from 8% in 2010 to 11.1% in 2019 in Turkey. This corresponds to a rise in the number of persons living with diabetes from 3.6 million to 6.5 million in Turkey. The Atlas goes on to estimate that the diabetes prevalence rate will be increasing approximately by 10% in each decade and add up to more than 10 million people by 2045 (IDF, 2019). As of 2019, as per it is measured by IDF, Turkey ranks the highest age-adjusted comparative diabetes prevalence (11.1%) and has the third-highest number of people with diabetes (6.5 million) in the Europe Region covering 57 countries or territories. Projections for 2045 show that Turkey will potentially hit 10th place in the highest number of adults (between 20-79 years) and 9th place in the highest number of people older than 65 years with diabetes in the world. With 43,503 annual deaths, Turkey is also currently among the countries with the highest number of diabetes-related mortality (IDF, 2019).

3.2 Brief history of Turkey's diabetes interventions

Turkey has signed the 1989 St. Vincent Declaration (WHO-IDF, 1989) prepared jointly by the WHO Europe Regional Office and IDF in 1992. Turkey's MoH started

developing the National Diabetes Programme in 1994 and put it into effect in 1996. From 2003 on, this programme was extended to cover hypertension and obesity and became “The National Diabetes-Obesity-Hypertension Control Programme” (Satman, Imamoğlu, Yılmaz, Ayvaz, & Çömlekçi, 2012).

Turkey’s MoH took a progressively strategic stance against diabetes. Interventions against diabetes were included among the strategic targets that were documented in the MoH’s “Strategic Plan 2010-2014” and in the “Health Transformation and Social Security Reform Project” conducted with the support of the World Bank Group in 2009. In 2009 also a diabetes-specific programme (Turkey Diabetes Control Programme) was initiated to meet the need for an updated strategy against diabetes and its respective risk factors and complications (Satman et al., 2012). This program was later updated as an action plan called “Turkey Diabetes Prevention and Control Programme 2011-2014” to increase diabetes awareness in the society, to improve the quality of care offered to diagnosed patients and to decrease diabetes-related complications and mortality. In light of the experiences and feedback gathered throughout this program, the “Turkey Diabetes Programme 2015-2020” was developed (Turkish Public Health Institution, 2014).

In addition to these, there are other studies that are either implemented by Turkey’s MoH or by civil society agencies and supported by the MoH, such as Diabetes 2020: Vision and Targets Project, National Insulin Education Programme, Diabetes at School Project, and WHO STEPwise which was a joint effort by MoH and WHO across Turkey (Satman et al., 2012). Moreover, because diabetes is closely related to other metabolic disorders such as obesity, hypertension and heart disease, programmes targeting to intervene with diabetes go parallel to other programmes, for

instance, Turkey Dietary Guideline 2015 or Turkey Healthy Diet and Active Life Programme 2014-2017 (2013).

3.3 Turkey's diabetes context

3.3.1 Healthcare environment

Since the introduction of the Health Transformation Programme (HTP) in 2003, Turkey's healthcare system has been through a major transformation that brought along significant changes in financing, regulation, and delivery of healthcare services. HTP also brought about a new division of labour between the private and public sectors in healthcare. The private sector's share in the healthcare service provision has increased while the role of the state was gradually redefined with a strengthened position as a financing, regulating, monitoring actor setting the rules for both sectors (Agartan, 2015).

HTP was proposed in order to address the following problems that have come to be identified in the Turkish healthcare system: poor health outcomes; high infant and child mortality rates; the absence of universal insurance coverage; overlapping roles of organisations, inefficiencies, waste and corruption in service provision; lack of a functioning referral system and preventive care approach; over-centralisation of health services management and skilled healthcare worker shortages, especially physicians due to their privilege of carrying out private practices while being publicly employed. As a result, General Health Insurance (GHI) was introduced with a single benefits package and three diverse, employment status-based insurance funds were united into a single provider as the Social Security Institution (SSI) (Agartan, 2015, p. 980).

Financial contribution to the GHI administered by the Government of Turkey is compulsory for all citizens, except for those living under a certain income threshold. This group can benefit from healthcare services without contributing to their financing. Formally employed people (and their employers) pay the compulsory contribution to the GHI as direct deductions from their salaries. Under certain criteria, dependents are entitled to benefit from their parents', children's, or spouses' GHI coverage as well. Hence, even though Turkey's GHI's ability to provide universal coverage is controversial at some levels (Yilmaz, 2021), it does cover a vast majority of the population for healthcare services. In fact, as of January 2021, the SSI reports that a total of more than 82 million people, which roughly makes up the 98% of Turkey's population, are covered by GHI (SGK, 2021).

Coverage by Turkey's GHI provides citizens with access to some of the diabetes-related needs, such as basic screening tests, oral anti-diabetic medications, injectors, blood glucose test strips and diabetic foot care products with little or no additional payments. Nevertheless, the scope of GHI is mostly focused on the treatment of diabetes, instead of prevention, as per the country's general policy approach to diabetes management. While there still seems to be significant shortcomings in GHI coverage in both prevention and treatment terms, it can still be assumed that GHI contributes to diabetes-related health equity to a certain extent.

Although the current GHI model initially aimed at ensuring equality in access to healthcare, it ended up creating new inequalities based on income (Yilmaz, 2013). This national insurance scheme fails to abolish access inequalities as it is combined with various contributory payments and co-insurances, because of the association of the levels of these payments with the quality of services, and the introduction of supplementary private health insurance (Yilmaz, 2013). This general trend of

expanding access inequalities is highly likely to have repercussions on diabetes patients as well. How these reflect on diabetes care and treatment pathways will be examined in the next chapter.

In terms of primary care, a reformed system with a family medicine model was introduced (Agartan, 2015, p. 980). The family medicine model was initially piloted in Düzce in 2005 and gradually expanded country-wide by 2010 (Güneş & Yaman, 2008). The transition period, however, happened somewhat haphazardly. Family medicine has been an area of speciality in Turkey since the 1980s and ‘family medicine specialist’ has been granted as a title following a 3-year training after the 6 years of undergraduate medical education. Nevertheless, when the family physicians primary care model was put into effect in 2005, these specialist doctors were not enough in number to meet the excessive need. At that point, general practitioners who had completed their undergraduate medical education have been through a 6-days training followed by a year of distance education and became family physicians (Yardımcı, Akbıyık, Aypak, Yıkılkan, & Görpelioğlu, 2016). This kind of accelerated assignment of family physicians has potentially resulted in certain gaps of knowledge and practice at the primary care level.

Family medicine model aimed at establishing a unified healthcare service provision model at the primary care level. These primary healthcare centres (PHC) were designed with the anticipation of acting as gatekeepers to more complex healthcare services. However, this role was not fulfilled by PHCs due to lack of specialised healthcare workers, overburden of family physicians and public resistance to the implementation of a referral system (Öcek, Çiçekoğlu, Yücel, & Özdemir, 2014). Lack of the referral system and failure of the gatekeeping model

kept intact the overburdening problem in hospitals and high demand for specialised services.

Another change brought along the introduction of HTP is the performance-based payment model where physicians are to be paid based on their performance points on top of a humble base salary. The idea behind this new model was to encourage the increase in efficiency of the healthcare service provision, but some actors raised concerns over the negative implications of such a remuneration system. For instance, the Turkish Medical Association opposed this model on the grounds that it aims to commercialise primary and secondary healthcare and also to deprive healthcare workers of their job security. From a similar perspective, the Turkish Nurses Association also indicated that the performance-based payment system is not designed to improve the quality of services, but only to benefit physicians (Akinci, Mollahaliloğlu, Gürsöz, & Ögücü, 2012). The performance-based system is not intrinsically doomed to undermine the service quality. On the contrary, it could have been channelled into improved outcomes through appraisal of performances on the right grounds. However, eventually, it did result in the undermining of practices that could potentially lead to better public health outcomes, especially in the case of chronic diseases, such as diabetes.

The research conducted by Kilic et al. (2014) in which they analysed Turkey's penultimate policy documents on diabetes mellitus in relation to interviews conducted with relevant actors addresses similar concerns regarding the performance-based payment system. The respondents of the study highlighted that this payment model may potentially cause problems, especially at the primary care level and have a negative impact on chronic disease management in the long run. It is believed that family physicians at the primary care level may become reluctant to

treat and follow up with diabetes patients because they would think that such long-term management required for chronic conditions and that the results are not always visible may hinder their performance points (Kilic et al., 2014).³

Kilic et al. (2014) also underscore some structural challenges in Turkey's healthcare system. The gap between policies and implementation is referred to as a major problem. It is partly explained by the severe lack of cooperation among stakeholders. Key informants described that the coordination and cooperation within the MoH bodies and among the MoH, provincial-level institutions, civil society and other sectors are quite poor, and these stakeholders lack mutual trust. This lack of communication and collaboration usually manifests itself in poor information sharing, duplication of certain activities and diminishing overall efficiency of the healthcare system as a result (Kilic et al., 2014).

Lack of a referral system, which permits patients to skip the primary level and directly apply to secondary and tertiary healthcare facilities, is deemed another major problem in Turkey's healthcare system. Overcrowding of hospitals due to the patient bypassing of primary care combined with the shortage of general practitioners and specialised healthcare staff, such as diabetes nurses, public health specialists and dietitians leads to an inefficient healthcare provision environment for patients with diabetes (Kilic et al., 2014).

Another crucial point Kilic et al. (2014) drew attention to is the lack of reliable, standardised data on major non-communicable diseases and associated risk factors in Turkey. Although the information system is gradually being automated and digitalised, the data has not been made available to the public. Taken together with

³ The payment system applied at primary level healthcare services is, in fact, more complex than it was referred to in the respective article. For more information, please see: https://www.ttb.org.tr/kollar/_ahek/makale_goster.php?Guid=6baa15c6-de5a-11e7-9fad-23dff326e1f9#

the lack of communication between different components of the healthcare system, the absence of an effective information sharing mechanism makes it virtually impossible to develop evidence-based policies (Kilic et al., 2014).

In addition to the findings of Kilic et al. about the impeding factors that create an unfavourable environment for effective management of diabetes, Satman (2018) refers to a different point. Satman, who is the head of the team that had conducted the TURDEP studies and also a board member of Health Institutes of Turkey under MoH, points to the lack of patient awareness and adaptability to the diabetes care processes as the main obstacle for the diabetes management in Turkey (Satman, 2018).

3.3.2 Food environment

UN Committee on World Food Security defines food security as “all people, at all times, [having] physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life” (International Food Policy Research Institute, n.d.). In general terms, Turkey can be considered a food secure country. Though it ranks 47th among 113 countries in the global food security index, its strengths stand out as sufficiency of supply, micronutrient availability, market access and food safety (Global Food Security Index, 2020).

Thanks to its climate and land qualities, Turkey is a prominently agricultural producing country. 73.5% of the whole agricultural production comes from crops. In parallel to that, bread (44%) and other cereals (58%) are the main sources of energy for the general population. In Turkey’s case, the problem with dietary patterns lies not in the nutrition content, food availability or per capita nourishment, but in the

distribution of a healthy diet across the society. Lower income and dietary literacy levels are observed to be associated with increased bread and carbohydrate-based diet, whereas higher-income families' dietary patterns rely more on meat and meat products (Pekcan, 2006).

In accordance with carbohydrate-rich diet and other lifestyle habits, unsurprisingly, obesity is another prevalent condition threatening public health in Turkey's society. Although which one comes first is interchangeable, obesity and diabetes are known to be closely associated. TURDEP-II study (2010) revealed that while 31.2% of Turkey's population is obese, 37.5% is overweight. Obesity is found to be more common among middle-aged or older women than other groups. Comparing the results with the TURDEP-I study, the research team verifies that obesity is one of the leading factors of the diabetes pandemic (Satman et al., 2013).

Food safety, on the other hand, is defined as the assurance that, when consumed properly, the foodstuff would do no harm. It pertains to consumer protection through improved food quality, strengthened food control systems and increased education of food producers, sellers and consumers (Pekcan, 2006). In relation to this definition, one dimension of food safety would be food labelling regulations. Turkish Food Codex Food Labelling and Consumer Informing Regulation (2017) clearly states that, among other information, food content and nutrition facts should be explicitly indicated in a visible, legible and attention-grabbing way. Compulsorily declared nutrition facts include, but are not limited to calorie, fat, saturated fat, carbohydrate, sugar, protein and salt content of the foodstuff. This list varies through different food groups. A 2010 study by Dikmen and Pekcan (2013) analysed 3184 foodstuffs for their labels and nutrition facts and found out that while 13% of the products did not have any labelling information,

only less than 20% had labels with a complete set of information as it is required in the aforementioned regulation (Dikmen & Pekcan, 2013). This study, again, implies a gap between policies and implementation.

