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## “Everyone Needs a Breath of Fresh Air”: Workplace Impact on Nurses’ Smoking Behaviors

### KEY WORDS

Eastern Europe  
Nurses  
Smoking cessation  
Workplace policy

**Background:** Europe continues to have among the highest worldwide prevalence of adult smoking (28%) and the highest among females (19%). Nurses’ rates of smoking in the region are comparable or higher than the general female population. Nurses who smoke are less likely to intervene with patients who smoke; therefore, supporting nurses’ efforts to quit is critical to promoting nurses’ well-being and strengthening the profession’s impact on prevention of tobacco-induced diseases. **Objective:** The aim of this study was to explore nurses’ perceptions of hospital workplace factors that influence nurses’ smoking and quitting behaviors in Central and Eastern Europe. **Methods:** Each country had a project director involved in the recruitment of participants and the translation of instruments. Using a moderator guide, focus groups (N = 9) about smoking and quitting were conducted in 5 countries (Czech Republic, Hungary, Romania, Slovakia, Slovenia) among 82 nurses who self-reported as current or former smokers. Recorded transcripts were translated and analyzed using content analysis methods. **Results:** The majority of nurses were female (94%) and currently smoking (65%). Four major themes were identified that describe workplace factors influencing nurses’ smoking behaviors and efforts to quit: (1) taking breaks, (2) effect of smoking on patient interactions, (3) perceived collegial support for quitting, and (4) impact of workplace policies. **Conclusions:** Workplace factors influence nurses smoking and quitting behaviors. **Implications for Practice:** Changes in healthcare systems and policies are needed to support nurses’ quit efforts. Additional education is needed to ensure that nurses understand issues related to smoking and interactions with patients.

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Nurses represent the largest group of healthcare providers in the world and as such play a vital role in strengthening health systems globally.<sup>1,2</sup> Nurses' contribution in addressing the growing epidemic of noncommunicable diseases, for which tobacco use remains a leading risk factor, has been underutilized.<sup>3</sup> Nurse-led smoking cessation interventions are effective in helping patients quit smoking, including with patients already diagnosed with cancer.<sup>4</sup> Quitting smoking improves prognosis and treatment outcomes and decreases risks of secondary cancer. Therefore, nurses have a critical role to play in enhancing cancer care outcomes by championing tobacco dependence treatment.<sup>2,5,6</sup>

Surveys of nurses from a wide range of settings and countries indicate they are motivated to both address behavioral risk factors, including smoking, with their patients and perceive smoking cessation counseling to be a part of their role.<sup>3,7</sup> However, a recent meta-analysis showed that compared with their nonsmoking colleagues, nurses who smoke, similar to other health professionals, are less likely to intervene and address tobacco dependence with their patients.<sup>8</sup> Therefore, in order to enhance the impact of the nursing profession and nursing professionals' ability to improve health outcomes through the provision of tobacco dependence treatment, it is imperative that nurses who smoke are supported in their efforts to quit and stay quit. The workplace is an effective setting for people to stop smoking,<sup>9</sup> and professional nursing organizations, such as the International Society of Nurses in Cancer Care, advocate for nursing leadership to promote smoke-free workplaces and support nurses' smoking cessation attempts.<sup>2</sup> However, in a United States-based study conducted in 2004 by Bialous et al<sup>10</sup> nurses described a variety of specific workplace-related barriers to quitting, including difficulties coping with withdrawal symptoms at the workplace, and concerns over the impact that quitting would have on their relationships with coworkers. Additionally, nurses have expressed fear of losing their work breaks if they quit smoking. A survey conducted by Sarna et al<sup>11</sup> has since substantiated these findings, which found that nurses who did not smoke were nearly twice as likely to miss work breaks when compared with nurses who reported current smoking. These United States data were used to develop the Tobacco Free Nurses initiative, which focused on enhancing nurses' efforts in tobacco control by supporting nurses' quit efforts along with increasing education, leadership, and research.<sup>12</sup> Since launching this national program, there has been a significant decline in smoking rates among United States registered nurses, from 11.14% in 2003 to 7.09% in 2010–2011, and the program is believed to have been a contributing factor.<sup>13,14</sup> At the same time, very little is known about nurses' perceptions and experiences with smoking and quitting in other countries, including in the European region.

Europe, and Eastern Europe in particular, currently has among the highest prevalence of adult smoking (28% overall) and the highest rates of female smoking globally (19%).<sup>15–17</sup> While nationally representative data are limited, in subnational evaluations nurses' rates of smoking have tended to mirror the female population or be slightly higher.<sup>18</sup> In the Global Health Professions Student Surveys conducted from 2005 to 2009 across 39 countries, not only did female nursing students have the highest rates of smoking (32.7%) (compared with female medical, dental, and pharmacy students), the overall highest rates of tobacco use among

nursing students occurred in the European region where 32% of nursing students in Czech Republic and Slovakia reported current smoking.<sup>7</sup>

To date, there has been limited research focused on tobacco dependence treatment among healthcare professionals in Central and Eastern Europe. A recent evaluation of the impact of a train-the-trainer educational program for nurses in Czech Republic underscored the need to address nurses' smoking as it represents a significant barrier to implementation of smoking cessation interventions with patients who smoke.<sup>19</sup> The European Health 2020 goals include a strong commitment to reducing tobacco use in the region.<sup>20,21</sup> In the strategic framework aimed at strengthening the contribution of the nursing and midwifery workforce toward achieving these regional health goals, the promotion of positive work environments is identified as a key priority action area.<sup>22</sup> As defined by the International Council of Nurses (2008),<sup>23</sup> positive work environments are workplace settings that maximize the health, safety, and well-being of health workers. Additionally, when the health, well-being, and motivation of the nursing workforce are supported, patient care experiences and health outcomes are enhanced. Healthy (and tobacco-free) health professionals are in turn positive role models in their communities, whose health, in turn, adds to and aids the health of the overall population.<sup>22</sup>

This study aimed to explore nurses' perceptions of workplace factors in the Central and Eastern European region that influence nurses' smoking and quitting behaviors, in order to inform workplace policies and develop tailored smoking cessation programs in the region. This study was part of an extensive project aimed at exploring nurses' perceptions of smoking and quitting and attitudes toward providing smoking cessation interventions to patients. While the findings associated with nurses' personal barriers to and facilitators of quitting smoking have been described elsewhere,<sup>24</sup> this article focuses on workplace-related factors and characteristics that impact nurses' smoking behaviors. Efforts are made to compare the results of this exploration with previously published research<sup>10,25</sup> among United States nurses.

