

## The Role of Social Media in Influencing Shisha Consumption Among Jordanian Women

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**Abstract:** Shisha use is a public health challenge in Jordan, particularly among females, due to increasing acceptance and social distribution. Despite the well-known health dangers, standard antismoking campaigns have failed to curb cigarette use convincingly. Social media sites provide unique opportunities to impact smoking behavior by changing perceptions, promoting cessation, and facilitating health-related substitutes. This study explores the influence of social media on shisha consumption among young women in Jordan using qualitative methods, including focus group discussions with young women who smoke shisha. Results emphasize that cultural beliefs, social influence, and psychological drivers of smoking behavior play a role, and social media can both contribute to and help reduce smoking. Exploiting social media communities (with incentive programs), positive reinforcement through digital campaigns, and reframing the narrative of smoking cessation all represent core digital intervention strategies identified in the study. Combining these with social media might help reduce shisha use and influence public health policy. This research highlights the importance of delivering culturally appropriate digital health interventions that are capable of challenging behavioral norms and promoting a smoke-free lifestyle among women in Jordan.

**.Keywords:** Shisha Consumption, Social Media Influence, Smoking Behavior, Digital Health Campaigns

### Overview

Shisha smoking is emerging as a public health challenge in Jordan, with increasing prevalence, despite established health concerns. Recent data suggest that shisha smoking among women is on the rise in Jordan, where it has been reported that 7.7% and 6.6% of current shisha smokers were women and men, respectively (Alkouri et al., 2022; Jaber, 2015). The rise is worrying in the context of the serious health hazards of shisha use, which mentioned respiratory diseases, cardiovascular diseases, and pregnancy-related and maternal disorders (Chaouachi, 2009; Haroon et al., 2024; Qasim et al., 2019). Despite these risks, social acceptance and norms allow shisha to be used by women, contributing to the underestimation and underreporting of its prevalence (Al-Jayyousi et al., 2022; Hawash et al., 2022). The issue is further compounded by the shortfall of targeted public health interventions for this demographic (Mdege et al., 2024; Yadav, 2024), emphasizing the dire need for culturally sensitive strategies to address women's shisha use in Jordan.

Traditional awareness initiatives and regulations have been unsuccessful in significantly compromising use — in particular among younger populations. With the rise of social media, there has been a unique opportunity to utilize digital interventions to influence smoking behaviors (Luo et al., 2021). And yet there is little research on the role of social

media platforms in the process of shaping the perception, discouraging shisha use, and promoting healthy alternatives (Marynak, 2024). This study aims to fill this gap by examining the effectiveness of social media campaigns in mitigating the impact of shisha smoking in Jordan, exploring potential strategies, and assessing their effectiveness in influencing behavioral change. The increased prevalence of shisha smoking among women in Jordan and its related health hazards highlight the substantial research gap in designing and evaluating culturally tailored interventions for this group. While previous research has predominantly investigated the prevalence and related health risks (Abubaker et al., 2023; Alkouri et al., 2022), effective strategies to reduce rates of shisha use among Jordanian women have been less frequently reported. Moreover, despite evidence of its potential for lobbying against smoking behavior, it has not been used specifically to enact smoking cessation in this population. Filling this gap is especially important for guiding public health policies and developing targeted interventions. The research proposes to integrate culturally relevant content with social media platforms to evaluate the extent to which these interventions can facilitate behavior change among this demographic. These findings will be used to guide and improve public health policies, resulting in a better and more efficient addressing of tobacco products among Jordanian women.

## **1 Literature Review**

The increasing prevalence of smoking, such as shisha smoking, among women is now recognized as an important public health problem in many countries, including Jordan (Bashirian et al., 2021; Jafari et al., 2021). Social media platforms have become important means for public opinions and behaviors (Ausat, 2023). With the rising prevalence of social media use among young women in Jordan (Alodat et al., 2023), it may be possible to use this platform to investigate whether smoking behaviors can be reduced. This study explores how social media can serve as an effective tool in reducing smoking prevalence among Jordanian women. It examines the impact of digital media campaigns, peer influence, and social norms in shaping smoking behaviors. Additionally, it investigates how social media platforms can function as intervention models to promote healthier lifestyles and support smoking cessation efforts. By analyzing existing research, this review aims to highlight the effectiveness of digital interventions in fostering behavioral change and public health awareness.

