

**SPECIAL ISSUE ARTICLE**

# Jordanian nurses' perception and interventions related to promoting smoking cessation

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**Aims and objectives:** To determine nurses' perceptions related to smoking cessation, health promotion and interventions provided to hospitalised patients.

**Background:** Smoking is a major health problem in Jordan. The cost for treating smoking-related health conditions is a significant strain on the healthcare system. Nurses are in an ideal position to encourage smoking cessation. Little is known about Jordanian nurses' perceptions related to smoking cessation issues.

**Methods:** A qualitative design was used to collect data from 22 Jordanian nurses using focus groups. Purposive sampling was used to select the study participants. Content analysis was conducted, to determine themes related to the research questions.

**Results:** Nurses indicated that smoking cessation counselling is important. However, they did not feel that their counselling was very effective. Nurses indicated that the presence of a well-defined hospital policy regarding smoking was a facilitator to smoking cessation and antismoking clinics would also help to decrease smoking. Challenges to nurses' interventions included lack of hospital policy, lack of time and nurses who smoke could not be role models or provide effective counselling. Regarding decreasing smoking in Jordan, nurses had suggestions that included scare techniques and increasing taxes on cigarettes as well as enforcing policies that prevent cigarette sales to children under 16.

**Conclusions:** Nurses are well aware of the hazards of smoking and indicate a belief that encouraging smoking cessation is an appropriate activity. Changes in smoking rules and the enforcement of rules, as well as increased public health efforts related to smoking cessation, are necessary to decrease smoking prevalence in Jordan.

**Relevance to clinical practice:** Training in smoking cessation counselling and increased awareness of the resources may increase nurses' ability to have an impact on decreasing the smoking prevalence in Jordan.

**KEYWORDS**

health promotion, hospitalised patients, interventions, Jordan, nurses' perception, qualitative research, smoking cessation

## 1 | INTRODUCTION AND BACKGROUND

Tobacco use is the leading preventable cause of death. Annually, tobacco is responsible for more than 5 million deaths worldwide (WHO, 2014). The US Surgeon General's report *Smoking and Health* (1964) provided evidence of the direct link between smoking and many preventable noncommunicable diseases including lung cancer, cardiac conditions and chronic obstructive lung disease (COPD) (US Department of Health Human Services, 2014). As such, smoking causes a significant burden for individuals afflicted with preventable diseases and imposes an economic burden on the healthcare systems.

The World Health Organization (WHO) document on the Tobacco Free Initiative published in 2005 indicated that to combat the tobacco epidemic, a comprehensive, continuous, sustainable and adequately funded tobacco-control strategy is needed (WHO, 2005b). The WHO stressed that the strategy should be focused on preventing tobacco consumption and promoting smoking cessation and that healthcare professionals should have a major role in its implementation. Abu-Moghli, Khalaf, and Barghoti (2010) emphasised an important effect of health education, conducted by a group of nurses and family physicians, on university students' knowledge and healthy lifestyles practices including smoking cessation.

The literature reveals the importance of the nurses' role in addressing tobacco dependence to reduce noncommunicable diseases and impact the leading, preventable cause of death and disability (Zarling, Burke, Gaines, & Gauvin, 2008). The American Academy of Family Physicians (AAFP), American Academy of Ambulatory Care Nursing (AACN) and Oncology Nursing Society (ONS) have emphasised the critical role of nurses in providing overall leadership for smoking cessation (Finn, 2014). This role was also supported by the 2012 WHO Global Forum for Government Chief Nursing and Midwifery Officers and the fourth triad meeting of the International Council of Nurses (Sarna et al., 2014).

Hospitalisation provides a unique opportunity to treat tobacco dependence (Zarling et al., 2008). Hospitalisation has been considered as a teachable moment (TM) for smoking cessation as patients are required to abstain from smoking while hospitalised (McBride, Emmons, & Lipkus, 2003). According to Rice, Hartmann-Boyce, and Stead (2013), hospitalisation provides "a window of opportunity" for nurses to counsel patients on smoking cessation. Moxham, Dwyer, and Reid-Searl (2013) claim that most smokers consider cessation during hospitalisation, but find abstinence difficult, and nurses have a great potential for actively influencing patients to achieve a healthier lifestyle.

Worldwide, several studies investigated the role of nurses in smoking cessation. A Global Health Professionals Survey was conducted by WHO (2005a) of third-year students in four health-related disciplines (dental, medical, nursing and pharmacy) from 10 countries. Between 87%–99% of surveyed students believed that they should have a role in counselling patients to quit smoking. However, studies by Poreddi, Gandhi, Chandra, Wilson, and Math (2015) and Fernández, Ordás, Álvarez, and Ordóñez (2015) found that lack of tobacco-