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## ■ Methods

### Study Design

A qualitative descriptive study design utilizing focus group methodology was conducted across 5 Central and Eastern European countries, among nurses who self-reported as a current smoker or former smoker. Focus groups were selected as the most appropriate methodology, not only because they allow for exploration of shared experiences of subgroups of people, but also because it would allow for comparison of nurses' experiences across varied contextual settings (Eastern and Central Europe and United States).<sup>26,27</sup> Additionally, within the limited time frame of the study, we thought that focus groups would allow us the maximum number of viewpoints. Social Cognitive Theory, which has been utilized widely within smoking cessation research to explain how individuals initiate and maintain smoking behaviors, served as the theoretical foundation in our previous study, which we have in turn used to model this study.<sup>28</sup>

This study was a companion to the Eastern Europe Nurses' Centre of Excellence for Tobacco Control (EE-CoE) project, which was formed to expand nursing expertise in the area of smoking cessation and tobacco control. The EE-CoE consists of an Advisory Board of tobacco control experts and designated Nurse Champions<sup>29</sup> in each country. The Advisory Board and Nurse Champions, who all had expertise in tobacco control (including smoking cessation, policy, and advocacy) and experience with the organizational culture of nursing in their country, were responsible for overseeing the focus groups' processes in each site.

## Participants, Recruitment, and Ethical Approval

Nurse Champions in each country coordinated the translation of materials and recruiting nurses for the focus groups. A convenience sample was recruited from among nurses working in institutions, primarily hospitals, using an institutional review board–approved e-mail, web-based announcements, and printed flyers. Inclusion criteria included being a practicing nurse who provides direct patient care and self-reported as being a current or former smoker. (Note: The term “current and former smoker” is used, not as a value judgment, but based on how the nurses themselves self-identified.) Interest in quitting was not a requirement for participation. Because of concerns regarding the perceived stigma associated with smoking among nurses, nurses in administrative positions who might have supervisory authority over participating staff nurses were excluded from participation. Views on quitting smoking held by nurses who have never smoked were not the topic of this study, and thus, nurses who had never smoked were excluded. Nurses who responded to the invitation flyers and e-mails and who were eligible to participate were provided with details about the focus group meeting. Attempts were made to conduct separate meetings for nurses who were former and current smokers in each country. However, in Romania, the focus group discussions included both current and former smokers, and in Hungary, only 1 focus group was conducted among current smokers.

Between March 27, 2015, to February 12, 2016, 82 nurses participated in 9 focus groups, recruited from hospital-based work settings from across the 5 different Central and Eastern European countries. Each of the workplaces that participated in the recruiting of participants was affiliated with the EE-COE, located in urban settings, and reported that 12-hour shifts were normative. At the time of the study, according to the Nurse Champions in each country, none of the institutions where nurses were recruited had implemented 100% smoke-free policies or implemented smoking cessation training for the nursing staff.

Ethical approval was obtained from both the University of California, Los Angeles and University of California, San Francisco institutional review boards before initiating any research procedures, including all necessary ethics approvals from all participating sites in each of the 5 countries: Centre for Tobacco-Dependent, Charles University and General University Hospital in Prague (Czech Republic), National Korányi Institute for Pulmonology (Hungary), Romanian Nursing Association (Romania), National Institute of Cardiovascular Diseases (Slovakia), and Institute of Oncology Ljubljana (Slovenia).

## Procedures

Prior to the start of the study, a face-to-face meeting was conducted with the EE-CoE Advisory Board and the designated Nurse Champions to ensure that there was a common understanding of project goals, including rationale and method for conducting the focus groups. During the meeting, procedures were discussed, and each country team had the opportunity to express what changes were necessary to remain culturally adequate. All procedures were described in detail in a Manual of Procedures mutually agreed upon by the entire team.

A focus group moderator guide, utilized in prior related research conducted among United States nurses about smoking and quitting,<sup>10,30</sup> was adapted for this study by the researchers and reviewed by the Nurse Champions from each country and the Advisory Board. Where appropriate, references were made to local resources, such as quitlines. The Nurse Champions, who were native speakers, translated all written materials (moderator's guide, consent form, demographic survey, recruitment materials) from English into each of the 5 respective languages to ensure that the questions were understood within the cultural context of each of the countries.

All Nurse Champions were provided training on conducting focus groups and utilization of the moderator guide, including strategies for engaging all participants in the discussion. Moderators were encouraged to modify the icebreaker question as deemed appropriate (eg, the Slovenian moderator began by asking “Where do you work, and what do you do?” whereas other moderators began by asking participants to describe their experiences with smoking and/or quitting) to the local context; however, key concepts to be discussed were consistent across the 5 research sites. In a few cases, the Nurse Champion opted to train an additional moderator to conduct the focus groups.