### **1.1 Social Media as a Tool for Health Communication**

Health communication is an area of research that has been increasingly affected by social media, which provides diverse platforms for targeting health behaviors (Dang et al., 2021). Social media have a unique space to deliver health information, empower positive behaviors, and form virtual communities to promote healthy lifestyles (Loss et al., 2014). Researchers have long known that social media has the potential to influence behaviors related to health, especially in young adults. According to Lister et al. (2011), offering an interactive platform for users to share their personal experiences, engage in health-related discussions, and receive timely health information Zhang, N, et al. This interactive aspect may also engage users more personally with the content than traditional means, potentially increasing the efficacy of health campaigns (Lin & Chang, 2018).

As far as quitting smoking is concerned, previous research has demonstrated that social media campaigns can increase awareness of smoking-related dangers, encourage healthier behaviors, and provide support to quitters (Naslund et al., 2017). For instance, a study by

Reno and Poole (2016) showed that social media campaigns promoting smoking cessation by providing social support to individuals quitting smoking. Participants in these studies reported feeling more empowered and motivated to quit smoking when they had access to tailored content that met their needs and interests (Yoo et al., 2016). Likewise, social media platforms have proven useful for rapidly disseminating population-level urgent, evidence-based information relevant to smoking (Duke et al., 2014).

## **1.2 The Role of Cultural Norms in Shaping Smoking Behaviors**

Smoking becomes normalized into social settings in many cultures, and certain characterizations are culturally acceptable or desirable. In Jordan, shisha smoking has long been integrated as a social activity, particularly by men, though increasingly by women. Women are commonly viewed smoking shisha socially, and they are afforded the opportunity to meet together with family or friends in social places (Al-Natour et al., 2021; Shadid & Hossain, 2013). The normalization of smoking-related behaviors in Jordanian culture is one of the other challenges faced in reducing smoking rates among women (Abu-Rmeileh et al., 2018). Social Media, of course, being a medium where cultural and social norms stand or fall, can be a major force in fighting the perception of smoking (Alzyoud et al., 2014).

Liao (2023) states that individuals exposed to media content that challenges cultural norms and shows alternative behaviors are more likely to modify attitudes and behaviors. For example, when the content on social media portrays smoking as detrimental — or rather promotes healthier alternatives — it has the potential to break the cycle of smoking normalization and provide new frames to understand/engage in social interactions (Hoek et al., 2022). International studies revealed that vulnerability towards smoking could be modified through social media by viewing smoking as an unhealthy and undesirable behavior (Bashirian et al., 2021). The use of social media to reduce smoking among Jordanian women will create a mechanism of behavioral conditioning to associate female smoking with a socially undesirable image alongside the provision of health and well-being.

One of the most significant advantages of social media is its ability to facilitate the formation of virtual communities. These communities often serve as support networks where individuals can share experiences, offer encouragement, and cultivate a sense of belonging (Haim-Litevsky et al., 2023). Peer influence, particularly among younger generations, is a powerful force in shaping behaviors. Henneberger et al. (2021) identified peer influence as a crucial factor in modifying health-related behaviors, including smoking cessation. Social media plays a vital role in shaping smoking behaviors by providing a platform for individuals to engage with like-minded peers, thereby reinforcing behavioral change through social interaction and shared experiences.

Social media communities can act as positive harbors for the purpose of connecting Jordanian women who attempt to refrain from smoking or quit smoking (Berger et al., 2021). For such reasons, these networks can be particularly empowering for women feeling isolated and experiencing reluctance to seek assistance in person (Berger et al., 2021). In addition, peer groups in social platforms, e.g., Facebook, Instagram, and TikTok, can reinforce the anti-smoking message and deliver it in a much more socially acceptable and powerful method (Bunting et al., 2021). For example, online communities, such as Wellness and Health-Focused Social Media Groups, provide a platform for women to share their personal health journeys, challenges, and achievements while offering mutual support, encouragement, and accountability. Such communities foster a sense of social responsibility

and motivation, which can lead to meaningful behavioral changes and sustained commitment to health-related goals.