### What does this paper contribute to the wider global community?

- Smoking is a worldwide problem that is responsible for about millions of deaths worldwide as a consequence of many diseases triggered by smoking.
- Nurses all over the world are in a key position to address tobacco dependence among hospitalised patients with the aim of reducing the impact of smoking on the health of individuals and the community. This research emphasises the importance of understanding the nurses' perception and interventions related to promoting smoking cessation from a cultural perspective
- As researchers, we need an in-depth understanding of the nurses' perception and interventions related to smoking cessation within a cultural context to develop policy implications for nursing education and nursing practice. This qualitative research study provides in-depth data rich in contextual information that can offer guidance to nurses' administrators and nurses related to smoking cessation issues. The use of content analysis allowed for a deeper exploration of nurses' perceptions related to smoking cessation, health promotion and interventions provided to hospitalised patients.

control curriculum for undergraduate nursing students decreases their competency in giving smoking cessation support. In addition, lack of a formal training programme about smoking cessation during their work after graduation decreases their ability to intervene (Barr, Houston-Miller, Hasan, & Makinson, 2013; O'Donovan, 2009).

Segaar, Willemsen, Bolman, and De Vries (2007) assessed nurses' use of smoking cessation interventions in a cardiac ward. They found about 46% of nurses did not provide smoking cessation support such as providing patients with self-help guides, discussing smoking cessation aids or providing follow-up care in daily practice. Using an intervention card, nurses' perception about advantages of the intervention, having other nurses around them who used it and having been involved in decision-making improved nurses' use of a smoking cessation intervention up to 52%.

Another study by Katz et al. (2016) aimed to assess nurses' perceptions about smoking cessation interventions in Veterans Affairs (VA) hospitals. The study identified several barriers that limit nurses' ability to provide smoking cessation interventions such as perceived lack of skills in cessation counselling, scepticism about the effectiveness of cessation guidelines, resistance from patients, insufficient time and resources, the presence of smoking areas on VA premises and lack of coordination with primary care.

To examine nurses' knowledge, sense of responsibility and readiness to provide smoking cessation interventions, Scanlon, Clark, and McGuinness (2008) surveyed 162 nursing staff from 13 different adult acute care wards. They found that while the majority of

participants (87%) acknowledged that they had a responsibility to counsel patients about smoking cessation, only 22% of the participants provide smoking cessation counselling for their patients. In addition, only 22% of participants had adequate level of knowledge about smoking cessation. The researcher concluded that nurses were more likely to counsel their patients about health conditions related to their area of practice than those conditions that were not in their practice area.

Jordan is considered one of countries with the highest prevalence of tobacco use in the Middle East. In 2010, tobacco-caused disease was responsible for 14.8% and 9.8% of Jordanian men and women deaths, respectively. In 2013, the percentage of Jordanian adults who smoked daily was 43.3% for men and 8.5% for women which is considered higher than other middle-income countries. Smoking among youth in Jordan is also alarming with 17.4% boys and 6.6% girls reporting daily use of tobacco which is relatively higher than other middle-income countries. In addition, mentally ill people are nearly twice as likely to smoke as other persons. A smoker in Jordan would have to spend 3.8% of national median income to purchase 10 of the cheapest cigarettes to smoke each day. This will severely affect Jordanian families' resources (American Cancer Society & World Lung Foundation, 2015). Merrill, Madanat, Kelley, and Layton (2008) reported that although Jordanian mothers had enough knowledge about symptoms relating to respiratory illnesses and home environments, 71% of Jordanian homes had family members who smoked indoors. This will raise the magnitude of second-hand smoking exposure and cause harmful effects, especially on childbearing women and young children (Haddad et al., 2011).

According to the Institute for Health Metrics and Evaluation at The University of Washington (2017), tobacco smoke ranked fifth as a risk factor causing the most deaths and disability in Jordan, especially cardiovascular diseases which are considered the leading cause of death among Jordanian population in 2015. Physicians' and nurses' commitment to smoking cessation increases the chance that the patients will quit smoking. Shishani, Nawafleh, Jarrah, and Froelicher (2011) studied smoking patterns among physicians and nurses who worked in Jordanian hospitals. They found that about 38.8% of physicians and nurses are current smokers and more than two-thirds 64.1% believed that nurses and physicians who smoke were less likely to counsel their patients about smoking cessation.

Jordanian national organisations including King Hussein Cancer Foundation and King Hussein Cancer Center, in conjunction with the Ministry of Health, produced *Jordan Guideline for Tobacco Dependence Treatment* under the slogan "Helping Smokers Quit." They believe in the role of healthcare providers, especially nurses, in smoking cessation efforts. They developed a brief advice form that healthcare providers can use as an intervention for tobacco dependence treatment. Using the acronym Asking, Advising, and Referring (AAR), they describe the steps as: Asking about tobacco use, Advising smokers to quit and Referring them for further help (Ministry of Health, King Hussein Cancer Foundation, & King Hussein Cancer Center, 2014).