The focus group discussions were held at a participating institution in a meeting room where privacy was ensured. Before the discussion, each participant was asked to read and sign an informed consent and given a copy. The consent included an agreement for the discussion to be audio recorded and ensured strict confidentiality. Additionally, all participants were asked to complete a questionnaire asking about demographics, professional characteristics, and smoking history. The focus group moderator in each country restated the purpose of the group and the ground rules for the group (ie, there were no wrong or right answers, the importance of hearing everyone's opinions, one person talks at a time, and what is shared in the group stays in the room). The purpose of the focus group was introduced as follows: “We are talking to nurses who are currently smoking or who have smoked in the past in [city or cities as applicable] about their thoughts and opinions about nurses and smoking cessation.” Participants were specifically encouraged to share their “ideas, comments, advice, and suggestions” as to “...strategies you think might be helpful... for nurses in the workplace.” At the end of the discussion, the moderator provided a summary of key points for validation by the participants. The moderator wrote notes about the experiences in each group to better inform the interpretation of the transcripts. Focus groups ranged in size

from 8 to 10 nurses, and each lasted between 1 and 2 hours. All discussions were recorded using a digital audio recorder, and nurses received a monetary incentive for participation (between US \$25 and \$50, as deemed appropriate for each site by the Nurse Champion).

## Data Collection Tools

The questionnaire items were drawn from a previously validated questionnaire “Nurses Helping Smokers Quit” (reliability  $\alpha = .92$ ).<sup>31</sup> If participants responded yes to the question, “Do you smoke now?” they were categorized as a current smoker (regardless of whether they smoked daily or occasionally). Otherwise, they were classified as a former smoker. Items for current smokers included interest in quitting (“Are you currently trying to quit?”). The test-retest reliability of a translated version was deemed acceptable (93% of  $\kappa$  values  $>0.7$ ).<sup>32</sup>

Key questions from the moderator guide about smoking and quitting used to guide the focus group discussion are presented in Table 1.

## Data Analysis

Descriptive analyses were conducted to profile study participants’ demographics, professional characteristics, and smoking histories, using means and proportions. Native speakers of each respective language transcribed verbatim digital recordings of the focus groups; however, transcriptionists did not differentiate between speakers to ensure maximum confidentiality. The Nurse Champions and in some cases members of the Advisory Board from each of the countries proofread all transcriptions for spelling and completeness. Additionally, 2 independent listeners reviewed the transcripts for accuracy by comparing a randomly selected section of each digital recording equaling at least 20% of the recorded time against the transcription, as described previously.<sup>25</sup> Final transcripts were translated into English after which a sample representing 20% of each transcript was back-translated into the respective native language and checked against the original transcript for accuracy and assurance that the translation captured the cultural context versus a strictly literal translation. For transferability of obtained findings, detailed and accurate information

 **Table 1 • Topics and Key Questions in Focus Group Moderator Guide**

Topics	Key Questions and Probes
Rates of smoking among nurses	How do you think the rate of smoking among nurses compares to that of other women? To other healthcare professionals? Why do you think that is?
Impact of smoking on nursing profession	Do you think smoking among nurses should be a concern for the nursing profession? Why or why not?
Smoking among student nurses	What, if anything, should be done about smoking among nursing students?
Nurses as role models	Do you think it is important for nurses to be role models in health promotion? Do you think that smoking is different from other things such as alcohol use or eating habits? If so, how does it differ?
Impact of smoking behaviors on work environment	Do you think your smoking affects [affected] your relationships with your nursing colleagues at work? Nonnursing colleagues? Administrators? Patients? How do you feel about this?
Smoking experiences	Think about the stress in your work environment. What effect do you think that stress in the work environment has on nurses who smoke or who are trying to quit?
Perceived barriers to and facilitators of quitting (personal and professional)	If you are a current smoker, what were the significant factors that are preventing you from quitting? Think of personal and social factors (eg, friends and family) that contribute or have contributed to your ability or inability to quit. Which of these factors were most important? For those of you who have quit or tried to quit, think about your own experiences. How easy or difficult was it? What were your reasons for wanting to quit? Think about professional and institutional factors (eg, nursing colleagues and work setting) that have affected your ability or inability to quit smoking. Which of these factors is/was most important? Have you experienced or did you ever experience any feelings of guilt about smoking or pressures to quit? From family or friends? From nursing colleagues? What do you expect people whom you know well and/or work with to do or say when they notice that you are trying to quit or that you have quit smoking? If you are a former smoker, what prompted you to quit? Did your nursing colleagues support or hinder your efforts?
Impact of smoke-free campuses and workplaces	Would having the grounds of the hospital go smoke-free help nurses who smoke quit? Why or why not?
Awareness and access to resources	Did you use any resources for smoking cessation (written material with information, group or individual counseling, Center for Tobacco Dependence, telephone quitline, NRT [nicotine replacement therapy] or other drugs, etc)? Were these available and accessible to you? Which of these did you find most acceptable? Most useful? Which were not useful? If a media campaign were developed to focus on helping nurses become smoke-free, what things do you think would be most important to include?

about each stage of the research was supplied. The data were described in detail and exemplified through direct and exemplar quotes. Deidentified English-translated transcripts were uploaded to Dedoose (version 7.0.23),<sup>33</sup> a web application research tool designed to assist with the management, analysis, and presentation of qualitative and mixed-methods research data. Specifically, this application was used to help organize the analysis and manage the translated focus group transcripts. Directed content analysis methods as described by Hsieh and Shannon<sup>30</sup> was used to identify, analyze, and report patterns across the data set, as well as organize and describe the data. Initially, 2 investigators (A.B.P. and M.R.-H.) began by reading 3 transcripts. Subsequently, using a systematic line-by-line review of the focus group transcripts, first-line codes that had been established based on a priori key concepts and topics from the questions in the moderator's focus group guide were assigned; these codes included perceptions of smoking within the nursing profession, the impact of smoking behaviors (workplace and personal), facilitators and barriers to quitting (personal and professional), and perceptions of smoke-free workplace policies. Any text that could not be categorized with the initial first-line codes was given a new code. The codes were then modified iteratively in research team meetings, which included tobacco control experts, where transcripts and codes were reviewed, definitions of codes clarified, and questions about coding and reliability were discussed. To assess the level of coding agreement, 2 investigators independently coded a subset of all of the transcripts (20% of the entire sample), and an interrater reliability score was computed (Cohen's  $k = 0.92$ ). The team used the report provided by Dedoose to evaluate the areas of consistency and discrepancies in coding and to guide subsequent modification of the codes and create a final codebook containing 10 codes and 20 subcodes (or second-line codes). Using the established codebook, 2 investigators then independently read the transcripts and the moderator notes as provided, line-by-line, and coded all of the 9 transcripts, after which they cross-checked findings to ensure consensus. In cases of dissent, the protocol called for discussion with a third investigator (S.B.). The coded excerpts were then reread, and codes grouped into broader, more encompassing categories, comparing them with one another and cross-checking with the original transcripts. Categories were then analyzed to identify major conceptual themes across groups.

