

# The Vital Role of Diabetes Nurse Educators in Smoking Cessation: A Case Study from Türkiye

Şeyda Özcan<sup>1</sup>, Aslı Çarkoğlu<sup>2</sup>, Mimi Nichter<sup>3</sup>, Mark Nichter<sup>3</sup>, Nuran Aydın<sup>4</sup>

<sup>1</sup>Atlas University School of Nursing, İstanbul, Türkiye

<sup>2</sup>Department of Psychology, Kadir Has University, İstanbul, Türkiye

<sup>3</sup>University of Arizona School of Anthropology, Tucson, United States of America

<sup>4</sup>Medipol University School of Nursing, İstanbul, Türkiye

ORCID iDs of the authors: XXXX

## Main Points

- Smoking poses a higher health risk for people with diabetes, making cessation a higher priority for this patient group.
- Diabetes nurses, if given cessation-specific training, are in an important position to offer diabetes-specific cessation advice.
- Diabetes nurses were receptive to diabetes-specific cessation counseling training, yet there are systematic challenges to incorporating cessation into their routine care.
- Training details as well as possibilities to overcome the systemic challenges are presented.

## Abstract

This paper discusses the development and implementation of a smoking cessation training program for diabetes nurse educators. People with diabetes who smoke have a significantly higher risk of morbidity and mortality. Smoking greatly increases diabetes complications. Surveys were conducted to ascertain how frequently nurses counseled patients to quit and their interest in cessation training. Observations of nurse-patient interactions and interviews with diabetes nurses facilitated the development of a culturally sensitive cessation training program. Survey results revealed that diabetes nurse educators recognized the need for training in smoking cessation, as many patients with diabetes do not consider smoking to be harmful for their health. A two-day workshop was developed for nurses on the specific harms of smoking for diabetes patients, including hands-on training in cessation counseling and motivational interviewing. Two months after training, nurses reported that the skills they acquired gave them confidence to counsel patients but identified four challenges to conducting cessation in their clinical settings. Diabetes nurse educators can play a pivotal role in delivering cessation. Training and overcoming challenges to implementation are urgently needed in the time of coronavirus disease 2019 given the dual risks of diabetes and smoking for severe complications.

**Keywords:** Diabetes and tobacco, diabetes nurses, nurses in cessation, smoking cessation, tobacco control

\*There authors contributed equally to this work.

## Corresponding Author:

Aslı Çarkoğlu

E-mail:

asli.carkoglu@khas.edu.tr

Received: October 31, 2023

Accepted: December 13, 2023

Publication Date: XXXX  
XX, XXXX

## Introduction

Diabetes is a high-priority global health problem exacerbated by smoking. Türkiye has the highest prevalence of diabetes in Europe (14.5%) and has experienced the largest regional increase in diabetes in recent years (IDF, 2021). Türkiye has also experienced a 40% increase in obesity in the past decade. This risk factor alone suggests rates of diabetes will

rise in the future unless significant behavior change is forthcoming (Satman et al., 2013). Türkiye also has one of the highest rates of smoking in Europe, with 44% of men and 20% of women reporting current smoking (WHO, 2019). Smoking increases the risk of type 2 diabetes by 30 – 40% compared to non-smokers, and increases diabetes complications dramatically, including coronary heart disease, myocardial infarction, stroke, peripheral arterial



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**Cite this article as:** Özcan, Ş., Çarkoğlu, A., Nichter, M., Nichter, M., & Aydın, N. (2023). The vital role of diabetes nurse educators in smoking cessation: A case study from Türkiye. *Addicta: The Turkish Journal on Addictions*, 10(3), 282-289.

disease, and diabetic neuropathy (Aggarwal et al., 2019; Fagard & Nilsson, 2019; Lotrean, 2017; Maddatu et al., 2017). Patients with diabetes who smoke have an 80% higher risk of mortality (Nelson et al., 2010) and are less actively involved in their diabetes care when compared to nonsmokers (Fagard & Nilsson, 2019). A recent study also found that patients with diabetes who smoke start insulin therapy earlier than those who are non-smokers (Sağlam et al., 2022). The World Health Organization recognizes smoking as a preventable risk factor for type 2 diabetes and they strongly recommend that people with diabetes quit smoking (WHO, 2018).

Although Türkiye is one of the tobacco control leaders in Europe, it has fallen short in its implementation of tobacco cessation in clinical settings (Nichter et al., 2018). Recent findings from the Global Adult Tobacco Survey in Türkiye found that only 46% of smokers had been asked by a health care provider if they smoked, and only 40% had been advised to quit (WHO, 2019). A Turkish study of 1492 patients who had type 2 diabetes for at least 6 months found that 20.5% were current smokers; their mean cigarette count per day was  $19.16 \pm 12.48$ , and their average smoking duration was  $19.69 \pm 11.68$  years (Celik et al., 2022). Diabetes nurse educators are well positioned to take the lead in encouraging their patients to quit smoking as part of their routine discussions about lifestyle changes necessary for diabetes management. A Cochrane review of nurse-delivered smoking cessation interventions in 13 high- and middle-income countries found that interventions by nurses significantly increased the likelihood of quitting among patients (Rice & Stead, 2008).

In order to proactively involve diabetes nurse educators in smoking cessation, there is a need to increase their awareness of the systemic harms of smoking for patients with diabetes, include smoking cessation counseling as a standard of good nursing care, and acquire competency in cessation assistance (Petersen et al., 2017; Sarna et al., 2009). More specifically, nurses need to know how to talk to patients about the smoking-related complications of diabetes and how to assist them in quitting in environments where smoking is seen as normative behavior.

In Türkiye, little is known about whether nurses routinely offer patients with diabetes smoking cessation advice. One study among patients with type 2 diabetes who smoked at the time of diagnosis ( $n = 150$ ) revealed that 57% of these patients continued smoking after diagnosis. Of these smokers, 37% continued to smoke at the same level, and 20% reduced their consumption. Only one-third of these patients reported being asked about their smoking status by a healthcare provider. Of those asked and advised to quit, little advice was offered on how to quit (Arslan, 2016). These study findings suggest that a more proactive approach to cessation counseling for patients with diabetes is required.

The intervention described in this paper follows the illness-specific approach to cessation counseling developed by Project Quit Tobacco International (QTI) in India and Indonesia for medical students and physicians. Quit Tobacco International training focuses on how to establish the relevance of cessation advice by addressing how smoking affects the patient's current condition (Nichter et al., 2009; Prabandari et al., 2015; Yamini et al., 2015). Quit Tobacco International-inspired training in Türkiye draws on over a decade of culturally-sensitive cessation training in India

and Indonesia, including experience counseling patients with diabetes (Mini et al., 2014; Padmawati et al., 2009; Thankappan et al., 2013). Results of a QTI clinical trial conducted in India found that a diabetes-specific cessation message from a doctor followed by cessation counseling by a non-physician healthcare provider yielded a 52% quit rate compared to a physician-only message (13% quit rate) (Thankappan et al., 2014).