Leveraging Digital Media for Positive Reinforcement can change behavior. Flash apps or bots on messenger can also be used to provide health-related content such as motivational quotes, success stories, and health tips to encourage women to quit smoking on a more lasting basis (Mitchell, 2024). Research indicates that regular exposure to positive reinforcement is an effective way to strengthen a person's commitment to change (Jokar et al., 2023). Just as an example: Instagram and TikTok are platforms where motivational content, fitness journeys, and quitting smoking stories can be shared on a regular basis as a constant reminder of health and self-care.

Additionally, social media can be used as a way to get women to participate in smoking cessation challenges, such as the "30-day quit smoking challenge," or virtual support groups that help women quit smoking through prizes and recognition of their progress. González-Bailón and Lelkes (2023) illustrated that interactive social media-interactive challenges can yield greater engagement and more successful behavior change because they generate a collective atmosphere of participation and encouragement. Online trackers and reminder systems represent another family of digital tools that individuals can use to track their progress and focus on their goals (Lu et al., 2021). Social media has the potential to provide ongoing, positive reinforcement through rewards and recognition, which may notably increase the chances of women quitting smoking (Siersbaek et al., 2024).

Social media provides a platform for people to take charge of their good health. In a conservative society like Jordan's, traditional gender roles often shape women's behavior, and smoking can be perceived as an act of defiance or a coping mechanism to counter social pressures. However, social media would reverse this narrative by constructing quitting smoking as a behavior of self-care and agency (Luo et al., 2021). According to research, people are more likely to make healthier choices if they visualize those choices leading to positive and empowering outcomes (Qasim et al., 2019).

A strategy that may be useful for increasing compliance with smoking cessation among Jordanian women is to reframe the behavior as something that they do to empower themselves and take care of themselves. Social media campaigns could focus on the positive aspects of quitting (increased energy and health, higher self-esteem) and present quitting as a choice that empowers rather than a failure. Women naturally have a desire to emulate, and influencers and public figures who share self-care and health programming messages will help to promote their quitting among them. A study by Lewis et al. (2016) describing smoking cessation framing as a form of personal empowerment rather than a sign of weakness or failure had better outcomes (Sweileh, 2024). By reframing the conversation in this way, it could appeal to Jordanian women on a personal level — seeing the act of smoking cessation as less of a sacrifice and more of a gift to themselves; a gift to create a healthier body, a more empowered ex-smoker, and a more confident person this alone to keep truly to themselves.

## **2 Methodology**

### **2.1 Research Design**

A qualitative research design was adopted to explore participants' views, attitudes, and behaviors toward shisha use and the possible role of social media in influencing these behaviors. Qualitative research methods are particularly adept at exploring complex social phenomena and elucidating the nuances of participants' experiences. These methods

facilitate a comprehensive understanding of human behaviors and interactions within their natural contexts ( Muurlink and Thomsen, 2024).

## **2.2 Sampling**

Using a convenience sampling approach, participants were recruited from different coffee shops around Amman, which are known to be popular venues for shisha smoking among young adults. Researchers circumvented the gating effect by approaching young women who met the demographic criteria, explaining the study goals, and guaranteeing that participation was voluntary and confidential. Interested screened participants who provided consent were recruited for focus groups.

## **2.3 Focus Group Discussions**

Eleven focus group discussions were held with groups of 3–5 participants. Focus groups are a well-established qualitative approach for uncovering collective views and engendering rich discussions on topics that may be influenced by social norms and peer behavior. This approach facilitates interaction, criticism, and the development of ideas among participants and yields richer insights on the research topic.

## **2.4 Data Collection**

Each focus group (FG) session lasted approximately 45–60 minutes, and a trained moderator facilitated the sessions using a semi-structured interview guide. The guide consisted of open-ended questions meant to provoke participants' perspectives on smoking shisha, the significance of social media in their lives, and its possible influence on their smoking behaviors. Each session was audio-recorded with participants' consent to ensure the accurate capture of the data.

## **2.5 Data Transcription and Analysis**

All audio recordings were transcribed verbatim, and transcripts were verified for accuracy. The qualitative data analysis software NVivo, was used to help organize and code the large text datasets and to analyze data. Thematic analysis was used to examine common patterns and themes in the data according to the following steps: Read and re-read transcripts so that the researchers immersed themselves in the data. We systematically coded the transcripts to identify significant statements and themes regarding the use of shisha and the influence of social media. Codes were aggregated into higher-order themes that encapsulated the core of participants' lived experiences and perceptions. The themes were reviewed and refined to confirm they represented the data accurately. Most importantly, each theme was clearly defined and assigned a name that conveyed its fundamental meaning.