## Validity and Reliability of the Study

Measures recommended by Lincoln and Guba<sup>34</sup> were taken into consideration throughout the data collection and analysis phases to achieve validity and reliability. For example, credibility was enhanced by providing rich description of the researchers' engagement with the data, ongoing discussions with Nurse Champions familiar with the setting, documenting all decisions in an audit trail, and preservation of interview transcripts, data analysis, process notes, and drafts of the final report. Reliability and dependability were supported by using the same theory-based semistructured moderator guide with each focus group and also through peer debriefing, which occurred through regular presentations to the entire research team to ensure coding agreement, discuss emerging themes, determine when data saturation

had been reached (ie, when no new ideas or perceptions were emerging), and agree on final themes and exemplar quotes. Confirmability was addressed by describing how interpretations were established and through the use of thick, rich quotes that personified the themes and subthemes. For transferability of obtained findings, detailed descriptions of participants, context, and findings are provided.

## Results

Eighty-two nurses participated in the 9 focus groups. Description of the participants' demographic and professional characteristics is presented in Table 2. The mean age was 43 years, and the majority reported current smoking (65.4%,  $n = 53$ ) and were female (94%), diploma-level prepared (64%), and highly experienced, with a mean of 20.5 practice years. Among the current smokers, 83% ( $n = 44$ ) reported smoking daily, and 32.1% ( $n = 17$ ) reported they were currently trying to quit (not displayed).

All 9 focus groups discussed how institutional and workplace factors influenced their smoking and quitting behaviors. The analysis generated 4 core themes on the topic of smoking and quitting within the hospital workplace: "Taking breaks," "Effect of smoking on patient interactions," "Perceived collegial support for quitting," and "Impact of workplace policies." We describe each of these themes and corresponding subthemes in Table 3 using exemplar quotations selected based on their representativeness of the overall themes as expressed by nurses across the 5 countries.

### Taking Breaks

There was consensus among current and former smokers that nurses' smoking behaviors are linked to the routines and culture of the workplace, with the most prominent matter being the relationship between work breaks and smoking. Work breaks were closely associated or even conflated with smoking breaks. The theme of taking breaks was composed of 4 subthemes, that is, perceiving nonsmokers as taking fewer breaks, facilitating communication and a sense of belonging, smoking as a sanctioned stress-coping strategy, and source of workplace conflict.

#### PERCEIVING NONSMOKERS AS TAKING FEWER BREAKS

For some, the ability to take work breaks had served as a direct motivation to start smoking and progress to regular smoking, and many reported that it contributed to relapse after successful quitting experiences. While some were adamant that they took steps to lessen the inequality (eg, responding to more patient call lights to make up for the time they had been away from the ward), there appeared to be a consensus concerning the existence of a "nonsmokers' disadvantage." Participants indicated that, unlike nurses who smoke, those who do not smoke are not perceived to have a "sanctioned" or "legitimate" reason for taking a break. In turn, nurses who did not smoke were more likely to take fewer breaks or not take them at all.

**Table 2 • Demographic Characteristics of Focus Group (N = 9) Nurse Participants (N = 82) From 5 Central and Eastern European Countries<sup>a</sup> by Smoking Status**

Variables	Nurse Participants					
	Total (N = 82) <sup>c</sup>		Current Smoker <sup>b</sup> (n = 53)		Former Smoker (n = 28)	
Age, mean ± SD, years	43.0 ± 9.4		42.0 ± 9.5		44.1 ± 9.3	
No. of years in nursing, mean ± SD	20.2 ± 10.3		19.8 ± 10.5		20.8 ± 9.9	
	n (%)		n (%)		n (%)	
Sex <sup>d</sup>						
Female	76	(93.8)	49	(92.5)	27	(96.4)
Male	4	(4.9)	3	(5.7)	1	(3.6)
Educational preparation						
Diploma	52	(64.2)	36	(67.9)	16	(57.1)
Associate degree	10	(12.3)	4	(7.5)	6	(21.4)
Bachelor's degree	6	(7.4)	5	(9.4)	1	(3.6)
Master's degree	13	(16)	8	(15.1)	5	(17.9)
Focus of clinical practice <sup>d</sup>						
Oncology	36	(44.4)	23	(43.4)	13	(46.4)
Medical/surgical	21	(25.9)	16	(30.2)	5	(17.9)
Psychiatric/mental health	12	(14.8)	9	(17.0)	3	(10.7)
Critical/intensive care	11	(13.6)	4	(7.5)	7	(25.0)

<sup>a</sup>Czech Republic (n = 17), Hungary (n = 10), Romania (n = 17), Slovakia (n = 20), and Slovenia (n = 17).

<sup>b</sup>Responded yes to "Do you smoke now?"

<sup>c</sup>One participant did not complete the demographic survey; calculations based on N of 81.

<sup>d</sup>Missing data for 1 participant.

## FACILITATING COMMUNICATION AND A SENSE OF BELONGING

There was consensus among nurses that taking smoking breaks together with colleagues facilitated communication and connectedness. Smoking breaks served as a venue for processing shared experiences or issues and for disseminating information. Nurses, from across the 5 countries, described the smoking breaks as fostering "solidarity" among coworkers who smoke.