Quit Tobacco International Türkiye worked to expand the reach and depth of smoking cessation training within the Turkish healthcare system. One of the project goals was to create a cadre of nurses trained in tobacco cessation able to perform illness-specific as well as general cessation as part of their routine clinical practice. The aims of this paper are: (1) to assess the extent to which diabetes nurse educators are counseling patients with diabetes to quit smoking as part of routine practice; (2) to describe the development and implementation of a cessation training program for diabetes nurse educators; and (3) to discuss challenges to implementing cessation following training based on nurse feedback.

## Methods

The project was carried out between 2014 and 2017. Ethics committee approval for the project was obtained from Kadir Has University's Committee on Human Research (Approval Number: 2014-DK-03, Date: 2014).

### Review of Nursing Curriculum

The authors reviewed the current national curriculum for nursing students to determine the extent to which the harms of tobacco and the importance of cessation counseling were included in training during the undergraduate and postgraduate diabetes nurse educator certificate programs. Curriculum from continuing education courses for nurses were also reviewed for inclusion of information on smoking and diabetes. Observations of the availability of educational materials related to smoking and diabetes were also made in private and public hospitals.

### Surveys

Two surveys were conducted among nurses. The first country-wide survey focused on diabetes nurse educators to ascertain the extent to which they counseled patients to quit. A list of diabetes nurses working around the country was compiled by contacting all 172 public and private hospitals in Türkiye listed by the Ministry of Health as having a diabetes clinic. In all, 439 diabetes nurse educators were contacted by calling these 172 hospitals. Of these, 165 (38%) agreed to participate. These nurses were directed to an online survey using QUALTRICS software. All participants gave written consent for participation before starting the survey.

The second survey ( $n = 101$ ) was conducted in a mid-sized private hospital in Istanbul and included all nurses. Our reason for surveying all nurses was that patients with diabetes in many hospitals are treated by general nurses who rotate between clinical specialties. All nurses working in in- and out-patient clinics in this hospital were invited to fill out a short survey; 101 (44%) of the total 231 nurses agreed to participate. For data entry and analysis of both surveys, Statistical Package for the Social Sciences Statistics software, version 20, was used.

**Formative Research and the Development of a Cessation Training Program**

Formative research was conducted in clinical settings as a first step toward developing training materials. Key informant interviews with five diabetes nurse educators based in large Istanbul hospitals helped us better understand the context in which these nurses worked and the opportunities they had to counsel patients individually and in diabetes education groups. We also observed typical nurse-patient interactions in the clinic to gain a sense of the style of communication and how passive and active patients were when speaking to nurses.

Educational modules to be used in nurse training were adapted from an existing QTI training developed for medical students in India and Indonesia. Modules included both general and illness-specific (i.e., diabetes) information on the harms of smoking. The modules were revised and translated into Turkish to include country-specific prevalence data and case studies relevant to Turkish clinical settings and Turkish culture.

A two-day training for a select group of diabetes nurse educators was held as a next step in this proof-of-concept study. The training was conducted by a psychologist and two diabetes nurse educators trained by QTI. Topics included in the training, adapted from QTI trainings in India and Indonesia, are outlined in Table 1. During the training, nurses were asked to provide feedback on the content and process of teaching. Following the training, diabetes nurse educators returned to their clinics and

were asked to take notes on their experience counseling patients in smoking cessation. They were further asked to identify effective and ineffective communication strategies with resistant patients who questioned the need to quit smoking or who thought of smoking as an important means of coping with stress. Nurses were debriefed about their cessation counseling experience during the focus groups held 2 months after training, with the aim of using observations and case studies in future trainings.

**Results**

**Review of Nursing Curriculum**

Although tobacco is briefly mentioned as harmful for health, a review of the nursing curriculum revealed that bachelor and master’s level nursing students receive very little training on the illness-specific harms of tobacco other than an association with cancer and chronic obstructive pulmonary disease. With respect to diabetes, students are not taught that nicotine constricts the flow of blood in the arteries, interferes with wound healing, impedes insulin absorption, or places the smoker with diabetes at considerable risk of stroke and heart attack as well as blindness and impotence. Tobacco, when discussed in the curriculum, was included as part of a general discussion on addictive substances, and as a risk factor for respiratory diseases. The harm of secondhand smoke exposure to patients with diabetes who are non-smokers was also not covered.

Observations in three diabetes clinics in Istanbul revealed that no educational materials were available to nurses to help explain the harmful effects of smoking for patients with diabetes. All that was available were promotional materials for a nicotine replacement product not specifically designed for diabetes patients or the Turkish population.

Consequently, the study group developed and pretested pamphlets and posters for use in the diabetes clinics. In addition, a flipchart was created for the diabetes nurse educator illustrating the potential complications of smoking for a patient with diabetes. A poster was also designed to raise awareness of the harms of secondhand smoke for patients who did not smoke, but were exposed to tobacco smoke in their homes. Notably, educational posters are not commonly seen in clinics due to hospital regulations, but educational videos are permitted in the waiting rooms of diabetes clinics where patients wait to be seen by a nurse or for test results. One such video was developed by the study group to be used in such settings and made available on the project website.

**Survey Results**

Questions on two separate surveys queried smoking prevalence among nurses, their practice of offering cessation advice to patients, and their motivation to be trained in cessation counseling. Among a national sample of diabetes nurse educators ( $n = 165$ ), 58 (35%) were current smokers, and among general nurses ( $n = 101$ ) from a mid-sized private hospital in Istanbul, 39 (40%) were current smokers. Slightly more than one-half of the nurses in both groups (51% of diabetes nurse educators and 55% of general nurses) reported “always asking” about the smoking status of their patients, a mandatory question on patient intake forms. Responses to questions about current cessation practices and motivation to engage in more comprehensive counseling can be

**Table 1.**  
*Components of the Two-Day Training Program*

<b>Nurse Training Day 1 Topics</b>	<b>Nurse Training Day 2 Topics</b>
Epidemiology of tobacco use	Practical, evidence-based cessation counseling skills
Addiction	Basic motivational interviewing skills of reflections and affirmations
Systemic harms of smoking	Establishing illness-specific quit advice
Intensity and duration of withdrawal symptoms and craving	Assessing stages of readiness to quit (pre-contemplation, contemplation, preparation, action, maintenance) [28]
The effect of nicotine on insulin resistance and its relationship to a rise in blood sugar levels	Matching advice to the specific stage of readiness
Specific information about the diabetes tobacco use interaction	5As of smoking cessation (ask, advise, assess, assist, arrange) [27]
Nature and effects of secondhand smoke	5Rs of motivating ambivalent patients (risk, relevance, reward, roadblocks, repetition) [29]
Nicotine replacement therapy	Culturally relevant ways of dealing with withdrawal and craving; do’s and don’ts