3.3.3 Social/physical environment

TURDEP-II study reveals that there is no significant difference in diabetes prevalence between men and women and between urban and rural areas. Regional breakdowns, however, show that Northern Anatolia is the region where diabetes prevalence is lowest in Turkey, while Eastern Anatolia has the highest prevalence rates. Diabetes awareness is identified to be highest in Western Anatolia and lowest, again, in the Eastern Anatolian region (Satman et al., 2012).

Given the fact that Eastern Anatolia is one of the regions with the lowest income levels, these data are in line with the general understanding that, in addition to several other factors, diabetes and socioeconomic status are negatively correlated. As the study conducted by Oğuzhan, Dündar, Ökçün and Koçkaya (2020) puts forth, diabetes prevalence is negatively correlated with the gross domestic product (GDP) per capita, positively correlated with the percentage of health expenditure within GDP and Gini coefficient (Oğuzhan, Dündar, Ökçün, & Koçkaya, 2020).

T2D is also found to be affected by the built environment through access to physical activity and stress factors, such as long distances of commute, traffic congestions and dependence on vehicles (Pasala, Rao, & Sridhar, 2010). Physical space and city planning are neglected dimensions of policies against chronic or non-communicable diseases in Turkey. Especially in the urban areas of the country, spaces needed for physical activities or green areas for improved health outcomes are almost completely disregarded. WHO identified that the minimum amount of

available green spaces in urban areas per capita should be at least 9 square metres, and the ideal amount is between 10-15 square metres. Unfortunately, per capita, green space in Turkey is between 1-9 square meters (Kırdar, 2013). There is very occasional forestation in urban centres and roads are not suitable for non-motorised vehicles. Only in some parts of the country, there are spaces encouraging physical activity with the local initiative of municipalities, but it is not possible to observe an overarching policy or implementation to foster bodily health through sports and outdoor activities.

3.4 Conclusion

This overview of Turkey's diabetes-related outlook suggests that Turkey has long been a part of the global efforts in the struggle with the diabetes pandemic. Diabetes care is addressed to a certain extent through extensive healthcare coverage and primary care facilities available to a vast majority of the population. However, given the constantly increasing prevalence rates, relying solely on the treatment of diabetes falls short in improving the overall situation and a more integrated policy approach with longer-term planning is sorely needed.

As presented by the studies examining Turkey's previous diabetes policy programmes and existing data outlined in this chapter, Turkey's diabetes policy approach has several shortcomings. Beyond a well-structured healthcare system, diabetes policies should be supported by proper nutrition, urban planning, education and development policies, which seem to lack in the case of Turkey.

This chapter also reveals that the literature on Turkey's diabetes policy analysis is limited both in volume and scope. While these studies highlight significant problems in their analyses, they are observed to have mostly remained

within a predominantly medicalised point of view. Therefore, this study aims to bring a social science approach to the diabetes policy discussions through the adoption of a wider perspective to examine not only healthcare policies but also health outcomes of other policies with a health equity and rights-based approach.

CHAPTER 4

A QUALITATIVE ANALYSIS OF TURKEY'S DIABETES POLICY

This chapter examines Turkey's 2015-2020 national programme for diabetes prevention and control document (MoH, 2014) (will be referred to as "the Programme" hereafter) in pursuit of questioning how come this policy fails to prevent the ever-increasing diabetes prevalence in the same period. In order to conduct a qualitative analysis, this study employs Walt and Gilson's policy triangle framework (1994) and explores the following four dimensions of the respective policy programme; 1) content (key objectives, areas of focus), 2) actors (stakeholders involved in/responsible for various stages of the programme), 3) context (the healthcare context surrounding the policymaking and implementation) and 4) processes (course of implementation, gaps and challenges). The context dimension in this study is examined in the previous, third chapter. The analysis of these components helps us to identify how and why Turkey's Diabetes Programme (MoH, 2014) falls short of improving the diabetes picture in the country. The analysis of the programme is further strengthened by the examination of other selected policy documents and circulars that are referred to in the Programme, and the transcriptions of Diabetes Parliament meetings.

4.1 Content

Turkey Diabetes Programme 2015-2020 (MoH, 2014) has five main objectives that are addressing 1) policy development and implementation, 2) prevention and early diagnosis, 3) effective treatment, 4) childhood diabetes care, and 5) effective

monitoring and evaluation of the Programme. These objectives divide into more specific targets and action points.

4.1.1 Policy development and implementation

In this section of the policy document, initially, the need for strong political will and cooperation is indicated. Other prominent points of focus are the production of reliable data and effective information management. The Programme recognises the need to conduct regular, comprehensive, up-to-date epidemiological studies in a standardised manner. The Programme (MoH, 2014) requires a ‘Diabetes Research Guide’ to be prepared and published so that the results of the epidemiological studies can be compiled in a comparable form. Standardisation of diagnostic criteria, laboratory conditions and used methods, treatment and monitoring protocols and guidelines, and training programmes are also given importance throughout the document.

For the improvement of diagnosis, treatment and monitoring standards, it is suggested to establish a cooperation mechanism among all the relevant actors to prepare a National Diagnostic and Treatment Guideline. In general, the need for financial, digital and human resource capacity building is stressed in order to achieve improved service provision and cost efficiency. Expansion of the scope of GHI coverage is also mentioned regarding the improved reimbursement capacity through relevant arrangements on Health Applications Communiqué⁴ (SUT) for medication and devices used by T1 and T2D patients (MoH, 2014).

⁴ Health Applications Communiqué (Tr: Sağlık Uygulama Tebliği – SUT) is a detailed legislative statement including all the details regarding healthcare applications, pricing and regulations which provides a basis for health policies.

4.1.2 Prevention and early diagnosis

The main prevention strategy of the Diabetes Programme (MoH, 2014) is awareness-raising campaigns targeting the whole society through community leaders, media, visual and auditory materials to be placed in hospitals and other public spaces, and through preaches in mosques. It is suggested to educate both healthy and at-risk people through Diabetes Training Modules. In this sense, the policy document demonstrates a whole-of-society approach, but only at the awareness-raising level. Additional preventive and diagnostic measures are limited to at-risk groups, such as those identified with prediabetes or pregnant people.

There are also a few action points addressing SDoH in terms of urban planning and arrangement of public spaces in favour of diabetes prevention and encouraging the society to adopt lifelong habits of a healthy diet and physical exercise. However, this Programme (MoH, 2014) does not elaborate on how to achieve these targets. Instead, it urges the effective implementation of the Turkey Healthy Nutrition and Active Life Programme 2014-2017 (2013).

Turkey Healthy Nutrition and Active Life Programme 2014-2017 (2013) is also published by the Turkey Public Health Institution under the MoH as a revision of a previous programme. It is a programme focusing mainly on obesity interventions and healthy lifestyle promotion. Healthy Nutrition and Active Life Programme presents targets, strategies and action points very similar to those narrated in Turkey Diabetes Programme, except that these are within the obesity framework. What stands out as distinct from the Diabetes Programme is the emphasis on social and commercial determinants of health in the Healthy Nutrition and Active Life Programme. One of the initial strategies put forth by this Programme is the elimination of health inequalities, especially those in relation to obesity and physical

inactivity risk factors. It aims to realise this goal through multisectoral cooperation, increased schooling and employment rates, especially in lower and middle-income regions, increased health literacy and conducting more research and workshops on this topic. Another suggestion to address SDoH is through the provision of free-of-charge breakfast, lunch, milk, fresh fruits and vegetables in schools in low/middle-income regions. Urban planning in favour of more physical activity and the creation of safe spaces for improved exercise possibilities are other dimensions of SDoH-related interventions.

Concerning CDoH, the Healthy Nutrition and Active Life Programme proposes closer cooperation with the private sector, more specifically the food sector, media and other stakeholders. It aims to encourage the production of foods with more balanced nutritional values. Trainings targeting food sector managers, producers and consumers; increased nutritional literacy; regulations on food labelling, commercials, marketing strategies and media; and discouragement of unhealthy food options through increased taxes are among the action points addressing CDoH.

4.1.3 Treatment

Trainings also stand out among the action points for the third objective (effective treatment of diabetes and its complications). In this section, mostly in-service trainings for healthcare staff and patient education by specialised staff are put forward as solutions. It is also targeted diabetes-related acute and chronic complications to decrease via better educating patients and their social circles and making them better prepared for emergencies. The establishment of multidisciplinary diabetic foot councils in tertiary healthcare facilities is also among the effective

treatment strategies put forth by the Diabetes Programme (MoH, 2014). Improved access to physical activity areas and proper diet in public places of accommodation, such as dormitories, schools, workplaces, prisons, military quarters for residents with diabetes are also mentioned in the treatment section, although they are more relevant to prevention measures.

Healthcare staff is planned to be encouraged to diagnose, treat and follow-up with diabetes cases through a performance-based payment system. Detection of especially gestational diabetes cases is to be an additional positive performance criterion. Additionally, the time spent giving and receiving trainings shall be included in the performance points calculations. Physical conditions, human and other resources are to be maintained in favour of the provision of these training sessions.

4.1.4 Gestational and childhood diabetes

Gestational and childhood diabetes, thereby pregnant women and children are the two groups that are most distinctively given importance within the Programme. Close follow-up and identification of gestational diabetes cases are emphasised multiple times. Action points similar to those mentioned above have been listed as a separate section specifically for children's diabetes under the respective objective (objective four – improvement in childhood diabetes care and treatment, prevention of T2D and obesity). Moreover, it is targeted the entire treatment and follow-up costs of children with T1D to be covered by the social health insurance scheme, and their health insurance entitlements to be granted all through their lives regardless of their contribution to social health insurance through employment.

Child-specific action points are primarily concerned with the conditions children with diabetes face in schools. These measures include, but are not limited to, providing reasonable accommodation for children with diabetes, strengthening of nursing care in schools, training of school staff about diabetes care, promotion of training of trainers about childhood diabetes, and education and nutrition aid to be provided to the families of diabetic children in poverty. Additionally, increasing the number of diabetes summer camps for children with diabetes that serve as a platform where children learn together with their peers how to be more conscious about their conditions and live self-sufficiently. The coverage of entrance fees to these summer camps by the SSI is mentioned among the objectives.

This section also urges the active enforcement of the School Canteens Circular (MoNE, 2016). School Canteens Circular (MoNE, 2016) is an intervention by Turkey's MoNE to regulate the types of products sold in canteen, cafeteria and buffets and inspection of these places in order to prevent children's consumption of calorie-dense, poor nutritional value food and beverages; discourage them from unbalanced and unhealthy dietary habits; and to maintain food safety in schools and other institutions under the respective ministry. Appendix 2 of the aforementioned Circular contains a long list of items (e.g., sugary drinks, any kind of chocolate, chips, fried food, tea and coffee) that are not appropriate to be sold at relevant institutions.

4.1.5 Monitoring and evaluation

The Programme acknowledges that there is a significant need for capacity building in terms of information management. It mandates the necessary regulations to be made for the country-wide electronic registration of diabetes-related data and integration of

the MoH information system with all the reporting institutions. It is, then, aimed to translate these data into setting up effective monitoring, evaluation and reporting mechanisms. For more advanced monitoring purposes, the establishment of a “Turkey Diabetes Observatory” is among the action points.

4.2 Actors

The policy documents analysed in the previous section are written by groups of medical doctors. However, it is stated in both documents that these programmes came to be prepared with the contribution of a broad scope of actors. Several government branches have been involved in the policymaking. Among these are Turkey’s Grand National Parliament, several ministries, several subdivisions of the MoH, some municipalities, universities, a wide range of civil society organisations, professional associations, and a number of individual experts. Both programmes designate specific actors to be in charge of each action point. Throughout both policy documents, government bodies are identified as the primarily responsible party for the action points with only a few references to universities, non-governmental organisations (NGOs) and the private sector as being secondarily relevant to the objectives.

There is, in fact, a much stronger civil society presence in the landscape of Turkish healthcare politics than it is referred to in the policy documents. As pointed out by Yılmaz (2021), over the past few decades, healthcare politics in Turkey has been accommodating a higher number of non-governmental actors, such as patient and professional organisations, which indicates a noteworthy increase in the democratisation of health politics. This is also the case when it comes to diabetes. In 2009, for instance, under the coordination of Turkey Diabetes Foundation, several

civil society organisations and professional associations have gathered to come up with a 10-year civilian strategic plan to identify diabetes policy vision and targets called ‘Diabetes 2020’. At the initial level of this plan, 11 sub-working groups were established to collect relevant data and conduct a needs assessment. The results were, then, presented in a meeting attended also by WHO Europe, IDF, commissions from the Grand National Assembly of Turkey and line ministry representatives. These meetings were later evolved into the Diabetes Parliament.