## SMOKING AS A SANCTIONED STRESS-COPING STRATEGY

Smoking breaks were described as a sanctioned and effective way to deal with the stress of the workplace. Smoking was believed to have a calming effect, and the actual mechanics of smoking (ie, travel to designated smoking locations and required use of hands) permitted one to leave the ward to "...go out ...and get some fresh air." However, it was noted that the potential benefits attributed to smoking were inherently linked with the notion of being able to "get away" from the work setting for a few minutes.

## SOURCE OF WORKPLACE CONFLICT

Smoking breaks, especially the longer breaks taken by nurses who smoked, were viewed by many as a source of workplace conflict. Former smokers expressed frustration over the length of time smokers would be absent from the ward. Both current and former smokers reported experiencing tension and resentment around breaks. Nurses who had quit smoking while continuing to work on the same ward found it particularly challenging to address the issues of smoking breaks with their colleagues who continued to smoke.

Nurses described ways in which they had attempted to mitigate the conflict created by their smoking breaks. Examples of specific actions included judiciously organizing their work so that it aligned with their need to take a smoking break or making arrangements amongst themselves to cover one another's breaks. Both current and former nurses took issue with the perception held by some that nurses who smoke are "lazier or avoid work." A number expressed frustration with hospital managers' handling of issues surrounding work breaks.

## Effect of Smoking on Patient Interactions

The theme, effect of smoking on patient interactions, was composed of 2 subthemes, that is, perceived need to hide smoking from patients and feeling guilt and shame.

### PERCEIVED NEED TO HIDE SMOKING FROM PATIENTS

When asked to reflect on whether their smoking had an impact on patients and patient's family members, a minority of participants reported they were discreet and never smoked in front of patients; therefore, their smoking did not affect patients. However, it was more common for nurse to report having observed physiological (eg, tachycardia) and psychological (eg, agitation) status changes in patients when they detected the smell of cigarettes. These nurses, in turn, reported having expended considerable time and energy to keep their smoking hidden from patients.

### FEELING GUILT AND SHAME

Many nurses described poignant accounts of how they felt their smoking, most often triggered by patients' responses to the smell





**Table 3 • Thematic Exemplar Quotes From Focus Groups (N = 9) Conducted Among Nurses (N = 82) Who Are Current (CS)<sup>a</sup> or Former (FS) Smokers From 5 Central and Eastern European Countries**

**Theme: Taking Breaks**

***Perceiving nonsmokers as taking fewer breaks***

“But then I came to work... and I found out that my female colleagues who smoked could go and have a coffee with a cigarette... and they didn’t have to work while I had to run around the department. So I bought a packet of cigarettes when I went to one shift, and I started to smoke regularly.” (FG 3, CS)

***Facilitating communication and a sense of belonging***

“[When you smoke] you felt like being more part of the team...” (FG 2, FS)

***Smoking as a sanctioned stress-coping strategy***

“The nonsmokers, it was like, they had no excuse, so more or less all the nurses smoked, to be able to get off for a moment.” (FG 3, CS)

“[W]hen I didn’t smoke, I didn’t even take 5 minutes, you just worked, worked. But this way I take that time, I go out for 5 minutes, and return with a clear head and continue...” (FG 5, CS)

***Source of workplace conflict***

“I just want to say, yes this is the problem I complain about... I worked in a ward where female colleagues used to smoke, let’s say 5 per day, and it made up 1 hour. Yes, she leaves the ward, and she normally says nothing to warn you; she won’t be there for an hour and to ask you to replace her. You do it automatically... there is no reciprocity. I only have maybe half an hour for lunch. That’s why it complicates relationship between you. We had conflicts, hidden conflicts.” (FG 4, FS)

Participant 1: I just think if someone should keep an eye on this [issue of breaks] in the hospital... In my opinion, this is an issue for the superiors. If they allow it, what can we do? We can say ‘don’t go’,...[b]ut if the order doesn’t come from above, then what?

Participant 2: It would just cause disputes in the team, then the team gets worse, the relations.”

Participant 3: And what’s the worst is when the ward nurse goes there with them, supporting them in fact...” (FG 4, FS)

**Theme: Effect of smoking on patient interactions**

***Perceived need to hide smoking from patients***

“I rather had the feeling that I provoke the patients, those who smoke. Because I came back after having a cigarette, and I smelled of it, of course. And they, connected to all those tubing, went completely crazy, they had tachycardia... got mentally disturbed.” (FG 2, FS)

“I never smoked when I was with them [her children]; they didn’t know about it. Only later, [did I tell them]... So I showed them that I had a double life.” (FG3, CS)

***Feeling guilt and shame***

“But I remember... a patient said at night once, ‘Oh, nurse, you really smell of cigarettes’ and I felt awful then... was really embarrassed by that.” (FG 5, FS)

“I think that if you are an authority figure, and then someone sees you smoking, well, you fall to the same level. You can’t provide the care, well, not care, education.” (FG 5, CS)

“I didn’t give advice on quitting because I’m smoking myself, and I didn’t think I would be credible.” (FG 7, CS)

“I also felt remorse afterward... I was ashamed of myself because of it; that I preach something to the patient, and then I go and have a cigarette over there.” (FG 7, CS)

**Theme: Perceived collegial support for quitting**

***Quitting at work is a solo experience***

“My experience from my multiple attempts to quit is that I often have to face mockery from people around me, like ‘funny we’ll see how long it will last this time.’” (FG 7, CS)

“Colleagues did not support me to quit too much. I said that I made up my mind and they said, ‘OK’ and support me for 1 to 2 days. After that, they were going out to smoking break and [would] start to ask, ‘Are you coming?’ So, after 1 week, I started to smoke again.” (FG 8, CS)