**Table 2.**  
Survey responses by two groups of nurses

	Diabetes Nurse Educator Survey (N = 165)		General Nurse Survey (N = 101)	
	N	%	N	%
How frequently do you ask your patients if they smoke?				
Always	82	51	56	55
Sometimes	75	47	36	36
Never	3	2	9	9
If your patient smokes, do you ask them how much they smoke?				
Yes	126	81	69	68
No	30	19	32	32
If your patient smokes, how often do you advise them to quit?				
Always	132	85	72	71
Sometimes	19	12	25	25
Never	5	3	4	4
In your opinion, how important is it for a nurse to talk to patients about quitting?				
Important	140	93	96	95
Not important	11	7	5	5
If a training program on cessation counseling were offered, would you be interested in attending?				
Yes	139	92	78	77
No	12	8	23	23

found in Table 2. Overall, the survey responses show a clear need for training in cessation counseling among nurses working with patients with diabetes.

While over one-half of nurses surveyed reported that they always ask patients about their smoking status and advise them to quit, our curriculum review and interviews revealed that nurses had little knowledge of diabetes complications exacerbated by smoking. They had also received no training to assist patients in the process of quitting. Their advice to quit smoking was not tied to the complications of diabetes, and specific advice on how to quit was not offered to patients wanting to quit.

#### Skill-Based Training for Diabetes Nurse Educators

Ten diabetes nurse educators from eight large private and public hospitals in Istanbul voluntarily participated in the smoking cessation training study. None of these diabetes nurse educators had previously received training in cessation or motivational interviewing, despite the fact that helping patients change behavior is one of their main responsibilities. As part of the training, a video was created modeling how to conduct the 5As and 5Rs with a Turkish patient who exhibited reluctance to quit smoking yet expressed concern about disease complications. In the video, emphasis was placed on approaching quitting as a process. Role-play exercises were developed to facilitate skill-based learning. Role-play also served as an opportunity for discussion about alternative ways of responding to patient concerns about

quitting, as well as ways of counseling patients at different stages of readiness (2008 PHS Guideline Update Panel, Liaisons, and Staff, 2000).

Feedback received from workshop participants was largely positive. Nurses found the content of the educational modules to be comprehensible and drew attention to only a few points where further clarification was needed. They appreciated the behavior change skills they had learned and recognized that this skill set could be applied to diet and exercise. They particularly valued the interactive learning process and the opportunity to discuss how best practices might be introduced and adapted in their busy clinics. Participants found the training video useful and asked that it be made available online for review later. Each participant was provided with diabetes-related quit smoking brochures, posters, and flipcharts to utilize in their clinics. Nurses commented that being able to hand out materials increased the legitimacy of their cessation role.

Nurses returned to their clinics and kept detailed notes about their cessation counseling experiences. After two months, they were debriefed in focus groups when successes as well as challenges in delivering cessation messages were discussed. One of the most important challenges identified was that the information provided to patients about the harms of tobacco and the importance of quitting was not in sync with advice received from their doctors. Among those patients who had been asked about their smoking status by a doctor, none were told about specific diabetes complications linked to smoking and none were provided advice on how to quit beyond being asked if they wanted a prescription for nicotine replacement therapy. Importantly, some doctors had advised patients to just reduce their level of smoking. This message was interpreted by patients as indicating that low-level smoking was not harmful for the health of a diabetes patient. As one nurse noted, "Our quit message is heard in relation to what these doctors say and do. Doctors smoke and tell patients that smoking just a few cigarettes a day is okay." Some patients overtly challenged the quit advice offered to them by a nurse, stating that the doctor had not told them to quit. These patients could not understand why nurses were spending time talking to them about smoking instead of attending to their blood sugar levels, inspecting their feet, and so on.

Nurses reported that when informing diabetes patients about the complications of smoking, a focus on mortality was less effective than a focus on the suffering that they might experience if they continued to smoke. Moreover, patients expressed greater concern about health problems they were familiar with, such as stroke or heart attack, than about less familiar complications such as gangrene and amputation. All nurses reported that establishing the relevance of quitting by tying quit advice to the patient's illness was more effective than informing patients about the general harm of smoking. Patients expressed interest in both how their diabetes could be exacerbated by smoking and how smoking compromised the effectiveness of their medications, something they had not considered before.

During debriefings, nurses requested additional information on mental health complications of diabetes, especially depression. A current systematic review found the mean prevalence of depression among people with type 2 diabetes to be 28%,

compared to 13% among the general population (Harding et al., 2019). In another systematic review, Grigsby et al. (2002) found evidence of generalized anxiety disorder prevalence of 14% and anxiety symptoms of 40% among people with diabetes, whereas the prevalence of generalized anxiety disorder is estimated to be 3 – 4% among the general public. Nurses noted that some of their patients appeared to be suffering from depression, and they felt unprepared to deal with this. Nurses suggested that more emphasis be placed in future training on patients who use smoking to cope with mental health issues.

A few nurses expressed fear that some patients might become aggressive if they recommended smoking cessation, particularly if the doctor had not recommended that patients quit. Violence against healthcare providers is not uncommon in Turkey (Çelik et al., 2007; Erkol et al., 2007). This is one of the reasons why a non-confrontational approach to cessation counseling, in keeping with motivational interviewing, was critical to maintain. Nurses also expressed concern that nicotine withdrawal might lead some people to become depressed, anxious, or violent. Questions were raised about how one could distinguish between mental health problems and withdrawal symptoms. This issue was only briefly mentioned during the training and demands greater attention in future trainings.

During training, attention was placed on identifying culturally appropriate ways of responding to cessation challenges, for example, patients who expressed the need to smoke to cope with and who were unsure they could cope with the additional stressor of withdrawal symptoms. As nurses gained confidence conducting brief cessation interventions, they experimented with and identified innovative responses to common challenges. Table 3 provides examples of common responses that nurses encountered which demonstrate barriers to behavior change and examples of how they addressed these concerns and reframed their patient's past quit attempts that had not proven successful.

On a positive note, diabetes nurse educators reported that cessation counseling created closer bonds with patients and noted that patients appreciated the personal attention they received in the process of counseling. In short, discussions about smoking cessation provided nurses an opportunity to deliver patient-centered care. Nurses reported increased job satisfaction in helping patients engage in behavior change that could have a long-term impact on the quality of their lives. Talking about quitting smoking, they noted, often led to talk about other healthy behavior changes. For this reason, nurses saw the potential of smoking cessation playing a central role in broader lifestyle change programs for patients with diabetes.