# **3 Results**

Theme One: Current Prevalence and Patterns of Shisha Smoking Among Different Demographics of Jordanian Women

Shisha smoking among Jordanian women demonstrates that there are no significant differences in smoking patterns among women in 4 social classes; however, higher rates of

smoking are more prevalent among younger women (aged 18-24) and women from culturally influenced backgrounds. Young women mainly smoke shisha as a social activity, while older women consider it a cultural tradition or a way of entertaining and relaxing. Qualitative interviews identified three important sub-themes: social and cultural acceptability of shisha, frequency and location of use, and age-related differences in consumption.

### **3.1 Social and Cultural Acceptance of Shisha**

Shisha smoking has long been culturally accepted for various populations in Jordan, but results suggested that older females from middle and upper socioeconomic classes in the country may be at risk. Several participants mentioned that shisha is an integral part of social gatherings as well as family traditions. (Shisha is often mistakenly perceived as being less harmful than cigarettes, and research shows that social settings promote incorrect beliefs about this type of smoking.) One participant, age 27, who lives in Amman, said:

“Shisha has always been in our in-person socializing. My mother and aunts smoke it, so it’s not bad; it just seems like culture.”

This demonstrates how shisha use is passed down through the generations in the family, with younger women emulating the practice of the older women in their family. Another, a 42-year-old woman from Zarqa, reiterated how shisha smoking tends to not be seen as dangerous as cigarette smoking:

“For many women, especially housewives, smoking shisha is a part of the routine to overcome the fatigue after a long day. “It’s not considered dangerous because it’s not like cigarettes.”

This underscores an important public health problem: Although cigarette smoking has long been considered harmful to health, shisha is perceived by some as a less harmful alternative because of water filtration, even though evidence shows otherwise.

### **3.2 Frequency and Pattern of Use**

According to the study results, the difference in shisha smoking among Jordanian women depends on several factors, which are different based on personal and social situations. Younger women primarily consume shisha in public settings such as cafés, whereas older women use it in domestic environments. A university student described her pattern of use at 22:

“I smoke shisha when I go out with friends, perhaps once or twice a week. It’s fun to do at cafés.”

In contrast, a 35-year-old woman from Amman wrote that shisha consumption is made part of daily routines at home:

“At home, we make shisha almost every night when watching TV. We smoke it more often than we drink coffee or tea in our household.”

This highlights the normalization of shisha in daily routines, especially among families and social networks. The home-based nature and social acceptability of shisha smoking make it particularly challenging to implement public health interventions because it limits opportunities for policy regulations and awareness initiatives.

### 3.3 Age-Based Differences in Shisha Consumption

Age is a significant determinant of attitudes and behavior regarding shisha smoking. Younger women, especially in their 20s, see shisha as a stylish fad, influenced by social media and peer pressure. A 29-year-old marketing worker said:

Younger women are more adventurous in exploring different flavors and sharing it on social media.” It’s popular to smoke shisha in Internet cafes.”

This echoes the increasing lifestyle adoption of social media, where behaviors are driven by aesthetics and validation by peers. Older women were more likely to see shisha culture as an ongoing or habitual practice as opposed to one driven by trends. A 46-year-old homemaker observed:

“Older women don’t view shisha as a ‘thing’ to post on the Internet. It’s just a daily habit they don’t think much about.”

This disconnect of perceptions among younger women versus older women indicates there may be separate intervention strategies that may be warranted. Younger women may engage with digital awareness efforts that capitalize on social media influencers, whereas older women may need to be reached through community-focused health education programs.

Theme Two: Cultural, Social, and Psychological Influences on Women’s Initiation and Continuation of Shisha Smoking

A major influence on the initiation and use of shisha among Jordanian women, this requires consideration of the cultural, social, and psychological aspects. Such factors frame women’s perceptions of shisha, their motivation to use it, and their willingness to contemplate cessation. The research has found three main contributing groups: Cultural, social, and psychological.