“I can remember a colleague... who told me I wouldn’t be able to go through with it, which actually motivated me all the more, sort of. I really was set on quitting, you know, but then I told myself, ‘You will see that I mean it.’ So, it was like that...” (FG 2, FS)

“I stopped smoking during the 2 weeks [holiday]... I decided not to tell anyone, so that they didn’t feel sorry for me,” a poor girl that didn’t make it...’ And then it sort of got around, and then, people were like ‘this is great, you’ve made it,’ and that didn’t help me, actually. So I was a little bit in isolation again, I told myself I didn’t want [them] to know, I didn’t want to discuss it with anybody, I had a horrible craving for it. [I thought] if it’s like [this for] the drug addicts at the end of life, than I am lost.” (FG 2, FS)

***Potential for the workplace to play a supportive role***

“I cannot hold my working here responsible for my smoking, that’s not why I smoke.” (FG 7, CS)

“Think we need something encouraging quitting, not just fear of illness or a fine. We are not so bad; we need more support.” (FG 9, CS)

“It [smoking cessation program] should give the feeling that they...understand your problems and would work with you to solve them”; “[and rather than focusing primarily on the harms of smoking] ...it should focus on the benefits of quitting” and “...facilitate [our] willingness to quit.” (FG 1, Current smokers)

(continues)

**Table 3 • Thematic Exemplar Quotes From Focus Groups (N = 9) Conducted Among Nurses (N = 82) Who Are Current (CS)<sup>a</sup> or Former (FS) Smokers From 5 Central and Eastern European Countries, Continued**

**Theme: Impact of workplace policies**

**Supporting maintenance of smoking and quitting**

"I think that your environment is also very important. I quit for the first time because of pregnancy, but when I came back to work, I started smoking again. Back in those days, you could still smoke at work.... Then during the second pregnancy, 8 years later, I quit again, and when I got back, this smoking ban was in place, and we really stuck to it, and we didn't smoke...." (FG 6, FS)

"I must say that now it's a bit better... when they have to go out [to smoke], now everyone thinks twice before they get dressed." (FG 1, CS)

"You cannot smoke here; you cannot smoke there, over there, over there. I say to myself, just give up, stop smoking." (FG 5, CS)

**Unintended consequences**

"We respect the ban. But we have to hide more, right?" (FG 5, CS)

"But, if somebody looks down on you like that, then they hardly respect you, do they? [And then] it doesn't matter whether you smoke or not." (FG 2, CS)

"They [management] just wanted to shame us... [and] pillory us and they succeeded." (FG 1, CS)

"For god's sake, it's their [management] law, they made it, so it should apply to them as well, shouldn't it?" (FG 1, CS)

"There is one thing I don't agree with. I don't mind if they want to regulate smoking, or help us quit, but I think it cannot be done as drastically as we've seen. You cannot draw a line and say it's forbidden to smoke anywhere, not even in a designated area. If there was a campaign to lead or set you off on route to quitting, then it would be justified to restrict smoking during work hours." (FG 7, CS)

"Yes, even if someone has already decided to quit, a fair and open-minded atmosphere should be ensured for the campaign to work. And it should be a long-term program, not a one-time occasion." (FG 7, CS)

Abbreviations: CS, current smoker; FS, former smoker.

<sup>a</sup>Responded yes to "Do you smoke now?"

of cigarette smoke on their person when they were in close proximity, negatively affected their patients. These accounts were often accompanied by expressions of guilt, embarrassment, and even shame. They perceived their smoking behaviors as undermining their professional credibility and in particular diminishing their status and effectiveness as health educators. Some nurses felt less inclined to address tobacco use with their patients. In contrast, while a minority, some nurses who had successfully quit appeared to feel comfortable sharing their personal experiences with their patients.

**Perceived Collegial Support for Quitting**

The theme, perceived collegial support for quitting, was composed of 2 subthemes, that is, quitting at work is a solo experience and potential for the workplace to play a supportive role.

**QUITTING AT WORK IS A SOLO EXPERIENCE**

When asked about their quitting experiences, participants tended to describe them as "solitary" and "isolating," particularly in the workplace. Many nurses reported that they had intentionally avoided informing anyone in their workplace that they were quitting, and even when coworkers were aware, they verbalized that the support they received was not helpful. Both current and former smokers reported that it was common for coworkers to undermine their quit attempts, by cajoling, mocking, or directly offering them cigarettes. As one former smoker summarized, "they were saboteurs." While the negative responses from coworkers were a source of discouragement for many, a minority reported feeling emboldened to prove their skeptical coworkers wrong.

**POTENTIAL FOR WORKPLACE TO PLAY A SUPPORTIVE ROLE**

Some participants appeared to have low expectations of the workplace supporting their attempts to quit, arguing that it remains a

personally motivated decision. However, the majority envisioned the work environment as having the potential to play a supportive role and expressed a need for more nonjudgmental support in the workplace. A few former smokers who reported having quit in conjunction with workplace smoking cessation programs, found them to be very supportive. However, the majority reported they had not used any professional support or medications, with some verbalizing skepticism as to their effectiveness. At the same time, when asked to describe specific types of workplace programs or actions that would be supportive, participants in most of the focus groups offered rich descriptions of the qualities that should be present in these types of programs. They advocated for programs to "ongoing" versus "one-time occasions," with a supportive atmosphere, which promotes the nurses' decision to quit versus being coercive. Finally, they advocated for programs that make nurses who smoke feel understood while focusing on problem solving and the benefits of quitting rather than focusing primarily on the harms of smoking.

**Impact of Workplace Policies**

The theme, impact of workplace policies, was composed of 2 subthemes, that is, supporting maintenance of smoking and quitting, and unintended consequences.

**SUPPORTING MAINTENANCE OF SMOKING AND QUITTING**

There was consensus that the workplace could be associated with nurses' maintenance of smoking behaviors. Nurses described their places of work as being exceptionally stressful, attributing this to the unique nature of their work, a low professional status, nursing shortages, the rapid pace at which healthcare, in general, is changing, and their smoking. Some nurses felt disempowered and devalued and in this context voiced doubts as to whether there was even collective concern about their smoking behaviors and health.