## Discussion

In this paper, we have described a proof-of-concept study showing the potential role of diabetes nurse educators in smoking cessation. Their potential impact could be immense. Nurses who work in diabetes clinics typically interact with 30 – 50 patients per day. Moreover, the motivational interviewing and behavior change skills they acquire during cessation counseling training could have broad utility when applied to other areas of health promotion such as diet and exercise. Our survey results among nurses ( $n = 266$ ) about their interest in counseling patients are

corroborated by an eight-country survey ( $n = 1600$ ) that investigated whether nurses wanted to be more proactive in counseling patients about behavioral risks to noncommunicable diseases, such as diabetes (DeCola et al., 2012). Findings reveal that 95% of nurses believed that they should spend significantly more time, on average almost twice the amount as they currently spend, on both prevention and escalation of NCDs (Noncommunicable Disease). This includes informing patients about the harms of tobacco use.

The training of nurses described in this paper was a first step toward preparing diabetes nurse educators to counsel their patients more effectively. The training drew upon the past experience of QTI projects in other countries, was based on formative research, and was designed to be iterative and build on lessons learned by nurses during actual patient interactions. Lessons learned and challenges faced by nurses trained in this study will be incorporated into future training sessions.

## Limitations and Suggestions for Future Research and Implementation

Four challenges/limitations to involving diabetes nurse educators in smoking cessation may be highlighted. First, nurses reported that patients with diabetes who continue to smoke do not think that low-level smoking is harmful for their health. Unfortunately, this message is reinforced by some doctors either directly or indirectly by not paying sufficient attention to smoking during their consultations with patients. Some patients challenged nurse's cessation advice, stating that their doctor had not instructed them to quit. As has been reported globally, it is critical that nurses and doctors provide a consistent and repeated message to smokers at each visit about the importance of quitting (West et al., 2000). For cessation efforts to be successful, task-sharing of cessation messages will need to occur (Healton & Fiore, 2008). Nurses and doctors will also need to quit smoking in order to deliver credible messages about the harm of tobacco to patients. At present, the high prevalence and visibility of smoking (even right outside the hospital entrance) among nurses and doctors serves to undermine messages to patients not to smoke.

A second challenge reported by nurses trained to conduct cessation counseling was that, given their high patient load and the need to discuss diabetes management with each patient, there was insufficient time to conduct cessation interventions in the manner they had been taught. The support of hospital administration for smoking cessation is needed to make time for cessation counseling.

A third challenge noted was that many patients with diabetes who were non-smokers were exposed to secondhand smoke in their homes. These patients felt that they were powerless to impose a no-smoking rule at home. For many patients with diabetes who wanted to quit, doing so was challenging when family members regularly smoked in the home and continued to offer them cigarettes. In such cases, cessation interventions will need to involve the entire household and not just the patient.

A fourth challenge reported was that diabetes nurses had insufficient skills to assist patients who suffered from depression. The relationship of type 2 diabetes and depression is bidirectional: diabetes increases the risk of depression (Anderson et al., 2001) and depression increases the risk of development of type 2

**Table 3.**

Six common patient responses to nurse's quit advice, expected nurse assessment, and response strategies to consider following training

Patient's Response to Nurse's Quit Message	Nurse's Assessment	Nurse's Response Strategies
"I'm afraid I can't quit. I have tried before and it works for a while and then I start smoking again."	The patient feels helpless and powerless to quit and thinks he/she should have the willpower to quit immediately. The quit attempt needs to be reframed as a partial success, not a failure, and the patient needs to be reminded of the lessons learned in previous quit attempts. Also, we need to investigate the physical, psychological, and social triggers that led her/him to smoke again.	"Quitting is a process. It may take you several attempts to successfully quit. Feel good about the short-term quit success you've had in the past. The first week of quitting is by far the most difficult, and you made it beyond this period of time. Was there any positive change in the way you felt when you quit?"
<i>"If I quit, I don't know how I will deal with the stress at work. If I don't smoke I am afraid I will stress out a lot and my blood sugar will increase and make me ill. I don't want to be ill and lose my job!"</i>	The patient is concerned that stress will lead to an increase in their blood sugar level and considers smoking as an efficient way to manage stress. It is important to correct the misconception that smoking is an effective means of reducing blood sugar levels.	"I understand that you use smoking to cope with stress. But it is my duty to inform you that smoking does not reduce blood sugar levels. In many cases, it actually raises blood sugar levels. Here are some of the complications of diabetes linked to smoking (nurse uses the flip chart to illustrate the complications). Let us consider alternative ways of dealing with your stress at work."
<i>"It's hard to leave something that is so close to you. My cigarettes are closer to me than my husband. I tell them everything. It's hard to imagine life without them."</i>	Consider the patient's social support network and skills to deal with daily stressors, loneliness, and boredom.	"It sounds like cigarettes are very important for you; you describe them almost like a friend. But it may be a good time to think about making new friends who don't create complications for your diabetes. Can you think of healthier alternatives to smoking, such as activities that would give you the opportunity for new interactions that don't involve smoking?"
"I've already given up so much for my diabetes. I can't leave my smoking as well."	For a patient with diabetes who feels they have already given up many pleasures in their life, giving up smoking may be viewed as too much of a sacrifice. They are only looking at losses in their life and not what they may gain by behavior change.	"I understand that a lot is changing in your life and that is uncomfortable for you. You've told me how much you feel you are losing. I wonder if we can think and talk about what you will be gaining if you quit smoking. You told me earlier how it's becoming difficult for you to walk up stairs without feeling out of breath. Quitting smoking will make this easier for you. Can you think of any other benefits of quitting?"
<i>"I know that smoking is bad for my health. I don't want to hear this again. I don't want to quit."</i>	Patient is not ready to hear the cessation message, and it is important for the nurse to be non-confrontational. A teachable moment may appear in the future if the patient experiences complications from smoking.	"I see that you are not ready to talk about quitting just now. Let me give you some pamphlets about the potential complications of smoking for patients with diabetes and some materials on quitting. We can talk about this when you want to do so. All I ask is that you take a brief look at the materials and reconsider."
<i>"I don't want to quit because I may gain weight. Smoking helps me control my weight and is something to do when I'm frustrated and I don't want to give into the temptation to eat sweets."</i>	The patient is using smoking as a means of dietary control, a core message in all diabetes education materials. One unhealthy behavior (inappropriate diet for a patient with diabetes) is being substituted by another (smoking), so other alternatives need to be identified to control weight. Dietary advice is necessary, but may not be sufficient. This is a complaint shared by many female diabetes patients. Emphasis needs to be placed on what is feasible for women, given their specific life circumstances.	"Your weight is important to you and it is important for controlling your diabetes. I have many patients with weight concerns who have quit smoking and have not gained weight. If you wish, we can talk about what they did."

diabetes (Rotella & Mannucci, 2013). Future trainings will need to incorporate more information on depression and diabetes, how to differentiate symptoms of nicotine withdrawal from signs of depression, and provide suggestions for appropriate referral.