Diabetes Parliament is a significant platform for diabetes policy debates in Turkey. It has been attended by an extensive range of actors, including government representatives, members of the parliament from the ruling and opposition parties, patient and professional civil society organisations, individual patients and patient relatives. It is first initiated by the Turkey Diabetes Foundation, a civil society organisation, and later has become a platform hosted by governmental institutions. It is a platform where all the diabetes actors can gather in pursuit of claiming rights and addressing problems. Besides advocacy, diabetes-related civil actors are taking an active role in the struggle to improve services and conditions for patients and their families in various ways such as initiating collaborative projects with the public sector. Details of these projects and initiatives will be elaborated on throughout the following section.

4.3 Processes

There is very little and superficial information on the diabetes policy development processes in the policy documents. To compensate, here I focus on the implementation process and the correspondence between policy and implementation. The main data source that I use to examine the implementation is the transcriptions

of Diabetes Parliament meetings that took place between 2015-2018. These minutes include first-hand accounts of non-governmental actors' assessment of the policy and its implementation.

One key finding the analysis of Diabetes Parliament meeting transcriptions reveals is that throughout the 2015-2018 period, along which Turkey's Diabetes Programme was also in effect, national diabetes policy was not a common reference point in these discussions. The discussions took place over various diabetes-related policies, such as general health, education, or social security policies, however, no participant seems to refer to a diabetes policy per se. Particularly, Health Applications Communiqué seems to be one of the main reference points in these discussions. That every ministry handled and discussed the issues in an isolated manner from other government bodies points to a fragmented approach. This is controversial in the sense that one of the main purposes of having a national diabetes policy is to put forth a holistic approach where all the relevant actors can cooperate to produce a joint intervention. Therefore, it indicates a lack of a whole-of-government approach on the ground.

Discussions at the Diabetes Parliament revolve around some key topics and these topics do not exhibit significant differences from one year to another. This observation itself signifies a crucial lack of effective progress at the level of diabetes policy and practice. These recurring problems and themes are explored under five overarching categories below.

4.3.1 Limited diabetes awareness

4.3.1.1 Limited public awareness

Public awareness of diabetes is an issue that has been attached noteworthy importance in Diabetes Parliament meetings as it is considered at the root of many other problems. Especially problems encountered in schools by diabetic children were expressed quite frequently in these meetings (DP 7, 2015; DP 8, 2016; DP 9, 2017; DP 10, 2018). In this regard, Diabetes Parliament members strongly highlighted the significance of awareness raising activities and training modules during the discussions. Raising awareness on diabetes at schools were seen to be an effective measure to overcome bullying and discrimination at schools, get teachers and other school personnel to approach diabetic children in a supportive and helpful manner, and provide reasonable accommodation to children with diabetes (DP 7, 2015; DP 8, 2016; DP 10, 2018).

The problems arising from the lack of awareness on diabetes in schools have apparently been affecting diabetic children's access to schooling and their overall well-being at schools. It was reported that some teachers do not let children measure glucose or inject insulin, because they are not familiar with these practices. Without reasonable accommodation in school settings, children may end up secretly using toilet areas for such needs (DP 7, 2015; DP 8, 2016; DP 9, 2017; DP 10, 2018). A T1D patient shared this problem stating "Unfortunately, some teachers do not allow blood sugar measurement or insulin injection, allegedly, because other children would be scared. In general, because they were not directed to a suitable space, children have to inject insulin in toilets." (T1D Patient in DP 7, 2015, p. 35) (See Appendix B, 1). Some parents have reported withdrawing their diabetic children from the school concerning that they would not be well taken care of or may be

given any food that would jeopardise their health (DP 7, 2015; DP 8, 2016). A psychologist shared that when asked about the dropout children, a parent of a child from the school she was working in had expressed their concern saying

My child has diabetes, I can't send him/her to the school. His/her blood sugar is constantly around 400. I am concerned what if someone gives sugar or something to my child. Therefore, I did not want my child to start school. (Psychologist/Mother of a T1D patient in DP 7, 2015, p. 37) (See Appendix B, 2).

Diabetes awareness outside of schools was also acknowledged as an important part of the struggle against diabetes in society. The Head of Turkey Family Medicine Foundation reported that only about half of the 8 to 10 million diabetes patients in Turkey were aware of their condition. He also mentioned that the level of awareness has been decreasing over time. Hence, there seemed to be an obvious need for new measures to educate the public about diabetes to increase rates of early diagnosis and prevention (DP 7, 2015). One of the suggestions was to educate the public through media (DP 8, 2016). There was a general understanding that public institutions, such as Ministries of Health and National Education, civil society and private industry should cooperate to increase awareness levels.

Government representatives in Diabetes Parliament meetings responded to these claims and requests for more awareness raising activities by pointing out some of the campaigns that were already in effect at the time of the discussion and some others that were at the planning stage. A participant from the MoNE pointed out a number of initiatives of the respective ministry. He informed that within the scope of the Diabetes at Schools Programme, MoNE developed several training videos about childhood obesity, healthy diet, diabetes training for children and such other content. He also stated that from 2010, when the programme was first initiated, until 2018 these training materials had reached almost 27 million students in addition to their

families and school personnel (cafeteria personnel, school bus drivers, etc.). While there was a certain level of consensus on the necessity of public awareness raising, the measures put in effect by the state were mostly limited to schools (DP 8, 2016; DP 10, 2018).

Moreover, MoNE (2013) also issued a “Students with Diabetes Circular”. This circular mandates increased diabetes awareness of school management and teachers so that they can identify diabetic children; the whole school personnel to be educated about how to tackle a diabetes case in its routine course and in emergencies; full cooperation among teachers, management and school bus drivers with the diabetic children in supporting them in emergencies, during classes and examinations, in line with all the outstanding needs, such as meal and toilet breaks; active participation of the diabetic child into any activities the rest of the school is attending; provision of separate rooms for healthcare needs; and any measurements to be taken to ensure these children’s feeling safe and protected (MoNE, 2013). Although the content of the Circular seems to be extensively considerate of the challenges encountered by students, the important thing is that the respective circular was initially issued in 2000 and then renewed in 2013, but these discussions were still taking place in all sessions of Diabetes Parliament meetings between 2015 and 2018. This, then, indicates a serious implementation gap and lack of monitoring in schools (DP 7, 2015; DP 8, 2016; DP 9, 2017; DP 10, 2018).

4.3.1.2 Limited patient awareness

Diabetes is a highly complex health condition that requires close monitoring throughout the lifetime. Patient’s active participation in the processes, conscious and close follow-up of the diet, lifestyle choices, course of treatment and complications

are of crucial importance for successful management of the disease. Thus, patient education is a vital part of the diabetes management process.

In the Diabetes Parliament meetings, several stakeholders, especially the healthcare workers expressed that the patient education facilities in Turkey are highly insufficient (DP 7, 2015; DP 8, 2016; DP 9, 2017; DP 10, 2018). The reason behind this unmet need is the shortage of specialists particularly designated to give these trainings and overburden especially in public hospitals (DP 7, 2015; DP 8, 2016).

The official procedure for patient education is providing 45-minute trainings following diagnosis (DP 7, 2015). Unfortunately, in public hospitals it is not possible to spend this much of time on each patient. Many doctors mention that, on average, they can only allocate about 10 minutes of time for each patient (DP 8, 2016).

Especially in children's cases, the entire household needs to receive these information sessions, which is utterly unattainable (DP 7, 2015). As indicated by the Head of Turkey Diabetes Foundation, in 2015, for about 10 million diabetes patients in Turkey, there were only 650 endocrine nutrition specialists, 600 diabetes nurses and 300 diabetes nutritionists (DP 7, 2015). This size of healthcare specialists relevant to patient education is apparently not enough as it is suggested by the healthcare professionals in the meetings.

In an attempt to bypass these shortcomings in patient education, Turkey Diabetes Foundation had initiated an alternative solution and run the "Diabetes Peer Education Project" in 2011 within the scope of the "Stop Diabetes Project" developed by the same foundation (DP 7, 2015). Diabetes Peer Education Project is a training model in which patients initially trained by medical doctors of relevant specialties train other patients. Those who complete the training and successfully pass the final exam can become trainers to further educate other patients ("CNN,"

2011). Another initiative by civil society to increase patient awareness and empowerment has been the summer camps for children living with diabetes. Summer camps have been designed as an effective environment where children can learn how to deal with their diabetes condition independently from their families, increase their confidence and self-care skills, manage negative emotions about diabetes and socialise with other children undergoing similar challenges (DP 7, 2015; DP 8, 2016). Participants of the Diabetes Parliament have been strongly in favour of the continuation of these two projects and highlight that they are crucial to the long-term well-being of diabetes patients. Therefore, it was requested by several participants for summer camps to be covered under the GHI scheme (DP 7, 2015; DP 8, 2016).

In response to the concerns about patient education challenges, the MoH representative showed appreciation of civil society initiatives and explained that MoH also endeavours to improve patient education facilities. In cooperation with Public Hospitals Association, they standardised patient education modules under “Diabetes Schools” and extended them to private, and research and training hospitals too (DP 7, 2015).

4.3.1.3 Limited professional awareness

Diabetes Parliament meeting discussions imply a general need for improvements in the qualifications of healthcare professionals to offer better diabetes care. Especially family physicians and diabetes care team (dietitians, nurses, etc.) are considered to be in need of such capacity development. This kind of need for additional trainings for especially primary healthcare staff may partially be resting in the way Turkey’s health system had transitioned to the family physician model as explained in the previous chapter. Indeed, in 2016, the representative from the Federation of Family

Physicians Associations reproached that the family physician system was established in 2010, but in the following six years MoH did not take a single action about informing family doctors on how they should be dealing with diabetes cases (DP 8, 2016).

The Head of the Turkish Diabetes Society pointed to the importance of educating healthcare professionals about diabetes and training diabetes educators (DP 8, 2016). Diabetes Nurses Association has been one of the parties preparing and conducting training modules on diabetes, though the take-up levels turned out to be lower than expected among the primary healthcare staff (DP 8, 2016). The representative from the Public Health Institution under MoH also mentioned in the Diabetes Parliament meetings that they recognize this need and that they have coordinated the preparation of diabetes training modules for dietitians, family doctors and nurses. While some of these are trainings of trainers, others are about diabetes care, management and monitoring, and emergency preparedness, especially at the primary care level (DP 7, 2015; DP 10, 2018).

4.3.2 Problems in provision

Diabetes care requires a holistic approach to be effectively managed. Considering the broad range of complications diabetes can potentially lead to, in addition to an internal medicine or endocrinology specialist, a person diagnosed with diabetes mellitus should ideally be followed up by many other supporting specialists, such as diabetes nurses, diabetes education nurses, dietitians, podiatrists, ophthalmologists, physiotherapists, urologists, sports trainers and psychologists (DP 8, 2016; DP 10, 2018). Unfortunately, the vital role of these specialists is highly overlooked, and diabetes care is mostly reduced to a service to be provided by individual endocrine

and internal medicine specialists. No multidisciplinary approach to diabetes management is available in public hospitals.

4.3.2.1 Health workforce shortage

Specific medical specialties dealing with diabetes mellitus are internal medicine and endocrinology. Alas, Diabetes Parliament meetings revealed that the shortage of both core medical doctors and other relevant specialist support staff has been an ongoing problem in the Turkish healthcare system.

A representative from the Federation of Family Physicians' Associations stated that it was quite difficult to access endocrinologists in public hospitals because they are both insufficient in number and overburdened with several other specialty areas as diabetes care is not their sole responsibility (DP 8, 2016). Indeed, civil society representatives from different parts of the country reported that some regions have been suffering from a complete lack of endocrinologists. For instance, as far as it was raised by NGO representatives, there were no child endocrinologists in Muğla and children with diabetes had to travel to İzmir or Aydın to be able to see specialists. This situation was making it even more challenging to access healthcare for children with lower socioeconomic status (DP 7, 2015). Even in İzmir, the third most-populated city in Turkey, challenges in access to endocrinologists were reported by Life with Diabetes Association. It was asserted that, because of the scarcity of doctors as opposed to the large size of the patient population, people had to wait in line overnight to be able to get appointments (DP 8, 2016).

Diabetes Parliament members also mentioned that another reason why endocrinologists are commonly unavailable was that they are the only authorised physicians to prescribe certain medications used in diabetes treatment. Therefore,

even the patients who do not necessarily have to see an endocrine specialist are obliged to see them to get their prescriptions (DP 10, 2018).