### 3.4 Cultural Factors

The act of smoking shisha is believed by some to form a significant part of Jordanian social and family life. Several women indicated that they were introduced to shisha during family gatherings, which reinforced its cultural significance. A 34-year-old woman from Amman said:

SHISHA “I first tried shisha at a family gathering. My aunts and cousins were smoking, and they urged me to give it a shot. It felt kind of like a rite of passage.”

Another recurring cultural thing is the hospitality and socialization that goes with shisha:

“When people come to visit, we provide shisha; it’s a tradition for us. It’s like when you serve someone tea or coffee, it’s a way to offer hospitality,” A 40-year-old woman added.

Also, some women see shisha as more socially acceptable than cigarettes, especially in conservative communities. One participant, 28, said:

“Smoking cigarettes is a taboo for women in our culture, but shisha is considered a more refined and acceptable version.”

### 3.5 Social Factors

Social factors are an important driving force in the initiation and continuation of shisha smoking. A combination of peer pressure, social bonding, and media portrayals helps to normalize the practice, especially among younger women. A university student from Irbid described:

“I’m not going to lie, I didn’t like the taste at first, but all my friends would smoke shisha when we went out. Finally, I just joined the crowd.”

Additionally, social media has played a role in the rise in popularity of shisha, and many women are bombarded with images of influencers and celebrities glamorizing the habit:

“The fact that influencers post new shisha flavors and fancy cafés makes it seem cool. “It doesn’t feel like smoking — it feels like a lifestyle.” (using social media, 25 years old)

Furthermore, shisha cafés are readily available, making it an easy and attractive social activity. As one 30-year-old participant noted:

“There are so many shisha lounges now that it’s become the default plan when meeting friends. “It’s more common than going out to eat.”

### 3.6 Psychological Factors

Psychological motivations also help to sustain shisha use. The appeal comes from stress relief, relaxation, and the perception that it is less harmful than cigarettes. A 37-year-old salaried employee said:

“I like to unwind after a long work day with shisha. It’s my way of destressing.”

Similarly, health misinformation risks related to shisha were also apparent:

“I know smoking is not good, but I always thought the shisha is less harmful as the smoke goes through water,” he said. (31-year-old, teacher)

For some women, shisha smoking was a symbol of personal freedom and modernity:

“My parents were strict when I was growing up, so now smoking shisha is a small form of independence for me.” This is a 26-year-old graduate student.

*Theme 3: Impact of Social Media on the Perceptions and Practices Associated with Shisha Smoking among Women in Jordan*

Some respondents noted that digital platforms such as Instagram and Facebook can motivate them when they see smoking cessation or healthy behavior content. This campaign can also promote daily or weekly challenges, motivating women to share their experiences on quitting or reducing shisha consumption, ultimately creating a virtual “support group”. Motivational quotes, posts from fitness influencers, and advice from health experts can provide constant encouragement to elevate morale and increase the chances of changing behavior for the long term. A respondent even said, “I have joined 30-day losing weight on Facebook, People share their success, and I feel motivated to lose weight, I think it will work to stop smoking shisha.”

Moreover, many of those surveyed said seeing content about self-care, wellness and mental health on social media changed their views about smoking. Social media is a place to spread messages of health, self-development, and empowerment. Such a campaign could build on narratives about women who put their health first and spin this as empowerment. Using influencers and public figures who promote the benefits of self-care and health may encourage women to rethink smoking as part of their identity and have healthier and empowering replacements. “This is why I am committing to quit smoking,” one respondent quoted. “I’ve realized that true empowerment isn’t just about looking good but also about feeling good and taking care of my health.

## 4 Discussion

Social media has been a powerful tool used by youth in shaping the attitude of the public. In Jordan, platform-based images and content have a significant effect on the perceptions regarding health behaviors, such as shisha smoking, ranging from public health concerns to

a commonly shared social experience among women. Social media reinforced the harmful behaviors and tendencies by glorifying the act of shisha smoking, but it also can challenge the existing success to set up healthier lifestyles. A targeted campaign can encourage a smoke-free life among young Jordanian women using the power of digital platforms.