In the time of post-COVID-19, introducing cessation counseling in diabetes clinics is particularly urgent given that people with a history of diabetes (Huang et al., 2020; Singh and Khunti, 2021) and those that smoke (Umnuaypornlert et al., 2021) are both at high risk of experiencing severe COVID-19 requiring hospitalization. Data from surveys measuring the impact of the pandemic on smoking suggest two general patterns in Turkey. The first is an increase in cessation linked to fear of severe COVID-19 (Tetik et al., 2021). The second pattern is that increased stress during the pandemic has resulted in an increase in smoking (Çarkoğlu and O’Neil, 2021; Firat et al., 2021).

Both trends are important. The first offers an opportunity for diabetes nurse educators to promote cessation by informing patients of the double risk of severe COVID-19 posed by smoking and diabetes. Discussions about COVID-19 can be used as a teachable moment (Pettigrew et al., 2021; Simons et al., 2020). The second trend speaks to the need to prepare nurses to face mounting obstacles to behavior change in the time of COVID-19 (Forde et al., 2020). Pandemic-related increases in smoking and drinking, and obesity linked to the high consumption of comfort foods, exacerbate the symptoms of diabetes. The motivational interviewing skills introduced to diabetes nurses in the trainings described in this paper will better enable them to address not just smoking cessation, but these other risk behaviors in a more holistic and culturally sensitive manner.

There is a clear need for involving diabetes nurse educators in smoking cessation given the severe disease complications associated with this unhealthy behavior. During this study, we identified two opportunities for going to scale with cessation training for nurses working with patients with diabetes. Most notably, we received encouragement from the National Diabetes Congress of Turkey for developing nurse cessation training. Since 2018, a 2-hour training session has been held at Turkey’s National Diabetes Congress meetings. Participants are taught the basics of cessation counseling and how to establish the relevance of cessation advice for diabetes. Educational brochures on diabetes and smoking and the benefits of quitting are distributed. Feedback indicates that diabetes nurse educators appreciate the training and resources provided.

A second development is related to the national education and certification for diabetes nurse educators. The core text book for diabetes nurse educators now has a section on the role of the diabetes nurse educator in smoking cessation written by researchers from this project that includes their experiences discussed in this paper (Erdoğan & Özcan, 2021). This is a text used in undergraduate, graduate, and certification trainings of diabetes nurse educators and as such has extensive reach. This is an important step towards the inclusion of cessation as an integral component of the work of diabetes nurse educators. Our research team is encouraged by these developments and plans to continue working with nurses, their professional organizations, and the Turkish Ministry of Health as a means of promoting cessation training for diabetes nurse educators.

**Ethics Committee Approval:** This study was approved by Ethics committee of Kadir Has University (Approval Number: 2014-DK-03 Date: 2014).

**Informed Consent:** Verbal/informed consent was obtained from the patients who agreed to take part in the study.

**Peer-review:** Externally peer-reviewed.

**Author Contributions:** Concept – Ş.Ö., A.Ç., Mi.N., M.N., N.A.; Design – Ş.Ö., A.Ç., Mi.N., M.N.; Supervision – Ş.Ö., A.Ç., Mi.N., M.N., N.A.; Resources – Ş.Ö., A.Ç., Mi.N., M.N., N.A.; Materials – Ş.Ö., A.Ç., Mi.N., M.N.; Data Collection and/or Processing – Ş.Ö., A.Ç., Mi.N., M.N.; Analysis and/or Interpretation – Ş.Ö., A.Ç., Mi.N., M.N.; Literature Search – Ş.Ö., A.Ç., Mi.N., M.N.; Writing – Ş.Ö., A.Ç., Mi.N., M.N.; Critical Review – Ş.Ö., A.Ç., Mi.N., M.N.

**Acknowledgments:** The authors would like to thank Dr. Elif Altuğ and Dr. Ayşecan Terzioğlu for their contributions during the fieldwork phase of the study. Funds for this study were provided by Global Bridges.

**Declaration of Interests:** The authors have no conflicts of interest to declare.

**Funding:** This study was funded by Global Bridges.

## References

- 2008 PHS Guideline Update Panel, Liaisons, and Staff (2008). Treating tobacco use and dependence: 2008 update US Public Health Service Clinical Practice Guideline executive summary. *Respiratory Care*, 53(9), 1217 – 1222.
- Aggarwal, S., Khandelwal, D., Dutta, D., Kalra, S., & Balhara, Y. P. S. (2019). Diabetes and smoking: The burden of evidence. In: Rodriguez-Saldana, J. (eds) *The Diabetes Textbook*. Springer, Cham., [\[CrossRef\]](#).
- Anderson, R. J., Freedland, K. E., Clouse, R. E., & Lustman, P. J. (2001). The prevalence of comorbid depression in adults with diabetes: A meta-analysis. *Diabetes Care*, 24(6), 1069 – 1078. [\[CrossRef\]](#)
- Arslan, A. Y. (2016). *Smoking/tobacco use behaviors of people after they were diagnosed with Type 2 diabetes* (Masters Thesis). Koc University Health Sciences Institute.
- Çarkoğlu, A., & O’Neil (2021). The impact of personal, familial and social factors on individual well-being during the Covid-19 Pandemic (COVID-19 Salgın Sürecinde Öznel Esenliği Koruyucu Bireysel, Ailesel ve Sosyal Faktörlerin İncelenmesi) p 76. In *COVID-19 and Society: The social, economic and humanitarian effects of the pandemic; findings, results and suggestions (COVID-19 ve Toplum: Salgının sosyal, ekonomik ve beşeri etkileri. Bulgular, sonuçlar ve öneriler)*, TÜBİTAK, [\[CrossRef\]](#)
- Celik, S. S., Celik, Y., Ağırbaş, I., & Uğurluoğlu, O. (2007). Verbal and physical abuse against nurses in Turkey. *International Nursing Review*, 54(4), 359 – 366. [\[CrossRef\]](#)
- Celik, S., Olgun, N., Yilmaz, F. T., Anataca, G., Ozsoy, I., Ciftci, N., Aykiz, E. F., Yasa, S., Karakiraz, E., Ulker, Y., Demirhan, Y. E., Celik, S. Y., Arpacı, I., Gunduz, F., Temel, D., Dincturk, C., Sefer, B. E., Bagdemir, E., Erdem, E., Sarimehmetoglu, E., ... Cetin, N. (2022). Assessment the effect of diabetes education on self-care behaviors and glycemic control in the Turkey Nursing Diabetes Education Evaluating Project (TURNUDEP): A multi-center study. *BMC Nursing*, 21(1), 215. [\[CrossRef\]](#)
- Chow, Y. Y., Verdonschot, M., McEvoy, C. T., & Peeters, G. (2022). Associations between depression and cognition, mild cognitive impairment and dementia in persons with diabetes mellitus: A systematic review and meta-analysis. *Diabetes Research and Clinical Practice*, 185, 109227. [\[CrossRef\]](#)
- DeCola, P., Benton, D., Peterson, C., & Matebeni, D. (2012). Nurses’ potential to lead in non-communicable disease global crisis. *International Nursing Review*, 59(3), 321 – 330. [\[CrossRef\]](#)