Specialist physicians are not the only ones in the diabetes care team that are hard to reach. The rest of the diabetes care team were reported to be insufficient in number in especially public healthcare facilities as well. Especially diabetes nurses and diabetes education nurses who are supposed to be training patients about how to live with diabetes, how to use medication and inject insulin shots, and sometimes even following up the patient closer than the specialist doctor mostly seem to be absent from diabetes care, as mentioned in several Diabetes Parliament meetings (DP 7, 2015; DP 9, 2017; DP 10, 2018). For instance, an associate professor of medicine, who had been working in the diabetes outpatient clinic for 20 years, reported that he used to work together with another specialist and four training nurses 10 years ago, but eventually he remained as the only specialist with just two of the nurses in the same clinic. In the meantime, the diabetic patient population has doubled (DP 8, 2016).

In some cases, the lack of nurses specialised in diabetes care has been reported to be compensated through the assignment of general nurses. This, then, results in the shortage of general nurses who would otherwise be taking care of other patients, as pointed out by the Head of Turkish Diabetes Society. He strongly advocated specially trained nurses assigned with this specific duty should be prioritised in diabetes treatment to fulfil this need (DP 8, 2016).

The analysis of Diabetes Parliament meeting minutes indicates that another missing key profession from diabetes care in Turkey is the dietitians. A healthy diet is the cardinal rule for the prevention and successful management of diabetes. Yet, in the vast majority of the public healthcare facilities, especially in the family

healthcare centres, nutrition specialists are either too few in number or completely absent (DP 8, 2016). As stated by the representative of the Turkey Dietitians Association in 2015, there were, in fact, a sufficient number of trained diabetes nutrition specialists in Turkey, but the number tenured by the MoH was extremely low (DP 7). In 2018, the Head of Turkey Dietitians Association stated that there were only 600 dietitians for 855 public hospitals in Turkey (DP 10). This means that there was less than one dietitian for each hospital.

As a response to the emphasis on these gaps of specialist services, the General Directorate of Public Health under MoH asserted that dietitians are effectively serving at the newly established Healthy Living Centres. When patients with diabetes or obesity visit their family physicians, they can be directly referred to Healthy Living Centres without needing to admit to any hospital. In 2018, it was reported that admissions to these centres rose up to 254,000 patients. These centres would be followed by Obesity Diabetes Centres that were to be opened up by hospitals and the MoH was making effort to make other specialised services available to diabetic patients (DP 10, 2018).

4.3.2.2 Under-specialisation of diabetes care services

Another problem concerning the diabetes care provision is apparently the professional identification of the roles of non-physician providers in diabetes care. Lack of a specialised job description was reported to be one of the major impediments to an effective working environment for especially nurses and dietitians.

Several participants of the Diabetes Parliament underlined the problem that diabetes nursing was not recognised as a specific professional category yet (DP 7,

2015; DP 9, 2017; DP 10, 2018). Because they were not formally delegated with their diabetes-specific responsibilities, nurses had to take care of diabetes patients as an additional task that mostly remains financially uncompensated. Diabetes Nursing Association shared that they had been striving to train new nurses that can take over diabetes education roles, however, due to the lack of formal status of diabetes education nursing, trained nurses continue to be assigned in general nursing roles (DP 10, 2018). This generalist definition of the nursing profession grants the chief physicians in hospitals the autonomy to allocate nurses wherever the chief physician deems them to work (DP 7, 2015).

Similar to the case of diabetes nurses, dietitians were reported not to be formally assigned to diabetes-specific roles that leave them overwhelmed by the responsibility of every single diet-related task in the hospitals (DP 10, 2018). Diabetes Dietitians Association also pointed out the vital role of dietitians in effective treatment and prevention of diabetes and asserted that consulting with a dietitian upon the diagnosis has proven to significantly reduce future costs of diabetes care through many studies. Nevertheless, dietary treatment was said to have been reduced to giving patients a list of forbidden food items in Turkey. As a professional association, they endeavoured to change this practice, and also to train specialists through their certificate programmes. However, it remained as an entirely neglected area of specialty by the state (DP 7, 2015). Likewise, the Head of Turkey Family Medicine Foundation drew attention to the fact that this service domain has been totally ignored because it is not within the reimbursement scope. As a result, the hospital managements have not been willing to assign physical spaces for nutritionists, because their service does not bring about any revenue to the hospital (DP 7, 2015).

4.3.2.3 Negative outcomes of performance-based payment system

The performance-based payment system is one of the prevailing problems frequently raised in Diabetes Parliament meetings regarding the current functioning of the healthcare system. This system in which physician and hospital remuneration is based on the quantity of the healthcare service provision, instead of the quality is unfavourable for both ends of the healthcare. Such a working modality leaves all the patients underserved. Diabetes patients are one of the groups that are neglected the most because especially at early times of the diagnosis, diabetes patients need close attention and care to be acquainted with their condition, learn how to deal with it, proper arrangements of medication and insulin doses, and monitoring for complications. Thus, from the physician's perspective, it is challenging to properly deal and follow up with diabetes cases while being pressured by serving more patients in a limited time. The Head of Turkey Diabetes Foundation summarised this problem by the following statements:

MoH mandates "The more patients you see, the higher your salaries will be." A doctor's seeing 80 patients a day means saving only 5 minutes for each patient and still working more than 8 hours [a day]. No patient can be examined in 5 minutes, it is especially impossible for diabetes patients. Diabetes patients need at least half an hour. Proper time should be spared for matters like adjustment of insulin, adjustment of medications, systemic examination, cardiac examination, or dietary training. Therefore, the place of diabetes within this performance-based payment system should be changed, maybe the performance points for diabetes patients should be doubled and the time spared for them should be extended. (DP 9, 2017, p. 107) (See Appendix B, 3)

As mentioned in the previous chapter, undermining service quality is, in fact, not an inevitable consequence of the performance-based payment system.

Nevertheless, as it was reported in Diabetes Parliament meetings, this remuneration system eventually has not resulted in favour of chronic diseases, such as diabetes.

Firstly, it is a system that compels limiting the time spent with each patient. For that matter, the Head of Turkey Diabetes Foundation suggested the performance points for diabetes care be revised and increased so that more time can be spent on these patients (DP 9, 2017). Secondly, it encourages further undermining of specialised services. Diabetes Nursing Association and Diabetes Dietitians Association representatives asserted that the performance-based payment system assigns very little to no performance points for the services provided by diabetes nurses and dietitians. Moreover, some of the tasks they fulfil may even gain performance points to the physicians they are working with, instead of the nurses or dietitians themselves (DP 10, 2018). Lack of performance indicators for non-physician providers was reported to lead to frustration, burnout, regret and loss of motivation among these occupational groups. As a result, they have become increasingly more reluctant to invest time and effort in diabetes patients (DP 10, 2018).

4.3.3 Problems with medical devices and medications

Diabetes patients need to measure their blood glucose levels on a regular basis, several times a day. This is typically done by punching a hole on the fingertips with a small needle and dripping a drop of blood onto a strip. The strip is, then, inserted into the glucometer and it digitally measures the glucose level in the blood. Therefore, measuring glucose via glucometer is a painful method, especially when it is repeated about 10 times a day which is the case for especially T1D patients. Alternatively, continuous glucose monitoring (CGM) device can be used. This is a coin-size device placed permanently onto the skin that automatically measures blood glucose

regularly without any additional actions. Therefore, it makes life much easier for diabetes patients and enables them to carry out their daily lives uninterrupted.

Another device that is frequently needed by diabetes patients, particularly those with T1D is the insulin pump. Insulin pumps are devices worn on the outside of the body and supply insulin inside the body through a subcutaneous catheter. Both CGM and insulin pump devices prevent the constant need of injuring the body with needles and because they provide more timely, regular, and accurate measurements and insulin supply, they are more effective in diabetes care.

Problems with these devices, strips and other consumable parts have been one of the most popular topics in all the Diabetes Parliament meetings reviewed for this study. The problems as they were raised in the meetings are examined in the following two sub-sections.

4.3.3.1 Problems in financing/reimbursement

Financing problems of medical devices and their consumable parts have been one of the outstanding topics that have come to be continuously discussed in the Diabetes Parliament meetings between the 2015-2018 period. Despite the patient representatives' continued emphasis on the gaps in coverage in these discussions, no progress has been achieved in favour of the patients. Indeed, a Life with Diabetes Association representative reflected on the lack of progress censuring that nothing had been achieved throughout the past decade of Diabetes Parliament in terms of reimbursement and co-payments, indicating that this predicament had been going on beyond the time period included in this study (DP 10, 2018).

Co-payments for glucometer strips were reported to be a considerable financial burden for many people because this co-payment was calculated with an

underestimation of the strips typically needed by a diabetes patient (DP 7, 2015; DP 8, 2016). As stated in the most recent Health Applications Communiqué (2021), SSI covers the cost of 150 strips a month, which makes five strips a day. According to the statements of the Diabetes Parliament participants, this amount used to be the same back in the period between 2015-2018 as well. However, this standardised amount is not adequate for all diabetes patients. T1D patients, for instance, are taught that they need to measure their blood sugar levels eight times a day. Eight strips a day used to add up to 200 TL out-of-pocket payments per month as stated by a T1D patient in 2016 (DP 8). The need for glucose level monitoring may even go up to 13 times when the person is ill or physically very active (DP 8, 2016).

For example, a T1D patient, who was also an attorney, referred back to his speech in the first session of the Diabetes Parliament in 2011 where he had explained that SSI used to pay a small amount (0.55 TL) for each strip and the rest was paid out-of-pocket. This issue was brought to court back then in order to raise the amount paid by SSI and claimants were found to be right in their demand. In the first Health Applications Communiqué issued after this court decision, the amount to be paid by the SSI was declared even lower (0.32 TL). Following a new lawsuit this amount was raised to 0.36 TL, but this time the SSI gave up on the 20 TL reimbursement that it had used to pay for glucometers. The attorney underlined that within this struggle of reducing the costs, the SSI disregards the fact that current policies of leaving patients with poorer means for monitoring of diabetes will lead to way higher costs in the long run (DP 8, 2016).

In response to the discussions on reimbursement amounts covered by GHI, the General Director of GHI asserted that while it is correct that all these debates are within his mandate, the desired changes are not so easy to make. The assigned

directors' terms in the office are typically so short that it is not realistic to expect significant changes within these time periods. He added “[the term in the office] could be enough to raise 0.36 TL to 0.38 TL (reimbursement amount) but expecting it to be raised to 1 TL would be just expecting too much.” (DP 8, 2016, p. 78) (See Appendix B, 4).

Similar to the problems with strips, co-payment for CGM and insulin pump devices have been a highly controversial matter that has come to an impasse over the years. Discussions at the Diabetes Parliament meetings signify that the amount of co-payment by SSI has not changed at all along many years despite continuous price increases. In accordance with that, the coverage of these devices has been undermined and the affordability of these devices for patients has constantly been declining. For instance, in 2018, a representative from Life with Diabetes Association informed that 10 years ago he could buy an insulin pump by paying 1500 TL on top of 3500 TL paid by SSI. At the time of this discussion, in 2018, SSI was still paying the same amount, but the price of the pump has become 14,500 TL (DP 10, 2018).

As the price of the device itself is not the only expense, and there are also consumables that should be used regularly with these devices, using these devices for diabetes care becomes a significant financial burden for patients. For instance, SSI has been paying about one-third of the price of reservoir sets used with the insulin pumps. In this case, even if the pump is somehow obtained, the fixed costs become deterrents for insulin pump use and people reported having stopped using them because of these high expenses (DP 10, 2018).

One of the striking real-life examples of the necessity of these devices and burden of their additional costs was the situation described by the father of a T1D child:

My son was diagnosed with T1D at the age of 4. Now, he is 8 years old. I'm sorry, my voice is trembling. Families with a child with T1D would understand me better. ... I was a civil servant. I retired 2 years ago only to follow up with my son. So, I retired to be able to check 4-5 times a night whether his blood sugar dropped or increased, whether he went into hypoglycaemia or fainted. During the day, my wife keeps watch in the school. ... When [my son] had diabetes for 3 years, he said "I do not want to punch my fingers anymore. Look at my fingers, what they have become. It hurts so much." Sacrificing our basic needs, we obtained a sensor from Germany. It is something inserted on the arm. It's the size of a 1 TL coin. It costs 250 TL and should be changed every 15 days. So, it costs 500 TL a month. ... It has a mobile phone-sized device. When you hold it close [to the piece on the arm], it reads all the information that it had read so far. Our state does not even pay 0.1 TL of it. We also got him an insulin pump. I would like to stress that a T1D child gets punched by needles 450 times a month. If you have any needles with you, please go ahead and sting it on your skin. How many times can you do it? In order to prevent this ... we obtained an insulin pump. 5000 TL. State covers 3500 TL of it, and the people should pay the remaining 1500 TL [equals to the minimum wage for that year]. [Reservoir] sets [of insulin pumps] should be changed every 3 days. For these, SSI has set a co-payment amount further in the past. It has been 10 years, but the price is still the same. Now, I am paying 293 TL for these. ... [With the help of this set] we dropped the 450 needles to 12. I think this has been a very meaningful result. (DP 9, 2017, pp. 36-38) (See Appendix B, 5)

In fact, SSI imposes price limitations on medications, but the devices and tools are not subjected to these caps. Therefore, the prices for insulin pumps, sensors or strips are not standardised, and out-of-pocket payments differ along a wide price range. In Diabetes Parliament meetings, the General Director of GHI also pointed out the lack of price regulations imposed on devices as the basis of these problems and stated that he does acknowledge the gap, but these kinds of changes take time. The price regulations imposed on drugs took about 20 years to be properly put into effect, as he mentioned. Therefore, he would not foresee a similar system for devices to be functional in the next couple of years. However, at the same meeting, he also mentioned that he was quite eager to facilitate whatever it takes to ensure children's

access to CGMs, but for these to be reimbursed, the medical device companies should first apply to get their CGMs into the reimbursement list. According to the General Director, over the past year, only one company applied but three more applications were needed in order to make a decision on the device's inclusion in the reimbursement list (DP 10, 2018).