Findings from surveys done in 2006 in Amman, Jordan provided some insight into nurses and physicians patient counselling

preparation (Merrill et al., 2008) and attitudes and practices regarding smoking prevention and control (Merrill, Madanat, & Kelley, 2010). Merrill et al. (2008) found that about 78% of nurses reported that they were trained to help patients to quit smoking. They did not indicate whether the nurses in fact provided any counselling for patients regarding smoking cessation. Using further survey data collected in 2006, Merrill et al. (2010) reported that 78.5% of the nurses agreed or strongly agreed that nurses should routinely ask about their patients' smoking habits and 84.5% agreed or strongly agreed that nurses should routinely advise their smoking patients to quit smoking. Approximately 57% of the nurses indicated that they thought nurse counselling was effective or very effective in helping patients stop smoking. Shishani, Nawafleh, and Froelicher (2008) conducted a study to assess the prevalence of smoking among nurses and physicians and their learning needs for promoting smoking cessation, using a descriptive cross-sectional design. The findings indicated that of 164 nurses and 87 physicians, 41.5% of nurses and 43.6% of physicians are smokers. A high percentage (71.6%) indicated that they need training to provide smoking cessation to clients, and they stated that both schools of nursing and medicine in Jordan do not offer training about smoking cessation in their curricula. However, in 2011, Shishani et al. (2011) studying the smoking patterns of 918 nurses and physicians using a descriptive cross-sectional design found that smoking was higher among physicians (46.9%) as compared to nurses (36.1%).

In Jordan, health promotion related to smoking has been researched (Khalaf, 2013), but not from a qualitative perspective. Nurses have prolonged and extensive contact with patients in the hospital. This places them in an ideal position to provide counselling related to smoking cessation. There is little known about the perceptions of the nurses regarding the value of encouraging smoking cessation or any interventions that they provide to encourage smoking cessation. A better understanding of these factors, as well as nurses' perception of facilitators and barriers to interventions, will be the basis for policy implications for nursing education and nursing practice.

## 2 | AIMS AND RESEARCH QUESTIONS

The aim of the research was to determine nurses' perceptions and interventions related to smoking cessation for hospitalised patients. The research questions are as follows:

- What are Jordanian nurses' perceptions related to health promotion for smoking cessation for hospitalised patients?
- What interventions do Jordanian nurses engage in related to health promotion for smoking cessation for hospitalised patients?
- What are the barriers and facilitators to discussing smoking cessation with hospitalised patients as perceived by Jordanian nurses?
- What do Jordanian nurses think can be done to decrease smoking in Jordan?

### 3 | METHOD

#### 3.1 | Design and participants

A qualitative design guided by a phenomenological approach was used to provide a robust description of hospital-based nurses' perceptions and interventions related to smoking cessation. This design was used as it is one of the most appropriate designs to provide the researchers with in-depth exploration of the nurses' perceptions and interventions related to smoking cessation. Finlay (2009) indicated that the "phenomenological research aims to capture subjective, 'insider' meanings and what the lived experience feels like for individuals" (p. 475). Jordanian registered nurses who had practiced in an adult inpatient hospital setting for at least 1 year were invited to participate in the study. They were recruited by purposive sampling, representing the three regions of Jordan. A screening guide was used to select participants representing diverse backgrounds. Eligible nurses were contacted and invited to participate in the focus groups.

#### 3.2 | Data collection

Three focus groups consisting of 22 nurses (seven to eight participants in each group) were conducted in Arabic. Focus group was chosen as a research strategy because of the social orientation of the methodology. As the nurses interact with each other, as well as the moderator, they are more likely to give more in-depth answers and react to the comments of others. This method of data collection is effective in producing a large amount of data from large numbers of participants in a short period of time. It is indicated by Wu and Volker (2009) that "with its open, naturalistic, descriptive, and constructivist approach, this method allows the researcher to capture, interpret, and understand lived experiences" (p. 579).

A semistructured interview guide, developed by the researchers and validated by an expert in qualitative approach, was used. The guide included the following: introductory general questions and an exploration of the research aims with open-ended and prompting questions. Before starting the focus group, demographic data were collected from the participants, including highest level of education, number of years of experience as a nurse and number of years working on the specific unit.

The first and last 10 min of each session were used for introduction and conclusion. The participants were asked to use tags with numbers, and these numbers were used by the observer and later when writing the transcriptions.

Each group included two researchers—one acted as the moderator and one acted as the recorder. The focus group started with a basic introduction, completion of consent forms, review of confidentiality expectations, a clear definition of the topic to be discussed and the process for group discussion. During the focus group, the participants were asked the open-ended questions in the following sequence; nurses' perception related to health promotion interventions for smoking cessation, their interventions with patients related to smoking cessation, and barriers and facilitators to health

promotion interventions as well as what nurses think can be done to decrease smoking in Jordan. Probing questions were used to get rich information, and the focus group was audio-taped to provide clarification of the recorder's notes. Each focus group lasted from 1.5–2 hr. The focus groups were conducted in Arabic, and the audiotapes were transcribed and translated into English and back translated to Arabic to ensure trustworthiness of the data.