- Erdoğan, S., & Özcan, Ş. (2021). *Diyabet Hemşireliği (Diabetes nursing)*. Nobel Tıp Kitabevi.
- Erkol, H., Gökdoğan, M. R., Erkol, Z., & Boz, B. (2007). Aggression and violence towards health care providers – a problem in Turkey? *Journal of Forensic and Legal Medicine*, *14*(7), 423 – 428. [CrossRef]
- R. H., & Nilsson, P. M. (2009). Smoking and diabetes—The double health hazard! *Primary Care Diabetes*, *3*(4), 205 – 209. [CrossRef]
- Firat, M., Demir Gökmen, B. D., & Karakurt, P. (2022). An investigation of smoking habits and mental well-being in healthcare personnel during COVID-19. *Perspectives in Psychiatric Care*, *58*(1), 108 – 113. [CrossRef]
- Grigsby, A. B., Anderson, R. J., Freedland, K. E., Clouse, R. E., & Lustman, P. J. (2002). Prevalence of anxiety in adults with diabetes: A systematic review. *Journal of Psychosomatic Research*, *53*(6), 1053 – 1060. [CrossRef]
- Harding, K. A., Pushpanathan, M. E., Whitworth, S. R., Nanthakumar, S., Bucks, R. S., & Skinner, T. C. (2019). Depression prevalence in Type 2 diabetes is not related to diabetes – depression symptom overlap but is related to symptom dimensions within patient self-report measures: A meta-analysis. *Diabetic Medicine*, *36*(12), 1600 – 1611. [CrossRef]
- Huang, I., Lim, M. A., & Pranata, R. (2020). Diabetes mellitus is associated with increased mortality and severity of disease in COVID-19 pneumonia – a systematic review, meta-analysis, and meta-regression. *Diabetes and Metabolic Syndrome*, *14*(4), 395 – 403. [CrossRef]
- IDF Diabetes Atlas* (10th ed) (2021). [CrossRef]
- Lotrean, L. M. (2017). Smoking cessation in patients with diabetes. In P. Behrakis, C. I. Vardavas & S. E. Papadakis (Eds.), *TOB-G: Tobacco cessation guidelines for high risk populations* (149 – 191). Tobacco Cessation for High risk Groups (TOB.g).
- Maddatu, J., Anderson-Baucum, E., & Evans-Molina, C. (2017). Smoking and the risk of type 2 diabetes. *Translational Research: The Journal of Laboratory and Clinical Medicine*, *184*, 101 – 107. [CrossRef]
- Mini, G. K., Nichter, M., & Thankappan, K. R. (2014). Does increased knowledge of risk and complication of smoking on diabetes affect quit rate? Findings from a randomized controlled trial in Kerala, India. *Tobacco Use Insights*, *7*, 27 – 30. [CrossRef]
- Nelson, K. M., Boyko, E. J., & Koepsell, T. (2010). All-cause mortality risk among a national sample of individuals with diabetes. *Diabetes Care*, *33*(11), 2360 – 2364. [CrossRef]
- Nichter, M., Çarkoğlu, A., Nichter, M., Özcan, Ş., & Uysal, M. A. (2018). Engaging nurses in smoking cessation: Challenges and opportunities in Turkey. *Health Policy*, *122*(2), 192 – 197. [CrossRef]
- Nichter, M., Nichter, M., Padmawati, R. S., & Thresia, C. U. (2009). *Anthropological contributions to the development of culturally appropriate tobacco cessation programs: A global health priority. Anthropology and public health: Bridging the differences in culture and society* (2nd ed, pp. 298 – 331). Oxford University Press.
- Padmawati, R. S., Ng, N., Prabandari, Y. S., & Nichter, M. (2009). Smoking among diabetes patients in Yogyakarta, Indonesia: Cessation efforts are urgently needed. *Tropical Medicine and International Health*, *14*(4), 412 – 419. [CrossRef]
- Petersen, A. B., Meyer, B., Sachs, B. L., Bialous, S. A., & Cataldo, J. K. (2017). Preparing nurses to intervene in the tobacco epidemic: Developing a model for faculty development and curriculum redesign. *Nurse Education in Practice*, *25*, 29 – 35. [CrossRef]
- Pettigrew, S., Jun, M., Roberts, I., Nallaiah, K., Bullen, C., & Rodgers, A. (2021). The potential effectiveness of COVID-related smoking cessation messages in three countries. *Nicotine and Tobacco Research*, *23*(7), 1254 – 1258. [CrossRef]
- Prabandari, Y. S., Nichter, M., Nichter, M., Padmawati, R. S., & Muramoto, M. (2015). Laying the groundwork for tobacco cessation education in medical colleges in Indonesia. *Education for Health*, *28*(3), 169 – 175. [CrossRef]
- Rice, V. H., & Stead, L. F. (2008). Nursing interventions for smoking cessation. *Cochrane Database of Systematic Reviews*, Issue 1.
- Rotella, F., & Mannucci, E. (2013). Depression as a risk factor for diabetes: A meta-analysis of longitudinal studies. *Journal of Clinical Psychiatry*, *74*(1), 31 – 37. [CrossRef]
- Sağlam, Z. A., Saler, T., & Köse, Ş. (2022). Does smoking speed up switching to insulin therapy in Type 2 diabetes patients? *Pakistan Journal of Medical and Health Sciences* *V16*(1), 465 – 470.
- Sarna, L., Bialous, S. A., Rice, V. H., & Wewers, M. E. (2009). Promoting tobacco dependence treatment in nursing education. *Drug and Alcohol Review*, *28*(5), 507 – 516. [CrossRef]
- Satman, I., Omer, B., Tutuncu, Y., Kalaca, S., Gedik, S., Dincceg, N., Karsidag, K., Genc, S., Telci, A., Canbaz, B., Turker, F., Yilmaz, T., Cakir, B., Tuomilehto, J., & TURDEP-II Study Group (2013). Twelve-year trends in the prevalence and risk factors of diabetes and prediabetes in Turkish adults. *European Journal of Epidemiology*, *28*(2), 169 – 180. [CrossRef]
- Simons, D., Perski, O., & Brown, J. (2020). Covid-19: The role of smoking cessation during respiratory virus epidemics. *BMJ Opinion*. Available at: <https://blogs.bmj.com/bmj/2020/03/20/covid-19-the-role-of-smoking-cessation-during-respiratory-virus-epidemics/> (accessed Dec 27, 2023).
- Singh, A. K., & Khunti, K. (2022). COVID-19 and diabetes. *Annual Review of Medicine*, *73*, 129 – 147. [CrossRef]
- Tetik, B. K., Tekinemre, I. G., & Taş, S. (2021). The effect of the COVID-19 pandemic on smoking cessation success. *Journal of Community Health*, *46*(3), 471 – 475. [CrossRef]
- Thankappan, K. R., Mini, G. K., Daivadanam, M., Vijayakumar, G., Sarma, P. S., & Nichter, M. (2013). Smoking cessation among diabetes patients: Results of a pilot randomized controlled trial in Kerala, India. *BMC Public Health*, *13*(1), 47. [CrossRef]
- Thankappan, K. R., Mini, G. K., Hariharan, M., Vijayakumar, G., Sarma, P. S., & Nichter, M. (2014). Smoking cessation among diabetic patients in Kerala, India: 1-year follow-up results from a pilot randomized controlled trial. *Diabetes Care*, *37*(12), e256 – e257. [CrossRef]
- Umnuaypornlert, A., Kanchanasurakit, S., Lucero-Priso, D. E. I., & Saokaew, S. (2021). Smoking and risk of negative outcomes among COVID-19 patients: A systematic review and meta-analysis. *Tobacco Induced Diseases*, *19*, 09. [CrossRef]
- West, R., McNeill, A., & Raw, M. (2000). Smoking cessation guidelines for health professionals: An update. *Thorax*, *55*(12), 987 – 999. [CrossRef]
- World Health Organization (2016). *Global Adult Tobacco Survey Fact Sheet Turkey*. <https://nccd.cdc.gov>
- World Health Organization Diabetes (2018). *Factsheet: Diabetes*. <http://www.who.int/news-room/fact-sheets/detail/diabetes>
- World Health Organization (2019). *WHO report on the global tobacco epidemic, country profile: Turkey*. [http://www.who.int/tobacco/surveillance/policy/country\\_profile/tur.pdf](http://www.who.int/tobacco/surveillance/policy/country_profile/tur.pdf)
- Yamini, T. R., Nichter, M., Nichter, M., Sairu, P., Aswathy, S., Leelamoni, K., Unnikrishnan, B., P. P. M., Thapar, R., Basha, S. R., Jayasree, A. K., Mayamol, T. R., Muramoto, M., Mini, G. K., & Thankappan, K. R., P. P. M., Thapar, R., Basha, S. R., Jayasree, A. K., Mayamol, T. R., Muramoto, M., Mini, G. K., & Thankappan, K. R. (2015). Developing a fully integrated tobacco curriculum in medical colleges in India. *BMC Medical Education*, *15*, 90. [CrossRef]