Because the device reimbursement problem seemed to be at a stalemate at the policy level, the participants sought to come up with some resolutions to ensure the cost-effectiveness of these devices for the SSI. The Head of Life with Diabetes Association, for example, suggested that these devices should be provided to those who are verified to be able use them, for instance through a board approval, to prevent devices from being wasted (DP 7, 2015). On a similar note, the Head of Turkey Diabetes Foundation resentfully asserted that about 30-40% of insulin pump users end up quitting using their devices. What he suggested was these unused pumps to be returned to health officials so that they can be repurposed by those who are in need and that the pumps should be provided only after the relevant trainings. He demanded SSI to address this problem (DP 7, 2015; DP 8, 2016).

Another point Diabetes Parliament actors drew attention to about the financing of medical devices and tools for diabetes care was the fallacy of taking T1 and T2D patients as a single homogenous group and allocating a common budget for all diabetes patients. The coordinator of the Diabetes Parliament enunciated this problem by recommending a split of budgets for T1 and T2D. The coordinator substantiated his recommendation by underlining the fact that there were only about 5000-6000 T1D patients, as opposed to about 5 million (in 2016) T2D patients, and it is only the former group that would potentially benefit from pumps and other devices. While T2D has been spreading dramatically, T1D prevalence and incidence

have been stable throughout the years. Therefore, it is unfair to enforce the same regulation and budget constraints on both groups (DP 8, 2016). Similarly, Life with Diabetes Association and Turkey Diabetes Foundation, as well, addressed the same fact that even though there were 35,000 T1D children in Turkey in 2018, only around 5,000 would need insulin pumps and it would not pose a high burden on the SSI to cover insulin pumps for this group (DP 10, 2018).

All diabetes patients' being subjected to identical budgetary limitations can partially be considered as a reflection of the disease-centred approach that is dominant in Turkey's healthcare system. Although, in this case, the disease-centred approach is also misguided, because it is not flexible enough to accommodate T1 and T2D as completely different diseases that can easily be differentiated on medical terms. What can be extracted from the course of discussions at the Diabetes Parliament is that policy makers disregard the varying needs of these two patient groups both living with diabetes.

4.3.3.2 Problems in regulation

The analysis of the Diabetes Parliament discussions points to a lack of regulation in the medical device market. Among a wide range of devices in the market, the analysis here indicates that some of them are not functioning correctly in such a way that could potentially have fatal consequences for the patients.

Many participants have experienced incidents where these devices measured the glucose levels either much higher or lower than it actually was. Plenty of people shared stories where they or people they know were having symptoms of hypo- or hyperglycaemia, but when the glucose was measured with the devices, they have the results were exactly the opposite (DP 7, 2015; DP 8, 2016; DP 9, 2017; DP 10,

2018). As diabetes patients need to urgently receive insulin shots when the glucose levels are too high, this kind of inaccurate results may lead to unnecessary reception of insulin which may even result in death. The incident shared by a T1D patient was only one of the many:

I measured his blood sugar, it was 162. But I instantly knew that he was actually in hypoglycaemia, because I am a diabetic person myself since 17 years. ... At the emergency room (ER), they said the patient was having a cerebral hemorrhage. Here, there is also some lack of knowledge of the ER doctor. When I suggested to check his blood sugar, they refused. So, I had to lie that I am a healthcare staff as well. Then, they measured the blood sugar and it turned out to be 52. When the sample was sent to biochemistry [lab], it came back as 32. I demand these unknown devices in Turkey's market to be kept under control and be regulated. I think they are like workers without any occupational safety. (T1D Patient in DP 7, 2015, p. 29) (See Appendix B, 6)

As pointed out by the Head of Turkey Diabetes Foundation, the problem with these devices is that they do not act erroneously at the initial trials, but only after the 50th or 100th measurement. Therefore, when the devices are first tested, they seem safe to use. Thus, it is suggested by the Turkey Diabetes Foundation that there should be prerequisites for companies to offer technical support and get formal representation in Turkey to get the licence to sell their products in Turkey (DP 7, 2015). Patients and civil society representatives have been demanding a closer audit, monitoring and standardisation of these devices (DP 7, 2015; DP 8, 2016).

The Head of Turkey Diabetes Foundation underscored similar problems were also observed in the glucose-measuring strips as well and made similar points about the lack of reliable companies that can provide customer support services.

Unfortunately, these devices and other medical equipment currently on the market are preferred by the SSI mainly because they are cheap, and they are cheap because they are not providing customer support or any post-purchase services (DP 8, 2016).

An SSI representative stated that the problems regarding strips and devices were mostly directed to SSI during the meetings as an institution representing the

state. Nevertheless, he addressed that the main responsible for the authorisation of faulty strips and devices are the MoH because SSI cannot monitor, regulate or deny purchasing devices approved by MoH. He underlined that SSI is a reimbursement agency, not a healthcare regulator (DP 7, 2015).

These problems about the regulation of medical devices seem to have resonated at the level of the MoH. Public Health Institution under MoH acknowledged the need for improvements regarding the monitoring and supervision of these devices and added that they have been working in cooperation with prominent university and training hospitals in Ankara on the evaluation of devices (DP 8, 2016). Because the initial tests of the devices are conducted on people with healthy blood sugar levels, the results differ in smaller intervals. In response, some T1D patients in the Diabetes Parliament wanted to volunteer by donating their blood for the testing phases (DP 7, 2015).

4.3.4 Lack of preventive approach to diabetes

As far as it is currently known, T1D is not medically preventable, but T2D can be prevented or delayed by taking effective and timely measures (Centers for Disease Control and Prevention, 2021). Both types can be managed in a way to prevent or delay further complications and allow the patient to continue their lives uninterrupted (American Diabetes Association, n.d.).

4.3.4.1 Lack of preventive approach in medical practices

As much as Turkey's healthcare system is advanced in curative medicine, unfortunately, preventive medicine is not one of its strengths, because the healthcare policies are not implemented with a long-term vision that would prioritise the

prevention of diseases (Tatar, 2013). Diabetes Parliament meetings reveal that diabetes is no exception to this general trend.

Several actors, including representatives of civil society organisations and public institutions, diabetes patients, political actors and medical experts in Diabetes Parliament meetings articulated this gap between preventive and curative services in the Turkish healthcare system (DP 7, 2015; DP 8, 2016; DP 10, 2018). As most discussions concerning preventive measures revolved around the financing of healthcare services and medical devices, participants highlighted depriving patients of necessary means now will inevitably result in much higher costs in the future. For example, the Vice Head of Diabetes Dietitians Association stated in one of the meetings that “if a diabetic person’s body weight can be reduced by 5%, it would reduce this person’s financial burden to the healthcare expenditure by 30%” (DP 8, 2016, p.22) (See Appendix B, 7). The Head of Turkey Dietitians Association referred to a study conducted in Netherlands and stated

For each Euro spent on dietary consultancy for people with diabetes and obesity, the society gains a net of 63 Euros in return. The breakdown of this gain would be as follows; 56 Euros for health improvement, 3 Euros for reduced healthcare costs, 4 Euros for improved productivity. (DP 10, 2018, p.60) (See Appendix B, 8).

In a similar vein, the General Director of GHI explained in detail that in 2017 about 8-10 billion TL had been spent from the SSI budget for treatment of diabetes and its complications. One of the examples he gave on the cost of diabetes to the society was that in 2017, about 16,000 diabetes patients had their feet amputated. He, then, acknowledged that saving some of the budget currently being spent on diabetes treatment for prevention would probably save much more significant amounts to the state in the longer term (DP 10, 2018). This data alone shows that beyond its financial burden, the cost of unmanaged diabetes in terms of lost labour-power,

restrictions of the opportunities for social participation and psychological and physical suffering goes much beyond expenditure levels.

Representatives of public institutions all seemed to agree on the critical role of a preventive approach to diabetes care and underscored that their respective institutions have been individually working to address this gap (DP 7, 2015; DP 8, 2016; DP 10, 2018). Nevertheless, considering the same discussions continue along the 2015-2018 time period without much progress, these initiatives either were not pursued to completion or fell short at the implementation level.

4.3.4.2 Insufficient consideration of social determinants of health

Social determinants of diabetes have apparently been a mostly disregarded dimension of the discussions in Diabetes Parliament meetings. In general, Diabetes Parliament members seem to have failed to recognise the correlation between SDoH and diabetes. Poverty, as one of the core social determinants of diabetes (Hill-Briggs et al., 2021) was mentioned only once and references to other aspects of SDoH could be traced in very few points.

It was one of the rare moments when SDoH were mentioned when the representative of the General Directorate of Public Health asserted that poverty is one of the core underlying factors behind many health conditions, including diabetes. If poverty can be prevented, these conditions can as well. Therefore, she stated that MoH's diabetes prevention programmes are complementary to the programmes of all the ministries, especially those of the Ministry of Finance, Ministry of Environment and Urbanisation and MoNE, in such a way that they aim at managing diabetes through addressing poverty as well (DP 10, 2018).

The role of integrating physical activity in daily life in diabetes care was also brought up by a few participants, such as the Head of Turkey Diabetes Association who highlighted the problems like the limited availability of walking trails or bicycle tracks in Turkish cities (DP 8, 2016). Istanbul representative of the Republican People's Party also expressed the relation between diabetes and the urbanisation policies in Turkey and underscored the need for building physical activity spaces nearby the places people can socialise in urban areas (DP 8, 2016). According to the Director of Istanbul Public Health Institution, MoH initiated some projects to encourage physical activity, such as granting bicycles to municipalities for each meter of bicycle track they build (DP 8, 2016).

4.3.4.3 Insufficient consideration of commercial determinants of health

There were some concerns raised over the CDoH in the Diabetes Parliament. Diabetes Parliament members were, in general, critical about the insufficiency or lack of regulation of several CDoH.

The School Canteens Circular (MoNE, 2016) was one of the most frequently mentioned measures that had been taken as a joint action by Public Health Institution and MoNE to regulate the food and beverages sold at school canteens in favour of the availability of healthier options as addressed by the Head of Obesity, Diabetes and Metabolic Diseases Unit under the Public Health Institution (DP 8, 2016) and MoNE representative (DP 10, 2018). However, due to gaps in the implementation of this Circular as reported by civil society representatives, the availability of unhealthy foodstuff at schools continued to be a concern at the time of these meetings (DP 8, 2016; DP 10, 2018). Although the legal ground for the regulation of items sold at school canteens was established in 2016, it has not been possible to observe it being

fully applied even several years later. It is reported in 2020 that the food logo regulation to differentiate the school-appropriate foodstuff was postponed for the second time in a row. In the meantime, the School Canteens Circular has been in effect, but the audit of the implementation has been severely neglected (Gıda Dedektifi, 2020).

As the CDoH is closely related to food literacy, food packaging and content constitute a significant aspect of it. To improve food packaging, Public Health Institution representatives stated that they were expecting support from the Ministry of Agriculture. Public Health Institution demanded a revision of the regulation on the trans-fat content in foodstuff in a way that it would be compulsory to indicate the amount of the trans-fat (DP 7, 2015). Similarly, DP Coordinator addressed the need to regulate and limit the use of corn syrup as it leads to gaining fat especially in teenagers (DP 8, 2016).