At the same time, it was evident that participants' workplaces varied in regard to whether smoking restrictions were in place or the stage of implementation of these policies. In workplaces with smoking restrictions policies (such as designated smoking areas within the institution), some nurses indicated that they had found the policies to be supportive. Specifically, participants reported that smoking restrictions had increased the inconvenience and discomfort of smoking in the workplace. For some, these changes were supportive of quitting or provided the impetus to cut back or were supportive in preventing relapse.

## UNINTENDED CONSEQUENCES

Some nurses cited inequities in the enforcement of workplace smoking policies (eg, observing management personnel violating the policy) and reported feeling devalued by the related interactions. Others verbalized feeling "discriminated" against, citing accommodations that had been made for patients and visitors while their need to smoke were not addressed. Some were critical of partial bans and the decision to have designated smoking locations. They advocated instead for the implementation of comprehensive tobacco control programs, which include support for quitting for both patients and staff.

Participants identified several specific unintended consequences of smoking restrictions policies. Nurses reported having to assume additional patient-related duties because of these policy changes, such as being required to accompany patients who smoke to designated smoking areas. Additionally, the restrictions would result in an increase in time spent traveling to locations where smoking is permissible or less discoverable, often increasing the duration of breaks and compounding resentment between nurses who smoke and those who do not.

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## ■ Discussion

Through focus group discussions with nurses, who reported current or former smoking, from across 5 Central and Eastern European countries, we identified 4 themes that describe workplace factors and dynamics currently influencing nurses' smoking behaviors and efforts to quit. These themes included (1) taking breaks, (2) effect of smoking on patient interactions, (3) perceived collegial support for quitting, and (4) impact of workplace policies. Many of these perceptions of workplace factors influencing smoking and quitting were similar to those reported by nurses in the United States.<sup>25</sup>

Current and former smokers perceived nonsmokers as taking fewer work breaks. This perceived inequality in number and/or length of work breaks by smoking status was, in turn, a significant factor influencing nurses' smoking behaviors. Smoking breaks were viewed as positively impacting one's work life, by facilitating communication and a sense of belonging with colleagues, as well as serving as a stress-coping strategy. The terms "work" and "rest" breaks, which appear to be used interchangeably in the literature, are reported to contribute to healthy and productive work environments. They have also been associated with improved job satisfaction,<sup>35,36</sup> prevention of burnout,<sup>37</sup> stress reduction,<sup>38</sup> and decreased patient mortality.<sup>39</sup> Based on available reports

from the United States and England, missed breaks tend to be common among nurses.<sup>11,40,41</sup> Similar to the findings in this study, when surveying nurses (N = 2589) from 34 Magnet hospitals across the United States where smoke-free policies had been implemented, Sarna et al<sup>11</sup> report that nurses who do not smoke were nearly twice as likely to miss work breaks (odds ratio, 1.81; 95% confidence interval, 1.36–2.42) when compared with those who smoke. Enforcing work break policies could impact smoking behaviors and serve as facilitators for quitting and staying quit if nurses perceive that they will receive breaks regardless of their smoking status.

Nurses' reports of smoking-related conflicts with coworkers raise concerns about the impact these conflicts may be having on patient care. For example, the references to lack of or inadequate handoffs between nurses when those who smoke leave the ward to take breaks, and reports of young or less experienced nurses being left alone to deal with patients while fellow nurses go for smoking breaks, speak to system issues that have the potential to directly compromise patient care. Other authors have also expressed concern about how inequities in work breaks can lead to conflict and dissension and ultimately affect patient care.<sup>11</sup>

Nurses who currently or formerly smoked reported experiencing feelings of guilt and shame about their smoking behaviors and dissonance about their role as health educators. They further reported having gone to great lengths to hide their smoking from patients. Nurses use these actions and coping strategies to avoid experiencing the perceived negative attributes or stereotypes associated with smoking. This concept has been described as tobacco smoking self-stigma.<sup>42</sup> What nurses experience with tobacco smoking self-stigma may range from being aware of negative stereotypes to agreeing with and applying the attributes to themselves (ie, internalization of the stigma).<sup>42,43</sup> As demonstrated in a recent systematic review of smoking and self-stigma conducted by Evans-Polce et al,<sup>42</sup> there is support for the intended consequence of stigmatizing smoking behaviors, namely, reduced prevalence. However, the review also summarized the significant negative consequences associated with smoking self-stigma. These include guilt, loss of self-esteem, defensiveness, and resolve to continue smoking, and all of which are particularly consequential when individuals apply (internalize) negative stereotypes to themselves.<sup>42,43</sup> The negative consequences associated with self-stigma have the potential to undermine efforts to promote positive work environments and therefore lend support for prioritization of smoke-free workplace-based cessation initiatives that support nurses in their ability to quit and stay quit. These findings also highlight the opportunity for proactively engaging nurses as role models, early adopters of smoke-free workplaces and homes, and advocates for a smoke-free society.

Nurses do not appear to equate their perceived stress and need for smoking breaks with nicotine withdrawal symptoms. These observations suggest nurses and staff members may benefit from increased awareness of the interrelatedness of these dynamics, particularly when soliciting buy-in for comprehensive smoke-free policies and workplace smoking cessation programs.

Countries in the Central and Eastern European region have agreed to a *Roadmap of Actions* aimed at reducing the prevalence of current tobacco use in the region by a minimum of 30% by

2025.<sup>16</sup> The World Health Organization Framework Convention on Tobacco Control, to which they are all parties, calls for synergistic implementation of smoking cessation treatment, including tailored support to assist healthcare professionals who smoke.<sup>44</sup> Also, it is recommended that smoke-free policies be implemented in conjunction with supportive smoking cessation programs for staff and evidence-based treatment protocols for patients. However, according to a recent report, 83% of countries in the European region have yet to implement the recommended cessation treatment.<sup>45</sup> The nurses in this study provided a rich description of the qualities they would like to see in a smoking cessation program supporting nurses' own quitting efforts. Evidence-based interventions for smoking cessation programs for nurses have been reported,<sup>14,46</sup> and the similarities observed across studies suggest that these strategies could be applicable in these countries as well.