#### 3.3 | Data analysis

Content analysis according to the Colaizzi's framework (Speziale & Carpenter, 2007) was used to provide a robust description of hospital-based nurses' perceptions and interventions related to smoking cessation and to determine related themes. Colaizzi's method of content analysis is congruent with the descriptive approach taken in this study. In descriptive phenomenology, it is reasonable to recognise participants own experience as the fundamental structure of the phenomenon under investigation (Morrow, Rodriguez, & King, 2015). Colaizzi's phenomenological approach to enquiry involves a process of giving study participants the opportunity to validate the findings, "the structure of the phenomenon" by comparing the researcher's descriptive results with their experiences. The participants' clarification and/or elaboration that arise from their review of the analysed transcripts is included in the final explanation of findings. This contributes to establishing a rigorous and unbiased approach to data analysis (Edward & Welch, 2011). Two researchers listened to the audiotapes to compare them to the recorder notes. Any gaps in the recorders notes were supplemented by the notes taken from the audio-recordings. The results of the content analysis were shared in Arabic with the participants to determine whether the researchers had accurately portrayed the nurses' perceptions and interventions. Data analysis occurred concurrently with data collection.

#### 3.4 | Ethical considerations

The research study was approved by the IRB research committee at the School of Nursing at The University of Jordan (4/5/2015). All participants were asked to sign a consent form prior to the start of the focus group. While the topics discussed in the focus groups were not likely to be stressful to the participants, they were advised that they could leave the group at any time during the session. Participants were assured that their names would not be included in any research report. Throughout the study, the protection of human rights was an important priority. Audiotapes were erased after being transcribed. Consent forms are kept in a locked file available only to the researchers.

#### 3.5 | Rigour

Credibility was promoted by having the participants' review the themes that were derived from the content analysis of the focus group meetings. A full description of the participants' demographic data and a description of the setting where they work are provided

so as to provide context to the data. Transferability can only be demonstrated whether the findings have relevance for those with similar situations. By including implications for nursing education and healthcare policy, it is more likely that the findings will demonstrate transferability. Dependability was enhanced by using three focus groups. To promote confirmability, an audit trail was maintained by the researchers.

## 4 | RESULTS

### 4.1 | Participant characteristics

The participants were 22 nurses from different types of hospitals (governmental, military, teaching and private). The mean age of the participants was  $30.38 \pm 5.65$  ( $M \pm SD$ ). Most of the nurses were women and had never smoked. More than one-third of participants had 5–10 years of experience as a bedside nurse. More than two-thirds of participants had household income <10,000 Jordanian Dinar (JD) annually (1 JD = \$1.41 US). Almost all of the participants in this study did not have any medical illnesses. Half of the participants had completed a Bachelor's degree. More than half of the participants were married, and about half of participants lived with their spouses. The majority of participants had  $1.12 \pm 0.97$  ( $M \pm SD$ ) family members who are smokers. Table 1 presents the participants' Demographic characteristics.

**TABLE 1** Participants' Demographic characteristics ( $N = 22$ )

Item	N	%
Gender		
Female	16	72.7
Male	06	27.3
Education		
Graduate education	11	50
Bachelor	11	50
Diploma	00	00
Secondary level of education (high school)	00	00
Smoking status		
Smoker	03	13.6
Nonsmoker	19	86.4
Family members smoking status		
Family members who smoke	17	77.3
Family members who do not smoke	05	22.7
Number of years as bedside nurse		
<1 year	01	04.5
1–2 years	05	22.7
3–5 years	06	27.3
5–10 years	08	36.4
>10 years	02	09.1
But <20 years	00	00.0
>20 years	00	00

### 4.2 | Identified themes

The discussion in the three focus groups reflected the nurses' perceptions and experiences regarding smoking cessation. The revealed themes are organised according to the research questions: nurses' perception regarding promoting smoking cessation, nurses' interventions related to promoting smoking cessation for hospitalised patients, nurses' perceptions of the barriers and facilitators to discussing smoking cessation with hospitalised patients and finally the nurses' recommendations to decrease smoking in Jordan. The themes are presented in the text below and illustrated by quotations from the focus group discussion.

### 4.3 | Nurses' perception regarding promoting smoking cessation

Under this theme, three subthemes were identified as follows: smoking cessation counselling for hospitalised patients is important, smoking is an adaptation to illness, and policies related to smoking exist but are not enforced.

#### 4.3.1 | Smoking cessation counselling for hospitalised patients is important

Many participants confirmed the importance of smoking cessation counselling and asserted that this is a requirement for international accreditation. Some considered providing smoking cessation counselling to inpatients as a patient's right. A participant said "patient teaching and education is necessary and is the duty of all health professionals especially nurses as part of their professional duties." Another participant added that "nurses should assess smoking behavior as part of patient assessment." A participant said "health education should be continuous and sequenced and follow up of smoking patients should be maintained." Most participants agreed it is important to spare adequate time for health education and to find out ways to convince patients to quit smoking.

#### 4.3.2 | Smoking is an adaptation to illness

Some participants mentioned that most patients with cancer are smokers. They thought that by smoking, patients try to adapt to their illness. A female participant said "Our neighbor is a heavy smoker and she got breast cancer and was blaming who taught her to smoke. After she recovered she returned to smoking and when I asked her why she said 'do not let my husband hear you'; this means that now she is smoking without her husband's knowledge." The other participants agreed and indicated that patients smoke to forget the disease, the pain and psychological stress.