The increasing volume of misinformation about nutrition channelled by the media was another one of the issues raised by several actors. Public Health Institution brought attention to the food commercials targeting children because they are highly important in the acquisition of nutritional behaviours by children (DP 7, 2015). Not only commercials but those people who appear on the media with their professional identities are criticised for sometimes being misleading in giving healthcare advice, as stressed by both patients and civil society representatives in the Parliament (DP 10, 2018). Diabetes Dietitians Association and Turkish Diabetes Association referred to the same problem (DP 10, 2018) and the Head of Turkish Diabetes Association, for instance, gave an example of a medical doctor who claimed to cure diabetes completely using only turmeric, which is scientifically not possible (DP 10, 2018). Thereby, they called out the Radio Television Supreme

Council (RTUK) to intervene with the content of these commercials and the promotion of scientifically controversial information on health matters (DP 7, 2015; DP 10, 2018).

4.3.5 Coverage gaps

Few have mentioned about the financial burden of diabetes care for those who are not covered by GHI (DP 8, 2016). As explained in the previous chapter, GHI can be obtained through formal employment or familial relationship with someone covered under certain criteria. Those who have proven to be under a certain income threshold are exempt from paying premiums for social healthcare insurance. Although Turkey's GHI covers a vast majority of people, there are still a considerable number of citizens left without healthcare insurance. These people who have fallen into a coverage gap within an arguably universal health coverage model (Yilmaz, 2021) are mostly those who are unemployed and over 18 years of age but are not eligible for co-payment exemption under the stringent income eligibility criterion. Considering the employment challenges of diabetes patients, it becomes a central problem for some to maintain the continuation of social security benefits and afford diabetes care after the age threshold. This problem was addressed by both the Head of Turkey Diabetes Foundation and an endocrinology specialist in the Diabetes Parliament meeting. They raised the issue demanding that the social security benefits should be granted to the people with diabetes regardless of their age and employment status, at least in a way to exclusively cover the diabetes-related needs as these are of vital importance (DP 8, 2016). The endocrinology specialist from a public university hospital explained this situation as follows

The fellow diabetes patients are covered by the social security institution [general social health insurance] through their families throughout their education lives. However, after they graduate, this coverage is no longer valid, and they have to pay their own premiums. It is not a problem for those who find a job and get into employment life. But they have to pay these premiums even if they cannot find a job. Those who cannot afford to pay this premium cannot receive green card if their families have any property or income. Extending the scope of social security institution [social health insurance] coverage at least in a way to cover T1D medications and glucometer strips would make significant contributions. I believe this is a process that should continue at least until finding a job. Because, life does not go on without insulin. (DP 8, 2016, p. 53) (See Appendix B, 9)

4.4 Conclusion

This chapter demonstrates that Turkey Diabetes Programme 2015-2020 (MoH, 2014) has several shortcomings, both in terms of content and implementation. Its failure is most visible in the absence of references to this document by diabetes actors during the Diabetes Parliament meetings. The analysis here finds that, based on the policy content, the deficiencies of Turkey Diabetes Programme 2015-2020 can be summed up in five main points.

First, it lacks up-to-date, reliable data on diabetes prevalence and incidence in Turkey. The figures provided in the policy document are derived from the TURDEP-II study which was conducted in 2010. Frankly, it is not possible to manage and control something that is not properly measured and mapped out.

Second, it lacks a strong preventive approach. It does not offer any tangible, effective measures to prevent diabetes. The main preventive strategy mentioned in the programme is awareness raising on diabetes. A whole-of-society approach can only be observed at the awareness raising level. However, the rest of the preventive measures, such as regular screening, early identification of diabetes cases or lifestyle change programmes remain limited in scope and fall short of contributing to a

comprehensive prevention strategy as they are group-based interventions targeting already at-risk groups.

Third, the Programme does not reflect the challenges patients with diabetes had been facing. It seems as if the Programme has been developed without any consultation with non-governmental actors. Some key problems that were raised in the Diabetes Parliament meetings such as inadequate specialised healthcare services and lack of regulation of medical devices, which this analysis highlighted before, are not addressed in the policy document. This points to a lack of communication between civil society and policymakers or the disregard of the former's perspective by the latter especially considering that by the time the Diabetes Programme 2015-2020 was prepared, the Diabetes Parliament meetings had already been going on for already a couple of years.

Fourth, the Diabetes Programme fails to sufficiently address the correlation between social and commercial determinants of health and diabetes. It reflects the overemphasis on the curative approach in the Turkish healthcare system. Problems central to public health outcomes, such as poverty, access to adequate healthcare, schooling, employment, or the tax regulations, the role of media actors and content are entirely disregarded aspects in the policy document.

Lastly, it fails to set quantifiable indicators for efficient follow-up, monitoring and evaluation of processes. Therefore, although it attempts to establish certain monitoring, evaluation, and reporting mechanisms, it is not clear what the quantitative targets for success are and how the progress would be measured.

Having used the transcriptions of Diabetes Parliament meetings as a valuable data source to evaluate the implementation of Turkey's Diabetes Programme, the

analysis here reveals substantial gaps in implementation. These gaps are recapped in the three points below.

First, there are several action points in the policy document that were not actualised during the implementation period. For example, Diabetes Research Guide or the Diabetes Observatory were never established. Likewise, Diabetes Parliament discussions showed that the measures that were supposed to be taken to extend the GHI scope for complete, lifelong coverage of the T1D patients', especially children's expenses were apparently not taken. Actually, due to the lack of functioning monitoring and reporting mechanisms, as mentioned before, it is not possible to fully evaluate whether the other action points have been fulfilled. The analysis of the Diabetes Parliament discussions indicates that other diabetes-related policy documents, although put in effect, seem to have been neglected at the execution level. School Canteens Circular, Students with Diabetes Circular, food logo regulation, Food Labelling and Consumer Informing Regulation can be counted as some of these examples.

Second, the analysis of the Diabetes Parliament meetings demonstrates that the problems that diabetes patients face in Turkey go beyond those mentioned in Turkey Diabetes Programme 2015-2020 (2014). The Programme did not benefit from the comprehensive experiences of civil society organisations, diabetes patients and families put forth at the Diabetes Parliament meetings. These problems range from the inadequacy of specialised services, lack of monitoring and regulation of medical devices to health workforce shortage.

Third, the analysis of the Diabetes Parliament meetings shows that it has created a platform within which civil society actors and policymakers exchange their information and opinions about the state of diabetes in the country. In the case of

Turkey, as the Diabetes Parliament shows, this need for communication is acknowledged by the diabetes actors. However, this platform has paved the way to neither strong cooperation nor an impact on policy content so far.

CHAPTER 5

CONCLUSION

Diabetes Mellitus is a chronic disease currently about half a billion people are estimated to have. It marks the 9th leading cause of death globally. While some types of diabetes are not preventable, T2D, which makes up about 90% of diabetes cases worldwide, can be avoided if effective and timely measures are taken. Moreover, the onset of complications and advancement of all types of diabetes can be delayed or prevented by a comprehensive preventive approach.

Diabetes is increasingly becoming a major public health problem in Turkey. Despite a relatively strong healthcare system, a significant proportion of healthcare spending dedicated to the treatment of diabetes and its complications, and diabetes-specific policy and action plans in place, Turkey ranks among the countries with top rates of diabetes prevalence and mortality. This study explores the policy factors behind the gap between Turkey's strong resources and capacity in healthcare and its negative diabetes outcomes. It seeks to answer why Turkey's diabetes policy has failed to improve the diabetes outlook in the country or even prevent the worsening of the situation through a qualitative analysis of the latest national diabetes programme, namely Turkey Diabetes Programme 2015-2020 (MoH, 2014).

In line with Walt and Gilson's (1994) criticisms of health policy literature's strong focus on the content and consideration of other aspects of health policies as potential determinants of failure or success, this study employed their policy triangle framework to identify the shortcomings of Turkey's diabetes policy. Accordingly, Turkey Diabetes Programme 2015-2020 was examined at content, actors, context, and processes dimensions. In order to shed light on the processes component, Diabetes Parliament meeting transcriptions were used as a source of information.

The findings of this study are consistent with the three main problematics that stand out throughout the literature of diabetes policy analyses. The first one of these is the policy-implementation gap. Although the mentioned gaps pertain to different dimensions, studies on several countries, such as Tunisia, Australia, Spain, Ireland and Kenya, report the same gap as a notable factor in diminishing effectiveness of diabetes policies (Agudelo-Suárez et al., 2012; Fisher et al., 2016; Mc Hugh et al., 2014; Romdhane et al., 2014; Shiroya et al., 2019).

Another recurring theme that is observed both in the literature and Turkey's case is the lack of sufficient cooperation and communication among the diabetes actors. Although Turkey's policy environment does not suffer from the decentralisation-related tension and conflicts described in the case of Mexico as a federal country (Gómez, 2018), neither does it set a good example of multisectoral collaboration like Singapore (Ow Yong & Koe, 2021).

The final one is the lack of or inadequate recognition of SDoH that is also observed to be a deficiency in many country examples. What has been determined within the policy analysis studies is that the SDoH aspect is not a necessarily prominent feature of diabetes policies. While the literature points to policy environments with varying levels of SDoH acknowledgement, it is very rarely reported that this aspect of diabetes policies has been successfully translated into implementation. Even the studies on countries like Canada and Australia (Fisher et al., 2016; Raphael et al., 2012), where the SDoH awareness levels seem to be much higher than other countries, report the same gap between policy and implementation. Similar to the cases of Singapore, Kenya or Spain (Agudelo-Suárez et al., 2012; Ow Yong & Koe, 2021; Shiroya et al., 2019), Turkey's diabetes policy does not adequately address SDoH of diabetes and introduce SDoH-related measures to

improve its diabetes management response. It is also evident in the Diabetes Parliament discussions that non-governmental actors are also not primarily concerned with SDoH and their role in the high prevalence of diabetes.

Beyond these problems, this study sheds light on other factors in Turkey that could be impeding the effectiveness of the diabetes policy. One is the lack of reliable data on diabetes prevalence. The TURDEP-II study (2010) is the latest consistent data at hand. The uncertainty of the data may be a factor hindering the effective planning of diabetes response, monitoring and evaluating the results, identifying the direction and amount of the progress.

Second is the fragmented policy environment that lacks a holistic approach to diabetes. Major decisions concerning financing, devices, or management of diabetes are administered by separate public institutions. The analysis of the debates in the Diabetes Parliament signifies that the solution to most of the problems is beyond the jurisdiction of the bureaucrats working for one of these public institutions. This brings us to two conclusions: 1) The healthcare and institutional structures and the political context may not be suitable for making necessary changes. 2) Turkey lacks a whole-of-government approach to diabetes.

The thesis finds that Turkey's diabetes policy seems to present a case resembling a vertical policy with a disease-centred approach and a strong focus on treatment, as well as group-based features. Considering the Turkey case in terms of the dichotomies extracted from the literature provides insight on additional dimensions. These dichotomies present further shortcomings of Turkey's approach to diabetes management that can be summarised as 1) adoption of a vertical-like vision with short-term objectives and acute solutions, instead of an integrated approach where longer-term results are aimed through addressing diabetes with

comprehensive, multisectoral policies; 2) disease-centred approach focusing on diabetes as a single disease, neglecting diverse needs of groups or individuals within the whole population with diabetes; 3) stronger emphasis on treatment, instead of prevention; and 4) lack of a whole-of-government/society approach handling the diabetes crisis with multisectoral interventions mobilising the whole state capacity, targeting the whole society, and instead, adoption of a group-based approach where only those already at-risk are targeted.

In terms of vertical-horizontal dichotomy, Turkey's diabetes approach can be associated more with the vertical healthcare policies than the other end as it is characterised by few focused interventions with short-term objectives and acute solutions as opposed to a comprehensive, integrated approach where more fundamental changes are targeted with a longer-term vision. Moreover, Turkey's Diabetes Programme relies on stand-alone measures and action points instead of bringing about an environment where multiple institutions and sectors can coordinate and cooperate to mobilise their resources.

Between the disease-centred and patient-centred approaches, Turkey stands much closer to the disease-centred approach with grave negligence concerning peculiar needs of patients living with different types of diabetes, not to mention individual patients. As it can be observed both in the content and the processes levels of analysis, Turkey's diabetes policy is developed and implemented with the conception of diabetes almost as a single disease and diabetes patients as a single, homogenous group with identical experiences and needs regarding their conditions. This is, obviously, a significant fallacy where the policy response eventually failing all these groups, especially in terms of financing as a single budget is allocated for the whole diabetes response.

As for the prevention vs. treatment focus, Turkey's policy choices are observed to be putting a larger emphasis on treatment than prevention. Although treatment is central to diabetes management, almost total disregard of the prevention dimension weakens Turkey's response to diabetes. Concerning prevention, the prominent focus on awareness-raising activities in the policy content is insufficient in improving the overall diabetes-related public health outcomes. Furthermore, relying heavily on awareness-raising as a preventive strategy denotes a shift of responsibility from the state to the individuals.