Nurses reported having a range of experiences with smoke-free policies; some policies were viewed as supporting their efforts to quit, helping them cut back on smoking, and preventing relapse. At the same time, nurses reported a number of unintended consequences of these policies, including additional patient care responsibilities and exacerbation of the inequities in work breaks due to increased travel time to smoking areas. Some nurses had experienced the processes used in implementing these policies as being inconsiderate of their needs and even punitive in tone or spirit. Administrators need to be informed of best practices for implementing smoke-free policies and encouraged to conduct ongoing evaluations of the intended and unintended consequences of these policies. There is also a need for the development of contextualized guidelines for workplaces.<sup>47</sup> Additionally, a greater understanding of the needs of nurses who smoke and go through nicotine withdrawals in the workplace and training on the professional ethics associated with patients' right to receive evidence-based treatment (ie, tobacco cessation treatment) regardless of a nurse's smoking status are necessary. Finally, it is critical that all nurses are equipped with an accurate understanding of nicotine addiction.

In general, these findings closely mirror the perceptions of factors influencing smoking status reported by United States-based nurses in the study conducted by Sarna et al.<sup>25</sup> In both studies, nurses identified the tendency for workplace norms to conflate work (rest) breaks with smoking breaks, including the disparity in frequency and length of breaks between nurses who do and do not smoke and the resultant workplace conflict created by these dynamics. Similarly, while nurses may use slightly different terms to describe the benefits they attributed to these work (smoking) breaks (eg, "smoking buddies" vs "solidarity"), both samples identified the potential loss of work breaks and their perceived benefits as a common barrier to nurses quitting smoking. Additionally, nurses in both the United States and Central and Eastern European settings did not consider their colleagues or workplace to be a significant source of support during attempts to quit, with uncannily similar reports of coworkers undermining or sabotaging their efforts. While participants in both geographic settings acknowledged smoke-free policies as playing a role in quitting, participants in the current study appeared to have more limited experience with smoke-free institutional policies and even more markedly with workplace smoking cessation programs (or lack thereof).

Comprehensive smoke-free programs that adequately anticipate the implications of smoke-free policies on patient care and the well-being of staff have the potential to effectively support both nurses' and patients' quitting. Future research should consider evaluating the impact of incentives on workplace culture and smoking cessation outcomes among nurses, as they have demonstrated effectiveness in some populations.<sup>9,48</sup> Additionally, rather than focusing on eradicating undesired behaviors, behavior change experts recommend that policy changes be framed within the context of workforce wellness and a commitment to nurses' well-being. Implementing these changes within a holistic wellness program may work to address some of the insidious sources of stress and job dissatisfaction experienced by nurses who claimed they used smoking as a coping measure rather than acknowledge the power of the addiction.<sup>49-51</sup> An investment in the health and well-being of the nursing workforce ultimately represents an investment in the health of the population.<sup>22</sup>

## Limitations

There are several limitations to this study. First, only 1 or 2 focus groups were conducted per country, which may have limited the variation in nurses' perspectives represented and in turn the variability of the findings. Nurses who responded to the recruitment flyers may have held particular views on this topic, and while the gender composition of the participants is reflective of the workforce, males were not well represented, limiting inclusion of gender-specific considerations, especially considering the higher smoking rates among men.<sup>15-18</sup> Nearly all of the focus groups were homogeneous based on smoking status. However, transcriptionists were unable to distinguish individual speakers. Additionally, despite adhering to a structured moderator guide, slight variations in how the focus groups were conducted and differences in the skill level of the moderators across the 5 research sites may have limited the depth of some of the focus group discussions. For example, the note-taking step of the procedures was not fully implemented by all moderators and may have been due to the limited experience of the moderators or lack of in-person oversight, which may have in turn limited the moderator's effectiveness in eliciting input from more quiet participants or balancing the input from more talkative participants. Furthermore, while utilizing a content analysis approach was useful in helping to support and extend the understanding of nurses' experiences with smoking and quitting across varied cultural contexts, it may have introduced bias by increasing researchers' likelihood of finding supportive versus nonsupportive evidence.<sup>30</sup> However, as recommended, efforts were made to mitigate this by using an audit trail.<sup>30</sup> Finally, this study does not include the perceptions and perspective of nurses who have never smoked. Future research may be enhanced by the use of research methodologies such as Grounded Theory that integrate strategies to increase triangulation and data saturation.<sup>26,27</sup>

## Conclusions and Recommendations

The findings of this study suggest that nurses who were current and former smokers in these Central and Eastern European countries experienced a range of workplace factors influencing smoking

and quitting. The workplace-related barriers to quitting, some of which are similar to those observed among United States nurses, included differences in work breaks by smoking status, lack of support for quitting, negative effects of smoking on patient interactions, and impact of workplace policies on continuing to smoke or deciding to quit.

Momentum for tobacco control is growing in several of the countries included in this study,<sup>45</sup> and implementation of 100% smoke-free policies is currently underway. These policies will benefit all nurses, especially those who smoke by providing them support for quitting, as recommended by Article 14 of the United Nations World Health Organization Framework Convention on Tobacco Control.<sup>52</sup> These findings offer insight to administrators about how to provide contextualized support and implement comprehensive smoke-free policies within healthcare facilities. Specifically, we recommend that interventions include the development of workplace-based cessation programs that use a holistic framework, which denormalizes smoking, promotes the well-being of nurses by extending support for quitting, and ensures that all nurses have equitable access to work breaks.

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