#### 4.3.3 | Policies related to smoking exist but are not enforced

Most participants indicated that they believe that most hospitals have policies related to smoking, especially those which have obtained the

Joint Commission International (JCI) accreditation as this certificate requires nonsmoking signs. They also indicated that if they see any person smoking, they usually tell him/her it is forbidden to smoke. Some participants indicated that even the hospitals that still have not obtained the JCI certificate have nonsmoking policies. This is more apparent in the military hospitals and people usually abide by these policies because they would be questioned and their ID cards withdrawn. A participant said "every patient admitted to the military hospital has to sign a declaration that s/he will not smoke as part of the admission process. This also applies to his accompanying family member(s)." Another participant added "some Islamic hospitals relate smoking to religion following the premise that there should be neither harm nor malice/no harm or reciprocated harm." A participant working in a teaching hospital said "there are no smoking policies or rules; all teaching staff and even the medical staff smoke in my hospital."

Nurses in this study indicated that in governmental hospitals, there are smoking policies but "unfortunately, not activated." Neither the patients nor the visitors abide by them. They smoke anywhere. The visitors would go to smoke in the bathrooms or corridors and that some would not care and smoke in their patient's room. A participant said "Unfortunately in my hospital there is chaos and lack of discipline; everybody smokes and when you try to talk to them they may say what I shall do? May Allah forgive who taught me to smoke?" Another commented "I have no control over smoking except at home or in my own car."

Disappointingly, many participants indicated that many healthcare providers smoke in hospitals and that there is no obedience to the policies starting from the supervisor. Another participant indicated that "Most violations occur during the afternoon or night shifts, because during the day shift all administrators are there and they are very strict about smoking. Most residents smoke during the evening and night shifts but never in the morning as they may receive a warning."

A few participants indicated that in their hospital, there are only signs prohibiting smoking. Another participant said "the signs do not state 'no smoking'; instead the state 'smoking kills' or 'smoking is harmful to your health'." This is an advice not a warning. A participant said "we have sensors in all hospital rooms and corridors that would detect any patient or visitor who smokes." Most participants said there are smoking areas in their hospitals usually outside the hospital buildings.

#### 4.4 | Nurses' interventions related to promoting smoking cessation for hospitalised patients

Three subthemes under nurses' interventions are identified: nurses use a variety of strategies to promote smoking cessation, patients have faith in nurses, and patient's family could be the key towards supporting the patient to quit smoking.

##### 4.4.1 | Nurses use a variety of strategies to promote smoking cessation

Nurses indicated that they use a variety of strategies to discourage smoking, but seemed sceptical about the effectiveness of their

actions. Many participants indicated that they discuss the harmful effects of smoking with their hospitalised patients to promote smoking cessation because they believe that as nurses, they have a key role to play in encouraging patients to quit smoking or to seek help in quitting. One participant said "As a nurse I am responsible to raise the patients' awareness about the harmful effect of smoking." A participant said asking about smoking is among topics used in the assessment. She added "Sometimes a mother comes with an asthmatic child and we find this as an opportunity to talk about smoking by those surrounding him. Some women may not be aware of this and I think it is our responsibility to tell them." However, most participants indicated that their interventions are limited to asking patients if they smoke and how much and, if time is available, simply provide brief advice to quit smoking. Another said that the forms used in the endoscopy unit include one question "do you smoke?" and if the answer was yes, "how many cigarettes?"

Most participants indicated that discussing smoking cessation is not seriously considered, especially in governmental hospitals. A participant indicated "I tell the patient not to smoke only once, knowing that he will not listen." Many participants indicated that the patients and most of the Jordanian community know about the harmful influence of smoking; accordingly, there is nothing to add. Some participants indicated that patients know everything about smoking and that when the nurses start discussing it, they agree with what nurses tell them. Most participants agreed that it is the nursing students who are doing the job and are providing health education to patients including smoking.

Many participants indicated that they may talk to the patient depending on his/her condition or characteristic; a participant said "if the patient complains of heart problems or any kind of lung infection or disease, I usually discuss smoking and mention the consequences of smoking and its effect in worsening the disease condition." A participant stated that "once I was trying to prepare the inhalation for a patient and he picked up a cigarette. I said that we are trying to put the inhaler on you, but he replied: I need a cigarette and I replied, how fortunate you are, the cigarette is burning itself for you." When asked about the time that they would discuss smoking cessation with patients, the participants indicated that there is no policy in this regard and it depends on the situation. A participant clarified "I talk to the patient considering the way he responds and based on how he replies to my questions and talk. I try to provide him with alternative ways to reduce stress and tell him about the bad effects on his condition and his family." Few mentioned talking about the availability of the smoking cessation clinics at the cancer centres and very few informed their patients about nicotine gum.

Culture-specific counselling was used by some nurses. A participant said "our situation is a little different as we deal with pregnant women who do not admit being smokers for cultural reasons. So we ask the woman about smoking indirectly and talk to her about the effects of smoking on the baby and that it may be born underweight." A male participant said "If I knew that a female patient

smokes, I would tell her that she is harming the whole family especially her children." A few participants indicated that they talk to the mothers about how smoking harms their children indirectly. Other participants indicated that they will use the religion perspective and how smoking is forbidden from a religious background.