It is one of such minor yet significant ways that social media shapes perception about shisha smoking, through reflection and reinforcement of cultural norms. Shisha is often glamorized in Jordan and some societies as a social activity among women to be with their friends. Instagram and TikTok further compound these messages, where shisha becomes linked to being feminine and social. Consequently, young women can be influenced to indulge in smoking to 'fit in' with friends or to show off a lifestyle. Patterns of behavior and values such as the ones mentioned above have a tendency to be self-perpetuating, and social media only serves to reinforce these values with even more force than did our immediate surroundings in a previous time. Health advocates, influencers, and innovators can use Instagram stories, posts and TikTok videos to tell the horrible realities of shisha smoking and highlight the long-term health risks such as respiratory problems, cardiovascular disease, and skin damage.

Social media is also central to the phenomenon of peer pressure, especially for young women. Social media platforms such as Facebook, WhatsApp, and Instagram can support harmful behaviors or challenge them through a sense of belonging and community. Peer groups on such platforms may also play a role in making shisha smoking more socially acceptable, with users sharing images or videos of themselves at social events where shisha features prominently. Online communities about health and wellness, on the other hand, work in the opposite direction. Safe spaces where women share their experience of shisha smoking, challenges towards its cessation, and support towards a smoke-free lifestyle can also be created on Facebook groups and through WhatsApp chats. On online forums, the support that comes from chatting with other specialists or individuals who have effectively stopped using can fortify you — it shows that the choice to stop is an aggregate exertion.

A good approach to reducing shisha smoking is positive reinforcement using digital media. Social media platforms are particularly well-positioned to celebrate small wins and progress as they happen. Influencers and ex-pat smokers can motivate others to follow suit by sharing their own success stories. Use Instagram and TikTok to share “before and after” stories of women who have kicked the shisha habit, revealing the benefits to health, energy, skin, hair, and a woman's general appearance. Such success stories act as a powerful testimony to inspire and motivate similar positive action in others. Motivational quotes and tips on quitting smoking can be posted on Snapchat to keep your audience interested in what you have to say while staying focused on their health. Social media positive reinforcement can be leveraged by posting messages like "Every smoke-free day is a day you win for your health, for your future, and for your self-esteem," that encourage each shisha-free day as progress towards a better future. This creates a positive atmosphere with content that promotes health and vitality that young women can identify with and that inspires them to quit smoking.

This perception rests on the significant role of self-care or stress relief through shisha smoking among women. Shisha smoking is a social ritual for a considerable number of individuals, particularly young women, who smoke shisha as a method of relaxation or to combat stress after a long working day. In contrast, social media provides an off-beat avenue to encourage healthier ways of stress relief and relaxation. Instagram, YouTube, and TikTok are some examples of platforms that promote various self-care practices like mindfulness, yoga, physical exercise, and meditation, which can help have long-lasting effects on mental and physical well-being without leading to the adverse effects produced by cigarette smoke. Positioning self-care as an empowering practice that has nothing to do with smoking will

help shift the narrative of relaxation for women. This undermines the notion that shisha is essential for relaxation and pushes the agenda of better coping mechanisms for stress and anxiety. Such reframing helps to promote smarter choices, but also bolsters women's sense that smoking is not a source of their value or well-being -- and they do not need it to feel good about themselves.

## 5 Conclusion

The influence of social media on perceptions and behaviors of shisha smoking in young Jordanian women. But social media can also be a tool to promote healthy behavior and have people challenge this way of thinking that can be toxic. Through the strategic use of digital media — whether it be through mirroring cultural norms, addressing the power of peer influence, rewarding positive behavior, or changing narratives around self-care — social media can be a tool for change. This can pave the way to a smoke-free world for young women in Jordan by harnessing the potential of platforms that have so much more power over the young generation than anything else in the current time.

## 6 Limitations and Future Research

A key limitation of this qualitative study of the role of social media in decreasing shisha use among women in Jordan is the restricted generalizability of the results. Because qualitative research typically asks a few very specific groups of individuals a few questions, the findings may not fully reflect the entire population of women in Jordan. The sample size and demographic characteristics, such as age, socioeconomic status, or geographic location, of the participants may not reflect the range of experiences and perspectives present in the larger community. Thus, Future work in this area can build by addressing the limitations of the current study to better (specifically) assess and evaluate the potential role of social media in the overall decrease in the prevalence of use of shisha among women in Jordan.

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