Prioritisation of treatment over prevention is more visible in the reimbursement/co-payment attitudes of the state. Although it falls short of providing comprehensive coverage for some medications and medical devices, SSI still allocates an immense budget for the treatment of diabetes and its complications. However, preventive measures that could lead to potentially more effective outcomes in both social and financial terms are completely disregarded. Hence, the treatment-centred approach, as opposed to prevention, causes a double burden as it is less effective in improving diabetes outcomes, and way more costly in financial terms.

Regarding the final dichotomy, whole-of-government/society vs. group-based policies, Turkey's diabetes response is characterised by a group-based approach. In line with its vertical aspect, Turkey's perspective on diabetes fails to get to the underlying causes of persisting poor public health outcomes. Instead of putting up a comprehensive, multisectoral intervention mobilising the whole capacity of the government, supported by various policies and institutions, Turkey's diabetes policy confines its stance to a few measures that remain insufficient on their own. Moreover, in line with the treatment focus as opposed to prevention, the diabetes policy targets certain groups of society, instead of the whole population. These

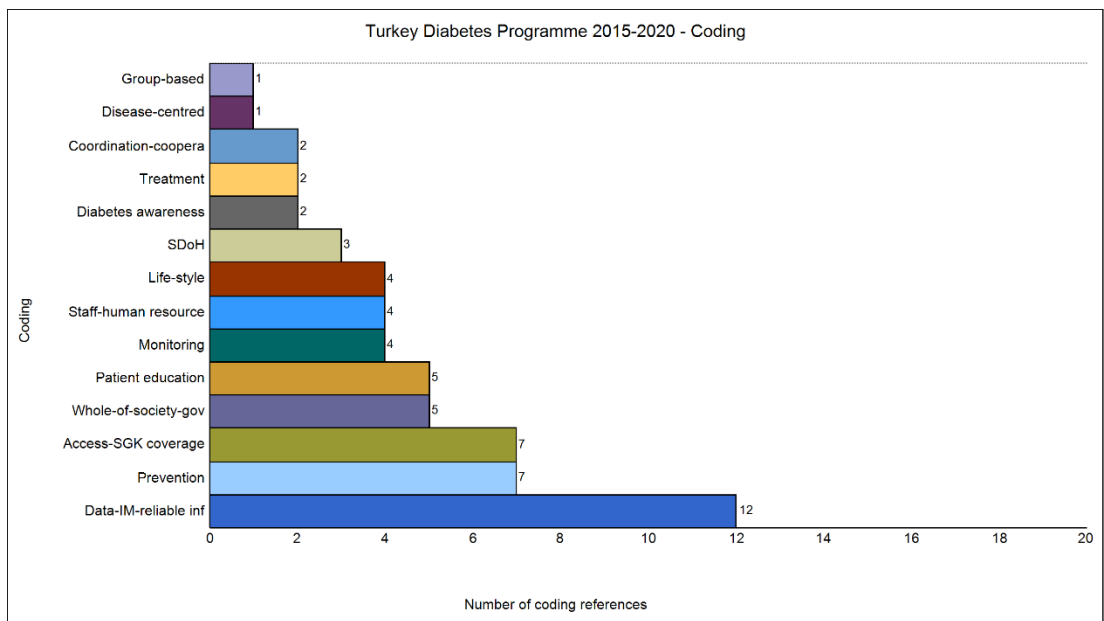
groups are already diagnosed or at-risk people, such as those with prediabetes or pregnant women, and children. The whole-of-society approach can only be observed at the awareness raising level within the policy content, which seemingly has also no correspondence in implementation.

To conclude, this study argues that 1) policy-implementation gap, 2) lack of cooperation and coordination among diabetes actors, 3) lack of an SDoH and preventive approach, 4) lack of reliable and up-to-date data, 5) healthcare and political structure and context incompatible with making fundamental changes are among the underlying factors why Turkey's diabetes policy approach fails to control the diabetes pandemic in Turkey, despite its strong healthcare system and the extensive budget allocated to diabetes management.

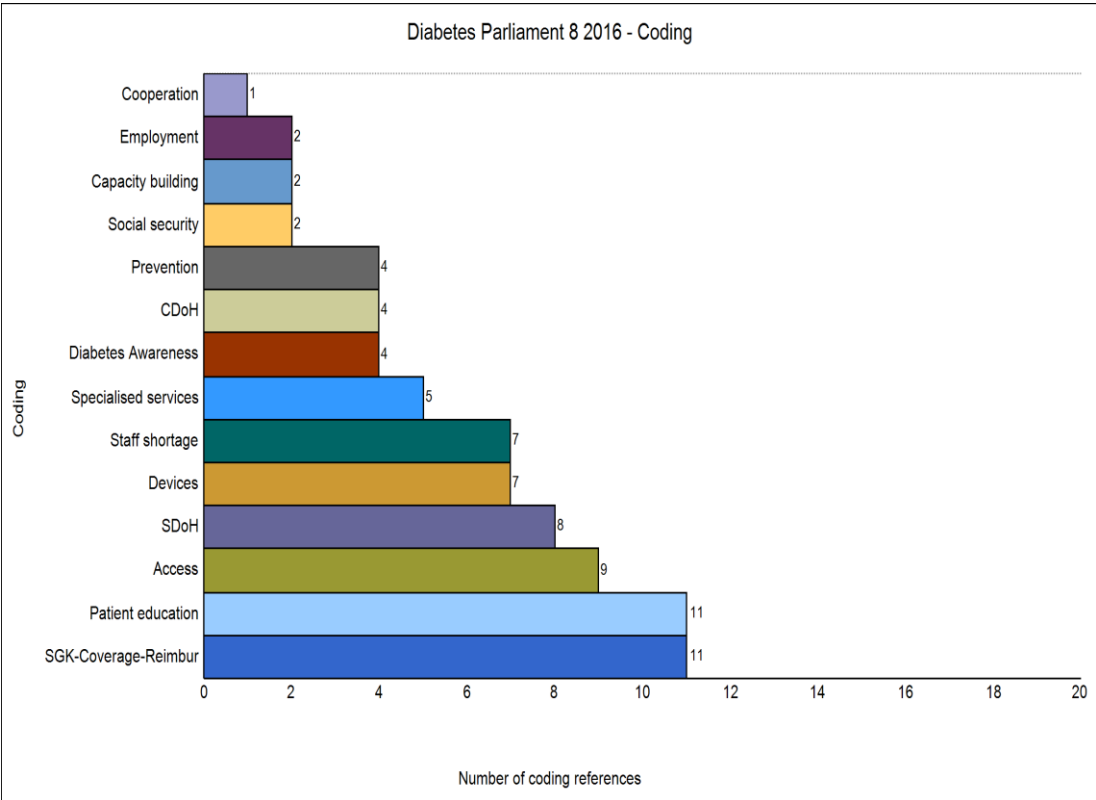
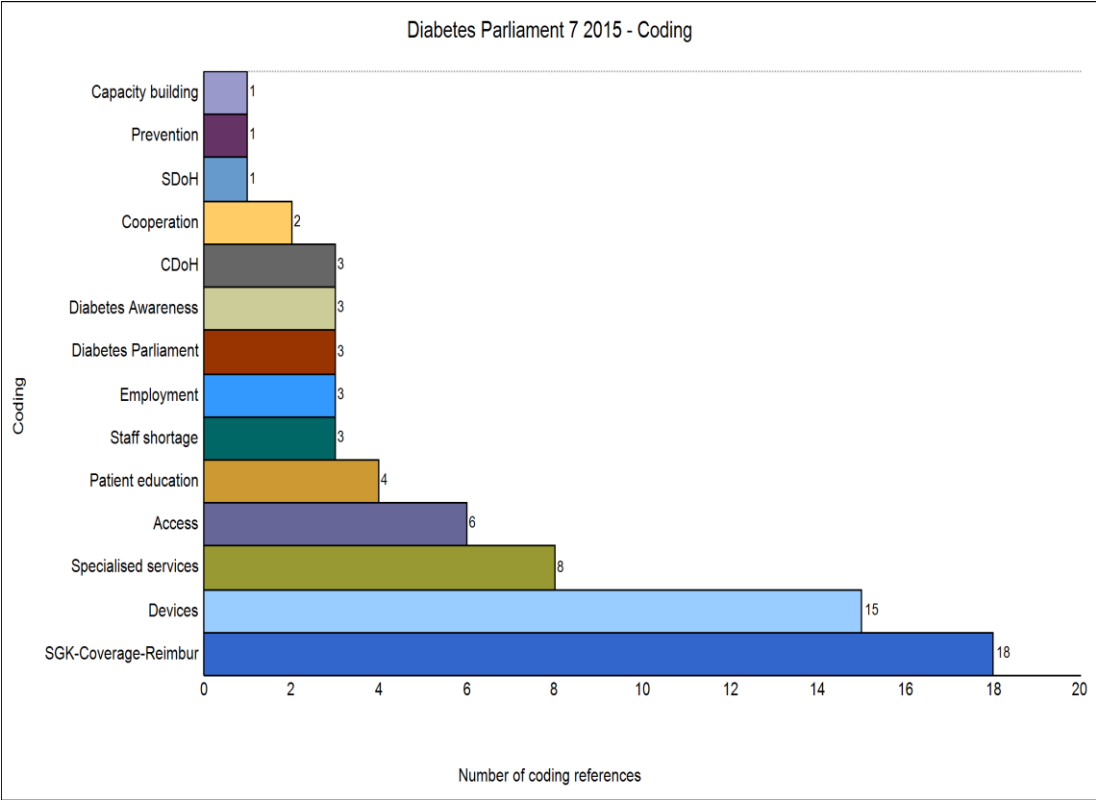
This study contributes to an emerging literature on diabetes policy analysis with an examination of the Turkish case in detail. The accumulation of similar studies will pave the way to the adoption of a comparative lens to diabetes policies, which will help us to investigate the country programmes in a more systematic manner and may give us the opportunity to establish a typology of diabetes management approaches in the future.

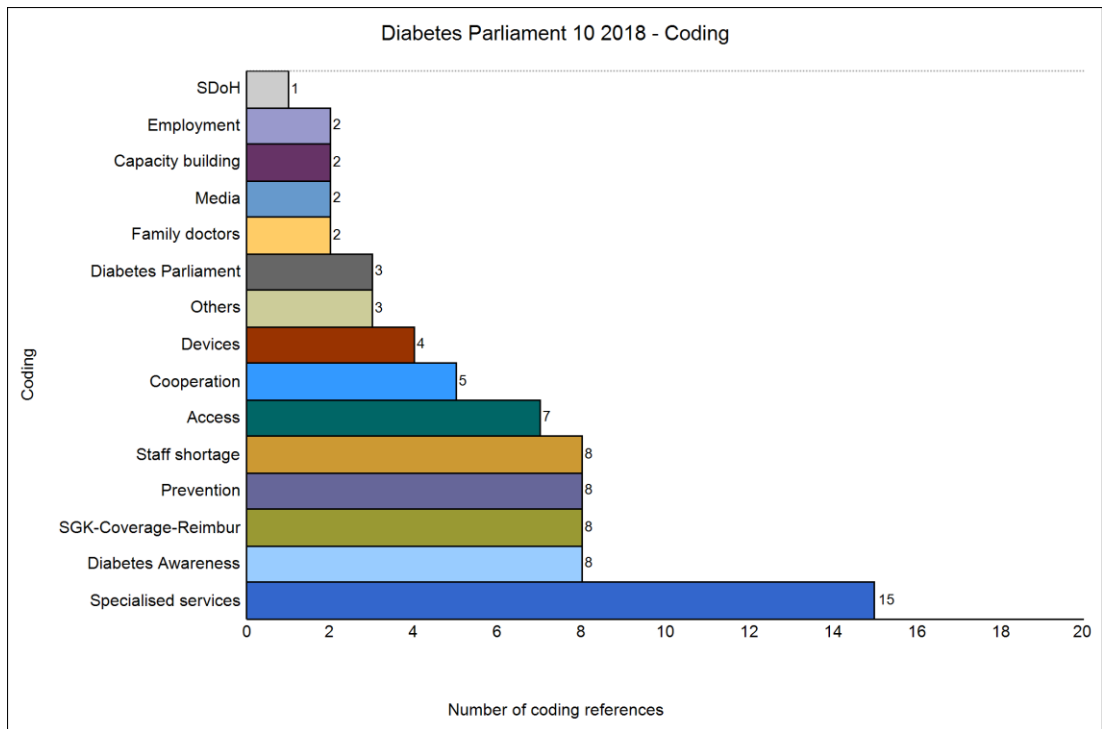
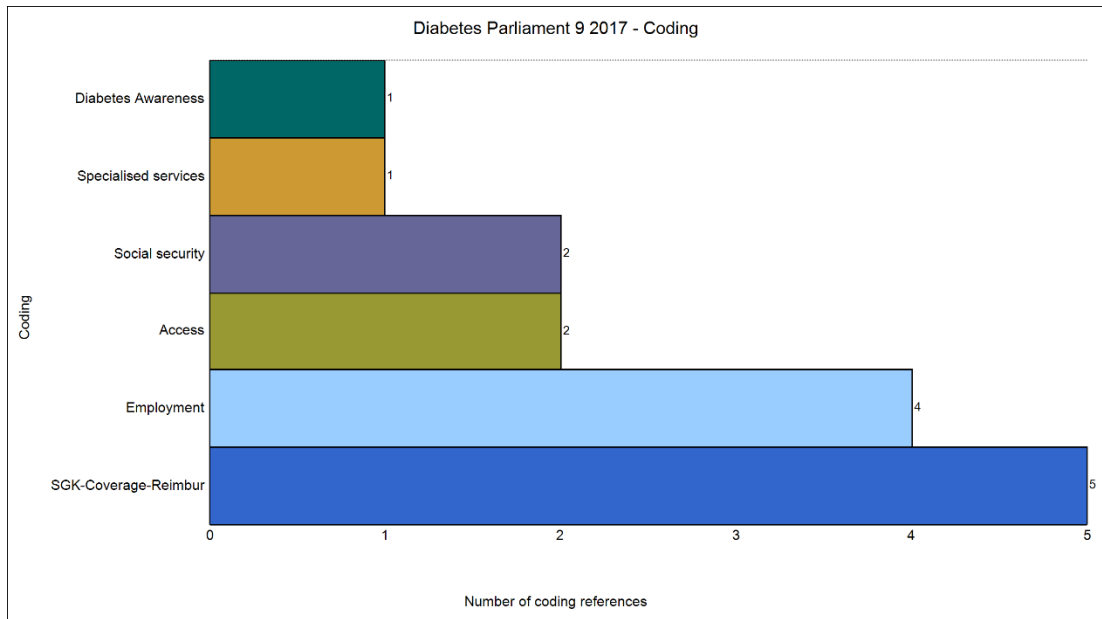
APPENDIX A
CODING PROCESS