Other nurses provide advice about long-term consequences of smoking. A participant said that he discusses the effect of smoking on the individual and the community and that the highest percentage of cancer disease results from smoking. He added "I use statistics and numbers such as the prevalence of cancer and the morbidities associated with smoking." A few participants indicated they tell the patients how they can use the money they spend in smoking to improve their living conditions.

#### 4.4.2 | Patients have faith in nurses

Several participants thought that patients may listen to nurses and be convinced and have confidence in them if the nurses showed sincere efforts and good work. They also agreed that if the nurse persisted on talking about smoking cessation, the patient would be convinced, especially if s/he hears the same thing from more than one nurse. A participant indicated that if the nurse informed the patient where s/he can get help and referred him to the specialised clinics and resources, the patient will respond positively. A female participant said "even if the patient is a smoker for a long time it is hard to convince him to quit, but as a nurse, yes, I believe he will listen to me as I believe patients have faith in nurses." Another female participant added "What may make the patient think that the nurse is worth listening to is that the nurse is the only one who talks to patients." She clarified "patients come to hospitals with great expectations of knowing about their disease, drugs and future plans and interventions but nobody talks to them except the nurses." Some participants mentioned that the influence nurses have on patients may be limited, the patient may be convinced to smoke a lesser number of cigarettes, and this depends on the nurse and his/her approach. They agreed that persistence is important, and if the influence was restricted to making only one patient quit smoking or even smoke less cigarettes, then this is success.

#### 4.4.3 | Patient's family could be the key towards supporting the patient to quit smoking

Most participants indicated that they do not mind involving the family members in educating the patient regarding smoking cessation. A participant said "well, why not involve the family? This would motivate the patient and would assist him in following the treatment regimen at home." However, they also said that while involving the family may motivate the patient to quit, yet, they do not consistently involve the family. A participant said "I gave health education and involved the family for the first time when I was a student. I provided the family with the most recent literature on smoking and they were convinced."

### 4.5 | Nurses' perceptions of the barriers and challenges nurses face in educating patients about smoking cessation

Two subthemes were identified by study participants: factors that facilitate educating patients about smoking cessation, and challenges nurses face in educating patients about smoking cessation.

#### 4.5.1 | Factors that facilitate educating patients about smoking cessation

Among the factors that will assist nurses to discuss smoking with their hospitalised patients are the patient him/herself and his/her own beliefs. According to the participants, if the patient shows acceptance and a will to know about smoking and its side effects and is willing to quit smoking, it will be easier to discuss the issue. A participant said "It shows on the patients' face, is he/she smiling, then you can talk." Another participant indicated "If the nurse has the will and intention to provide smoking education, he will find the time to do it." Many participants indicated that time is available, but it depends on the nurses' belief that educating patients about smoking cessation is their responsibility. Those who provide care to patients with cancer mostly agreed on the availability of time. However, a participant said "Sure, there is always time to talk to patients about smoking cessation and to try to convince them to quit but, to tell the truth, I don't." Two participants confirmed that there should be clinics for behavioural modification for smokers and considered inpatient units as inappropriate places for health education on smoking cessation. A participant said "I think there should be clinics in the same hospital to which smokers are referred similar to the respiratory and nutrition clinics."

The participants also mentioned several factors that may enable them to discuss smoking: the presence of a well-defined, well-stated smoking policy and well-planned health education programmes related to smoking cessation, availability of smoking cessation clinics, clarity of the role of the mass media, availability of resources for quitting smoking, the communication skills of nurses, the nurses' qualifications, the availability of time and the smoking behaviours of healthcare providers. A participant clarified "If the mass media had a clear and active role in health promotion and in sending messages about the hazards of smoking, then it would be easier for us to talk about smoking." Many participants agreed that they were well trained to provide health education to patients during their undergraduate study which is an important factor that assists them in providing health education.

#### 4.5.2 | Challenges nurses face in educating patients about smoking cessation

The participants indicated that there are several factors that may prevent them from discussing smoking cessation with their patients. Not having adequate information including not having a formal training programme about smoking cessation, not having a hospital policy

and the lack of no smoking signs in some hospitals are among these factors. Although most of the participants were not smokers, they indicted the most important aspect is not being a role model and that nurses who are smokers themselves would be unable to discuss smoking. A participant said "If you are a smoker then you can't and you do not have the right to talk about smoking and the risk factors associated with smoking, mind you, most health care providers are smokers and they smoke in the work place." Another participant added if the nurse is a smoker, he will not talk about smoking even if he has the time because he does not think it is important. A third participant said "The nursing director in my hospital smokes, once, a new nurse started to criticize smokers and she was considered the enemy, everyone hated her."