## Genişletilmiş Özet

### Sigarayı bırakmada diyabet hemşirelerinin önemli rolü: Türkiye’den bir örnek çalışma

Diyabet, sigara kullanımı ile daha da ciddileşen yüksek öncelikli bir küresel sağlık sorunudur. Türkiye, Avrupa’da diyabet prevalansının en yüksek olduğu ülkedir (%14,5) (IDF, 2021). Türkiye aynı zamanda Avrupa’daki en yüksek sigara içme oranlarından birine sahiptir; erkeklerin %44’ü ve kadınların %20’sinin düzenli sigara kullandığı bildirilmiştir (WHO, 2019). Sigara içenlerin içmeyenlere kıyasla tip 2 diyabet geliştirme riski %30-40 oranında artarken, tütün kullanımı diyabet hastalarının koroner kalp hastalığı, miyokard enfarktüsü, felç, periferik arter hastalığı ve diyabetik nöropati dahil olmak üzere diyabet komplikasyonları geliştirme risklerini de önemli ölçüde artırır (Fagard ve Nilsson, 2019; Maddatu ve diğerleri, 2017; Aggarwal ve diğerleri, 2019; Lotrean, 2017). Diyabet hemşireleri, diyabet yönetimi için gerekli yaşam tarzı değişiklikleri hakkındaki rutin konuşmalarının bir parçası olarak hastalarını sigarayı bırakmaya teşvik etmede öncülük etmek için iyi bir konumdadırlar.

Bu yazıda detaylandırılan projenin hedefi, rutin klinik uygulamalarının bir parçası olarak hastalığa özgü tütün komplikasyonları bilgisine hakim, sigara bırakma süreçlerini hastaları ile konuşup onlara destek olabilecek bir diyabet hemşiresi kadrosu oluşturmaktır. Bu bağlamda yazının amaçları şunlardır: (1) diyabet hemşirelerinin diyabetli hastalara rutin uygulamanın bir parçası olarak sigarayı bırakmaları için ne ölçüde danışmanlık yaptıklarını değerlendirmek; (2) diyabet hemşireleri için bir bırakma eğitim programının geliştirilmesini ve uygulanmasını tanımlamak; ve (3) hemşire geri bildirimine dayalı eğitimden sonra sigara bırakma desteği uygulanmasındaki zorlukları tartışmak.

Bu süreçte ilk olarak diyabet hemşireliği müfredatını taradık. Müfredatta tütün kullanımı ve diyabet ilişkisi konusunda var olan alt yapıyı değerlendirmeyi amaçladık. Hemşirelik müfredatının gözden geçirilmesi, lisans ve yüksek lisans düzeyindeki hemşirelik öğrencilerinin, kanser ve KOAH ile ilişki dışında tütünün hastalığa özgü zararları konusunda çok az direkt bilgi içerdiğini ortaya koydu. Örneğin diyabetle ilgili olarak, müfredatta tütün kullanımının insülin emilimini engellediği veya sigara içen kişinin inme ve kalp krizinin yanı sıra körlük ve iktidarsızlık için var olan risklerinin de önemli oranda yükseldiği gibi bilgileri içermediği görüldü. İstanbul’daki üç diyabet kliniğinde yapılan gözlemler, diyabetli hastalar için sigaranın zararlı etkilerini açıklamaya yardımcı olacak hiçbir eğitim materyalinin hemşirelere sunulmadığını ortaya koydu. Sonuç olarak, çalışma grubu diyabet kliniklerinde kullanılmak üzere broşürler ve posterler geliştirdi ve ön test etti. Ek olarak, diyabetli bir hasta için sigara içmenin potansiyel komplikasyonlarını gösteren diyabet hemşiresi için bir masa görseli (flipchart) oluşturuldu. Sigara içmeyen ancak evlerinde tütün dumanına maruz kalan hastalar için de pasif içiciliğin zararları konusunda farkındalık yaratmak için bir poster tasarlandı. Tüm bu ve benzeri materyaller proje web sitesinde kullanıma sunuldu.