1. Turkey Diabetes Programme 2015-2020 was coded based on the prominent themes encountered during the literature review along with the recurring topics within the document itself. Codes and their frequencies as they emerged throughout this document are as below:



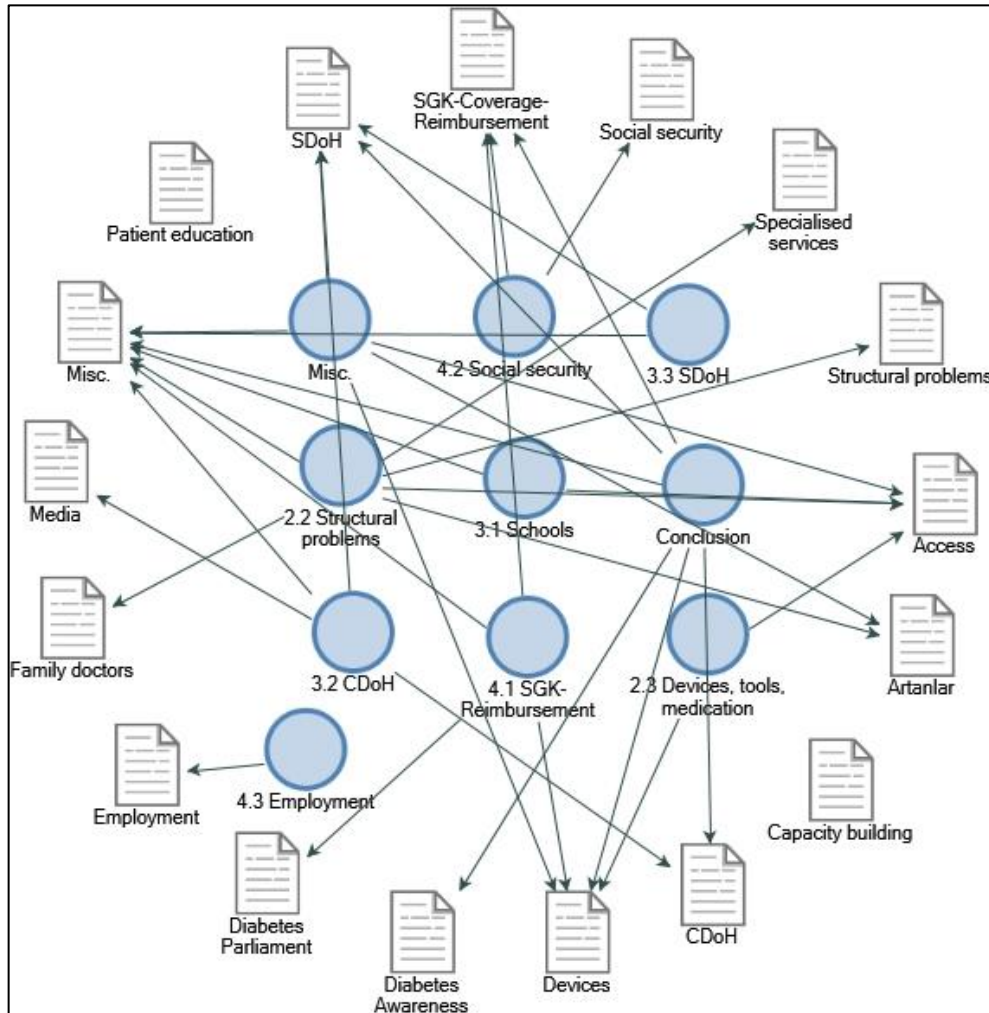
2. Later, the Diabetes Parliament 7, 8, 9 and 10 booklets were coded according to the initial codes and new codes were added along the way as the new themes emerged while reviewing these documents. This new set of codes as they emerged in each booklet and their frequency are as below:





3. Finally, all codes were revised and coded again in order to maintain a neat presentation of the findings. During this second phase, some codes were eliminated, and some are merged into single codes. Below map shows the codes from the first stage (circling items), and the final codes after they were filtered (items at the centre) and the relations in between, as in based on which initial

codes the final codes are derived. It should be noted that, because there have not been any significant changes regarding the Diabetes Awareness section, this part was not included in the second coding stage.



- Once the final codes were derived, they were translated into subtitles within the ‘4.3 Processes’ section after they were re-arranged in line with the research question.

APPENDIX B

ORIGINAL DIRECT QUOTATIONS (TURKISH)⁵

1. Maalesef bazı öğretmenler diğer çocuklar korkar bahanesi ile sınıflarda kan şekeri ölçümüne ve insülin yapılmasına izin vermiyorlar. Genelde başka bir yer de gösterilmediği için çocuklar insülinlerini tuvaletlerde yapmak zorunda kalıyorlar.
2. 'Benim çocuğum diyabet hastası, ben onu okula gönderemem. Şekeri sürekli olarak 400'lerde. Benim çocuğuma ya şeker veya başka bir şey verirse diye endişe ediyorum. O yüzden okula başlatmak istemedim.'
3. Sağlık Bakanlığı diyor ki "Ne kadar çok hasta bakarsanız o kadar çok maaş alırsınız". Bir doktorun günde 80 hasta bakması demek her hastaya 5 dakika zaman ayırıp 8 saati aşan bir süre çalışması demektir. Hiçbir hastaya 5 dakika bakılmaz; diyabetli hastaya hiç bakılmaz. Diyabetli hasta için en az yarım saat zaman ayırmak gerekir. İnsülinlerin ayarı, ilaç ayarı, sistemik muayenesi, kalp muayenesi, diyet eğitimi gibi konulara zaman ayrılmalıdır. Onun için bu performans sisteminde diyabetin yerinin biraz değişmesi, diyabetli hasta için bir performans değil belki iki performans konulup sürelerinin uzatılması lazım.
4. [Bir genel müdürü ömrü neye yeter?] Belki 36 kuruşu 38 kuruşa çıkarmaya yeter. Ama 36 kuruşu bir liraya çıkarmasını ... isterseniz biraz fazla bir şey istemiş olursunuz.
5. Oğlum 4 yaşında Tip 1 diyabetli oldu. Şu anda 8 yaşında. Kusura bakmayın sesim titriyor. Beni çocuğu Tip 1 diyabetli olan aileler daha iyi anlayacaktır. ... Ben devlet memuruydum; sırf çocuğumu takip edebilmek için 2 yıl önce emekli oldum. Yani gece 4-5 kere şekeri düştü mü, çıktı mı, hipoglisemiye mi girdi, bayıldı mı diye kontrol edebilmek için işimden emekli oldum. Gündüzleri ise eşim okulda nöbet bekliyor. ... 3 yıllık diyabetli iken "Parmaklarını deldirmek istemiyorum. Bakın parmaklarıma ne hale geldi. Çok acıyor" dedi. Biz yemedik içmedik Almanya'dan sensör getirdik. Koluna takıyorsunuz 1 TL büyüklüğünde. 250 TL ve 15 günde bir değişiyor. Aylık masrafı 500 TL. ... Cep telefonu büyüklüğünde bir aleti var. Yaklaşıyorsunuz o ana kadar kaydettiği bilgileri okuyor. Sağ olsun devletimiz 1 kuruşunu dahi ödemiyor. Pompa taktırdık. Üzerine basa basa söylüyorum bir Tip 1 diyabetli çocuğun vücuduna ayda 450 tane iğne batıyor. Yanınızda iğne varsa çıkarın ve bir yerinize batırın. Kaç kere batırırsınız? Bunun önüne geçebilmek için ... insülin pompası aldık. 5 bin TL. Bunun 3 bin 500 TL'sini devlet ödüyor, 1500 TL'sini ise vatandaş kendi cebinden veriyor. Setlerin 3 günde bir değiştirilmesi gerekiyor. 3 günde bir değişen setler için SGK belli bir tarihte ödeme kapsamına almış ve bir bedel belirlemiştir. Üstünden 10 sene geçmiş fiyat hala aynı. Şu anda pompanın setleri için 293 TL fark ödüyorum. ... Ayda 450 iğneyi 12 iğne darbesine düşürdük. Bu bence gayet anlamlı bir sonuç.

⁵ Turkish originals of these quotations are directly copied from the Diabetes Parliament 7, 8, 9 and 10 booklets without any interference with the spelling or grammatical errors.

6. ... bir cihazla şekerini ölçtüm. 162 çıktı. Ancak aslında o anda hipoglisemide olduğunu anladım. Çünkü ben de 17 yıllık diyabetliyim. ... Acilde hastamızın beyin kanaması geçirdiğini söylediler. Burada acildeki hekimin de bilgi eksikliği var. Ben 'şekerine de bir bakalım' dediğimde itiraz ettiler. Ben de sağlıkçyım diye yalan söylemek zorunda kaldım. Şekere baktık 52 çıktı. Biyokimya da bakıldı ve 32 çıktı. Ülkemizde piyasada dolaşan ... cihazların kontrol altında tutulması ve denetimlerinin yapılmasını istiyorum. Bu cihazları iş güvenliği olmayan işçiye benzetiyorum.
7. ... eğer biz bir diyabetlinin vücut ağırlığını yüzde 5 veya daha fazla zayıflatabilsek, diyabetin ülke sağlık harcamalarına getirdiği yükü yüzde 30'a yakın bir oranda azaltabiliyoruz.
8. ... obez ve diyabetli bireylerin diyet danışmanlığı almak için harcadığı her bir Euro ile toplumun net olarak 63 Euro kazandığı hesaplanmıştır. Bu kazancın dağılımı incelendiğinde sağlık koşulunda gelişmeye 56 Euro, toplam sağlık bakımı maliyetleri net 3 Euro tasarruf ve üretkenlikte artış da 4 Euro olarak belirlenmiştir.
9. Diyabetli arkadaşlarımız okul yaşamı boyunca ailelerinden dolayı sosyal güvenlik kurumu kapsamındalar. Ancak okul bittikten sonra sosyal güvenlik kurumu kapsamı ortadan kalkıyor ve kendileri pirim ödemek durumunda kalıyorlar. İş bulup çalışma hayatına atılanlar için sorun yok. Ama iş bulamadıysa da sosyal güvenlik kurumuna pirim ödemeleri gerekiyor. Bu piri mi ödeyecek durumda olmayan arkadaşlarımız eğer ailelerinin bir malı ya da geliri varsa yeşil kart alamıyorlar. En azından Tip 1 diyabetlilerin ilaçlarının ve şeker ölçüm çubuklarının temininde sosyal güvenlik kurumu kapsamının uzatılması önemli bir katkı sağlayacaktır. Bunun en azından iş bulana kadar devam etmesi gereken bir süreç olduğunu düşünüyorum. Çünkü, insüliniz hayata devam etmez.

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