Many participants said they have no time to discuss smoking cessation as they have many other things to teach patients about and they are overwhelmed with many other activities. One indicated that they are too busy in doing the paper work. Another participant said that in the critical care unit where he works, they do not have time to educate the patient and family and if nurses have the time, they prefer to have some rest. Some participants mentioned that smoking is a behaviour that needs a long time to be changed or modified. A participant added "I do not think that the time available is in any way adequate to help people stop smoking. It is a behavior that does not change overnight."

Nurses' negative perception, misconception and their scepticism in effectiveness of their role may hinder smoking cessation counselling services. A participant indicated "Health education in general and in relation to smoking cessation in particular is not in our job description. If it was, then we would be obliged to do it." Some participants thought it is very hard to have any influence on patients as smoking is an addiction. Two participants indicated that only the physician should have to discuss smoking cessation with the patient as patients do not accept health education from the nurse. A participant said "it is useless to give health education about smoking as patients already know everything about it and they do not care, they keep smoking."

#### 4.6 | Participants' recommendations to decrease smoking in Jordan

Most participants recommended that nurses should have a formal training programme about how to provide smoking cessation support for inpatients in hospital settings. In addition, they stressed the importance of being a role model for their patients by not smoking. Many participants mentioned that smoking cessation clinics are the best place to provide smoking cessation counselling and support for patients. A participant indicated that in these clinics, nurses can assess patients and provide time for health education on smoking cessation and to discuss with the patient all issues regarding his/her health condition and can make discussion about smoking a priority. This will provide nurses with ample time and make them feel it is a major part of their job. According to most participants, this is impossible to do in inpatient and emergency units.

The participants indicated that, in general, they have a role towards the public in regard to smoking cessation. The participants proposed several ideas to help reduce the incidence of smoking in Jordan including conducting health education programmes for school students and distributing brochures to raise public awareness. A participant added "the use of messages (harsh ones like using a picture of a dead man in his coffin) may really convince people to accept discussing quitting smoking and if this is combined with talking about the financial burden the result will be fabulous especially if the patient has financial problems." Other participants added as recommendations, conducting antismoking programmes, using the Internet and other mass media to send health-promoting messages, preparing colourful cards stating "thank you for not smoking," increasing the taxes on all types of cigarettes, enforcing smoking policies in public places especially hospitals, enforcing policies related to selling cigarettes to children under 16 years and promoting the role of the community health nurse, the religious leaders and the media.

Other suggestions included follow-up of patients who are smokers, increasing number of antismoking clinics and clinics specialised for health education, the role of healthcare centres in providing health education to the public about smoking and smoking cessation need to be emphasised.

## 5 | DISCUSSION

### 5.1 | Nurses' perception regarding promoting smoking cessation

Smoking cessation counselling for hospitalised patients is important. Many participants confirmed the importance of smoking cessation counselling and asserted that this is a requirement for international accreditation. Some considered providing smoking cessation counselling to inpatients as a patient's right. Similar results were reported by Sarna et al. (2016) and Shishani et al. (2008). On the contrary, the results of a study conducted by Aldossary, Barriball, and While (2013) indicated that nurses give priority to acute care rather than health promotion issues.

Some participants mentioned that most patients with cancer are smokers. They thought that patients try to adapt to their illness by smoking and indicated that patients smoke to forget the disease, the pain and psychological stress. Other studies indicated that people smoke to cope with stress and chronic pain (Hooten et al., 2011; Obeidat, Hawari, Amarin, Altamimi, & Ghonimat, 2016). However, according to Cleveland Clinics Foundation (2015), tobacco use actually triggers pain and can reduce the effectiveness of pain medications.

Jordan joined the WHO Framework Convention on Tobacco Control in 2005 (WHO, 2015) and the Jordanian Public Health Law No. 47 of 2008 addressed hospitals among the smoke free places and provided penalties for violations (The Hashemite Kingdom of Jordan, 2008). Yet the WHO *Report on the Global Tobacco Epidemic, 2015* (WHO, 2015) shows that the score obtained by Jordanian hospitals was only three of 10. This indicates low compliance of

Jordanian hospitals to implementing this provision. This was clearly discussed by the participants in this study who indicated that they believe that most hospitals have policies related to smoking that are not activated with variations related to smoking among the various types of hospitals. While military hospitals strictly enforce the no smoking policies, government and teaching hospitals are particularly lax in enforcement.

### 5.2 | Nurses' interventions related to promoting smoking cessation for hospitalised patients

The nurses clearly indicated that they think nurses have a role in smoking cessation counselling, but indicated that for the most part, they did not feel it was effective in the hospital setting; some indicated that they simply do nothing more than telling the patient not to smoke. Similar results were reported in several studies (Aldossary et al., 2013; Sarna et al., 2014, 2016; Schultz, Bottorff, & Johnson, 2006; Segaar et al., 2007). According to WHO (2005a) nurses and other health professionals should address tobacco use as part of their professional practice and at every encounter with the patient. However, according to the participants in this study, this intervention is carried out mostly by nursing students. Moxham et al. (2013) found that high percentage of nursing students think they enjoy an influential position in regard to promoting smoking cessation among hospitalised patients.