Projenin hemşire eğitimi içeriğini geliştirme öncesinde, çalışılacak hemşire gruplarının sigara bırakma konusunu hastaları ile ne sıklık ve detayda ele aldıklarını anlayabilmek amacı ile iki farklı hastanede çalışan hemşirelerle kısa anket çalışmaları yapıldı. Bu anketlerin sonuçları sigara kullanımının hemşireler arasında genel kullanım oranlarının üstünde yaygınlıkta olduğunu (%35 ve %40) gösterdi. Bunun yanı sıra, iki grupta da hemşirelerin yarısından fazlası (%51’i ve %55’i) hastalarının sigara içme durumunu “her zaman” sorduklarını ancak, hastalarına bırakma sürecinde yardımcı olacak bir eğitim almamış olduklarını bildirdilerdir. Yani çoğu zaman hemşirelerin sigara bırakma konusundaki müdahalesi hastanın sigara içip içmediğini bir forma işlemenin ötesine geçmemektedir.

Bu bilgiler ışığında hemşirelere gerekli bilgi ve görüşme becerilerini verebilmek amacı ile iki günlük bir eğitim geliştirildi ve sekiz büyük devlet hastanesinden on diyabet hemşiresinin katılımı ile ilk eğitim gerçekleştirildi. Eğitimin ilk gününde tütün ve sigara kullanımının diyabetli hayat üzerindeki olumsuz etkileri güncel araştırmalar ışında paylaşılırken, ikinci günde diyabetle yaşamda tütünsüzlüğün önemini hasta ile rutin iletişim noktalarında nasıl ele alınabileceği ve bu iletişim sürecinin 5A ve 5R müdahale modelleri ile nasıl şekillendirileceği hemşirelerden gelen örnekler üzerinden ele alındı. Eğitimde bırakmaya bir süreç olarak yaklaşılmasına vurgu yapıldı. Beceri temelli öğrenmeyi kolaylaştırmak için rol oynama egzersizleri geliştirildi ve uygulandı. Bu yazıda anlatılan hemşirelerin eğitimi, diyabet hemşiresi eğitimcilerini hastalarına daha etkili bir şekilde danışmanlık yapmaya hazırlamaya yönelik ilk adımdı. Eğitim, diğer ülkelerdeki QTI projelerinin geçmiş deneyimlerini temel alan, biçimlendirici araştırmalara dayanıyordu ve gerçek hasta etkileşimleri sırasında hemşireler tarafından öğrenilen dersler üzerine inşa edilecek şekilde tasarlandı. Bu çalışmada eğitim alan hemşirelerin eğitim sonrası uygulama deneyimleri ve karşılaştıkları zorluklar gelecekteki eğitim oturumlarına dahil edilmesi hedeflendi. Eğitim kapsamında, diyabetli hastalarla 5A ve 5R müdahale modellerinin nasıl uygulanacağını modelleyen bir eğitim videosu da hazırlandı.

Eğitime katılan diyabet hemşireleri ile eğitimden üç ay sonra yapılan değerlendirme toplantılarında sigara bırakmayı destekleme sürecini rutin pratiklerine ne oranda dahil edebildikleri sorgulandı. Bu görüşmelerin sonuçları sigarayı bırakma sürecinin rutin pratiklerine dahil edilmesinin dört zorluğu/sınırlaması olduğunu gösterdi. Hemşireler çalışmakta en zorlandıkları grubun görece düşük seviye sigara kullanan diyabet hastaları olduklarını bildirdiler. Bu hastalara düşük düzeylerde dahi sigara kullanımının diyabet kontrolü açısından sorun ve risk oluşturduğu bilgisinin hastalar tarafından kabul görmediği sık rastlanan bir direnç noktası olarak belirtildi. “Güvenli sigara kullanım oranı” diye bir olgunun olmadığı konusunda hastaların dışında diğer sağlık çalışanlarının da bilgilendirilmesinin önemi vurgulandı. Bırakma danışmanlığı yapmak üzere eğitilmiş hemşireler tarafından bildirilen ikinci bir zorluk, yüksek hasta yükü ve her hastayla diyabet yönetimini konuşma ihtiyacı göz önüne alındığında, bırakma müdahalelerini öğretildiği şekilde yürütmek için yeterli zaman bulunamadığıydı. Sigara kullanımının diyabet müdahale protokollerinde daha öncelikli ve detaylı yer edinmesi için hasta diyabet okulu müfredatı ve diyabet hemşiresi eğitim müfredatının bu konuda zenginleştirilmesi gereği tartışıldı.

Belirtilen üçüncü bir zorluk, sigara içmeyen birçok diyabetli hastanın evlerinde ikinci el dumana maruz kalmasıydı. Bu hastalar evde sigara içilmemesi kuralını uygulatabilmekte sorun yaşıyorlardı. İkinci el sigara dumanına maruz kalmanın sorunları konusunda daha yaygın bilinçlendirme çalışmaları gerektiği tespit edildi. Bildirilen dördüncü bir zorluk, diyabet hemşirelerinin depresyon sorunu yaşayan hastalara yardım etmek için yetersiz alt yapıya sahip olmalarıydı. Bu hastaların büyük çoğunluğunun sigarayı depresyonları ile başa çıkma aracı olarak kullandıklarını fark eden hemşirelerin depresyon teşhis ve müdahalesi için destek alabileceği psikiyatri konsültasyon ve liyezon hizmetlerinin azlığı önemli bir sorun olarak bildirildi. Eğitim detayları ve sistemik zorlukların üstesinden gelme olanakları makalede sunulmaktadır.

COVID-19 sonrası çağımızda, sigara kullanan diyabetlilerin Covid-19 komplikasyonları yaşama risklerinin önemli oranda arttığı tespit edilmişken (Huang ve ark. 2020; Singh ve Khunti, 2021; Umnuaypornlert ve diğerleri, 2021) diyabet öyküsü olan kişilerin diyabet kliniklerinde sigara bırakma desteği almaları özellikle acil bir ihtiyaç haline gelmiştir. Bununla birlikte, Türkiye’de artmakta olan sigara içme oranları ise endişeleri arttırmaktadır. Tüm bu gelişmeler, burada örneği verilen kronik hastalık türüne uygun bilgilendirilmiş ve o hastalıkla başatme ihtiyaçları çerçevesinde şekillenmiş sigara bırakma müdahale programlarına ihtiyacın artmakta olduğuna işaret etmektedir.