### 5.3 | Nurses' perceptions of the barriers and facilitators to discussing smoking cessation with hospitalised patients

Some nurses felt unprepared to provide counselling. They indicated that they were not adequately prepared at the undergraduate level. This result is consistent with the findings of Poreddi et al. (2015) and Fernández et al. (2015), while others were frustrated by the perceived futility of their efforts and lacking time and resources. Similar hindering factors were reported by Katz et al. (2016). It was indicated by Sarna et al. (2009) to facilitate the role of healthcare providers in increasing cessation efforts, they need to be aware of resources that can help them with skills, knowledge and access to cessation facilities. On the other hand, Zarling et al. (2008) indicated that nurses who were educated on smoking cessation were more confident and active in helping their patients. Moreover, the results of the review conducted by Rigotti, Clair, Munafò, and Stead (2012) and Rice et al. (2013) support the scepticism indicated by the participants in this study regarding the effectiveness of their opportunistic and short interventions. They indicated that interventions should start during hospitalisation and continue for at least 1 month after discharge for follow-up purposes. Shorter interventions are not expected to be beneficial.

According to Shishani et al. (2008), Beletsioti-Stika and Scriven (2006) and Hodgetts, Broers, and Godwin (2004), nurses being smokers impede their ability to counsel patients on smoking. Moxham et al. (2013) explain that smokers are poor role models and are less likely to provide cessation advice. The nurses did indicate a

belief that specialised smoking cessation clinics would be more likely to help decrease the problem as there the nurses would have special training and would be able to work with patients over a longer time frame, rather than the short episodic acute hospital visit when the patient is already stressed by illness.

### 5.4 | Participants' recommendations to decrease smoking in Jordan

The nurses had many suggestions to decrease smoking in Jordan, including increasing taxes on cigarettes and enforcing smoking regulations. It is interesting that none of the participants appeared very optimistic that the prevalence of smoking was going to be improved in the near future. Citing the large number of healthcare providers who smoked (Shishani et al., 2008, 2011) even in the government and private hospitals, nurses indicated their understanding of the difficulty of creating the nonsmoking culture.

## 6 | CONCLUSIONS AND RECOMMENDATIONS

This qualitative study provided an in-depth exploration of nurse's perceptions related to smoking cessation, health promotion and interventions provided to hospitalised patients. Additionally, it provided data rich in contextual information that can offer guidance to nurse administrators and nurses related to smoking cessation issues.

The study results indicated that nurses consider patient education regarding smoking cessation important and that it falls under nurses' roles but it is not very well implemented for several reasons, including lack of nurses' preparation at the undergraduate level to provide smoking cessation. Nurses indicated a need to enforce smoking policies and to be educated on smoking cessation interventions. The participants' recommendations can inform policy makers, nurse administrators and nurse educators on ways to enhance nurses' health promotion interventions to help slow the epidemic of tobacco use.

## 7 | LIMITATIONS OF THE STUDY

As with all qualitative studies, the findings of this study cannot be generalised to other populations as is the case for quantitative research. A major limitation includes the possibility that the participants may have responded with what they perceived as socially acceptable answers to the questions. This is particularly true when focus groups are used as perceived peer pressure may make a participant hesitant to offer an alternative opinion. Having participants from different regions of Jordan and different types of hospitals, while providing perspective, may in fact have been a limitation to discover in-depth practices at one type of hospital. Although there are similarities between predominantly Muslim Middle Eastern countries, the findings of this study, conducted in Jordan, cannot be

generalised to these other countries. Economic status and other cultural differences, as well as differences in nursing practice, limit the study to the country where it was conducted.

## 8 | RELEVANCE TO CLINICAL PRACTICE AND IMPLICATIONS FOR HEALTH POLICY

Providing nurses with more formal education related to smoking cessation may help nurses to more consistently provide counselling to their hospitalised patients. It is also necessary to include smoking cessation in the undergraduate nursing curriculum and in the job description of nurses. Nurses need to include, as part of their standards for clinical practice, education of patients about smoking hazardous, monitoring of patients smoking behaviour and provide smoking cessation interventions accordingly so that all patients are assessed about smoking behaviour and they are provided with the needed counselling and/or advice to help them to quit smoking along with support and follow-up.

Considering the cultural and religious contexts when discussing smoking is beneficial. Using the religious commands about the prohibition of smoking could be used as an approach by nurses while providing smoking cessation to patients and to the community. Nurses need better awareness of the resources available so they can be more effective in providing information, especially to patients who indicated an interest in smoking cessation. Of particular importance for health policy is the recognition that making laws related to not smoking is ineffective without strict enforcement. This is obvious by the different accounts of smoking behaviour in the different types of hospitals; patients in military hospitals abided by the rules, whereas even healthcare providers broke the rules in the governmental and private hospitals.

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### CONTRIBUTIONS

Study design: IK, FA, SL; data collection and analysis: IK, FA, DA; data interpretation: IK, FA, SL, DA and manuscript preparation: IK, FA, SL, DA.

### CONFLICT OF INTEREST

No conflict of interest has been declared by the study authors.

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