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Pleasure and practice: The individual and social underpinnings of shisha use

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Key Words: shisha cafes, young people, socialisation, peer influence, alternative for non-tobacco products

Abstract

Objectives: To explore 1) the social function of shisha cafés for young people living in the UK and 2) other alternative activities (existing or potential) that do not involve tobacco smoking.

Methods: We conducted qualitative interviews with young adults (age 18- 30) in Leeds, UK. Snowballing sampling was used in selecting the participants. Interviews were audio-recorded and explored the perspectives and experiences of young people in as well as potential alternative activities. Data were transcribed and analysed thematically.

Results: Shisha use plays a central role in social interactions. Youth described using shisha because of emotional and sensory pleasure. Shisha use was implicitly endorsed by respected professionals, such as doctors and university lecturers, who were seen smoking it. Most, but not all, shisha smokers acknowledged that shisha use is harmful. Suggestions for reducing shisha use included use of non- tobacco alternatives, legislation to reduce access, and alternative means for socialising, such as sports.

Conclusion: For young people in the UK, the known health dangers of shisha are outweighed by its social benefits and shisha is perceived as acceptable. Interventions to reverse the increase in shisha cafes should focus on both individual smoker, as well as the community, without sacrificing the importance of social interactions.

ARTICLE SUMMARY

Article focuses

- To explore the social function of shisha cafes for young people living in the UK.
- To explore other alternative activities (existing or potential) that do not involve tobacco smoking.

Key messages

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- Waterpipe smoking is becoming popular among young people because it plays a central role in social interactions.
- Shisha use is endorsed by respected professionals like doctors and university lecturers who were seen smoking it.
- Shisha smokers acknowledge that shisha use is harmful.
- Use of non- tobacco alternatives like legislation to reduce access and alternative means for socialising such as sports can contribute in reducing shisha use.

Strength and limitations of the study:

- This study is one of the few studies done in UK with an aim of exploring the use of niche tobacco, a case of young people's perception of shisha cafes.
- All the participants recruited were found to be students and yet the study aimed at including even those young people that were not in school. The results may not necessarily represent the views of young people that were not in school.

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Introduction

Shisha is a tobacco product that is smoked communally in a water pipe, narghile or hookah. Shisha smoking has origins in the Middle East, South East Asia and Northern Africa. [1] It commonly takes place in a cafe setting or other social gathering over one or more hours. Like any tobacco smoking, shisha contains harmful materials such as carbon monoxide, nicotine, and lead among others. [2, 3,4] According to the first international conference on water pipe tobacco research held in 2013, shisha smoking is a worldwide epidemic that needs urgent public health attention. [5] Shisha smoking is a particularly widespread practice among young people. [6,7]Studies from two universities in America found that the prevalence of any life time hookah use was 25- 28% among university students, [8,9] while studies from the UK indicated that shisha smoking was between 11-18% among university students and 8% among secondary school students.[10,11]

Research to date suggests that shisha use among young people is promoted primarily through peer influence [12,11,13] as well as percieved benefits, such as reduced anxiety and entertainment.[14,15,16] Many young people learn to smoke from friends, especially in high school or university .[14] Youth are either taken to shisha cafes by their friends to smoke or they watch their friends smoke at their homes or at school .[14] Shisha use is also promoted through flavoured tobacco products, [4,6,17,7] use of the internet [18,19,20,8,21] and gaps in implemetation of smoke free policies. Cases of non-compliance with smoke free legislation among the owners of shisha cafes has been reported .[19,22] Interventions targeting these reasons for shisha use have not been successful to date. Additional approaches are needed.

Shisha is well known to carry important meaning socially and among families, [23,6,24,25] yet little research has explored how this meaning could inform shisha ceasation interventions. We therefore conducted qualitative interviews of young people in the UK to explore the social functions ascribed to shisha cafes with a goal of identifying areas of intervention.

Methods

Participants

Inclusion criteria for this study were being 18-30 years of age, speaking English, smoking shisha in a shisha cafe at least once a week in the last one month, having lived in Leeds UK

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for more than one year, and being willing to provide signed informed consent. To recruit participants, one shisha smoker was initially identified from a shisha cafe in an inner city neighbourhood of Leeds (Harehills), who then identified friends for potential recruitment. These friends also identified their respective friends for potential recruitment (snowball sampling). Recruitment was performed with the help of community engagement officers at a local community centre (Hamara Health Living Centre).

Data Collection

After obtaining informed consent, socio-demographic information was collected and a single face-to-face semi-structured interview was conducted with each participant. The interview consisted of open-ended questions aimed at exploring young people's perceptions of shisha cafes in Leeds, UK. The interview guide was piloted to help in testing the adequacy of the questions [26] and modified accordingly. Interviews were audio-recorded. The primary questions asked were: ''How do you feel when you visit this café?'', ''What would you say has changed in your life when you started coming to this shisha café or any other?'', ''What would you say is the significance that you attach to going to a shisha café?'' and ''If there was to be an alternative to shisha, what would that be and why?'' Additional questions were probes to further explore responses to the primary questions.

Data Analysis

Recorded interviews were transcribed and the generated textual data was analysed using thematic approach. [27,28] In brief, codes were initially identified from the first eight interviews. Following an iterative process with additional interviews, the codes were refined and formalised as a codebook. All interviews were then coded. Themes were generated and supported with illustrative quotations from the interviews. Participants were enrolled until thematic saturation was achieved.

Ethical approval

Ethical approval was obtained from Leeds Beckett University and the local community centre (Hamara Health Living Centre).

Results

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Participants

A total of 48 participants were identified and screened. Of these, 31 enrolled in the study. Eight people declined due to lack of time for interviews, five did not give any reason and four people were not comfortable to be interviewed by a stranger. Participant socio- demographic characteristics are shown in Table 1. The majority were single, male, students in their 20s. Approximately half were South Asian, with the remainder split between blacks and whites.

Table 1. Participant socio- demographic characteristics

Characteristic		**N (%) or Mean (SD)**
Age (Years)		24.8
Gender:	Male	21
	Female	10
Race/ethnicity	South Asian	16
	Whites	8
	Black	7
Marriage status	Single	26
	Married	5
Occupation	Student	27
	Working	4

SD= Standard Deviation

Themes

The following themes were identified: 1) Shisha use plays a central role in social interactions, 2) Shisha cafes are pleasurable, 3) Shisha cafes are implicitly sanctioned when used by respected professionals, 4) Most, but not all, acknowledge that shisha cafes are harmful, and 5) Shisha cafe use could be reduced through efforts aimed at the individual and the community.

Shisha use plays a central role in social interactions

Most participants used shisha in cafés, which served as a place where young people could meet to socialise.

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''I like going to shisha cafés because I meet different people while I am there. We share different issues including school, friendship and even families''- Male, 27 years

Some female participants of South Asian origin highlighted that shisha cafes are the only places they can socialise with boys. One of the participants said;

''My father does not allow boys to come to visit me. The only place I can meet the boys is a shisha café because my father allows me to go there. This makes me interact with the boys and even share contacts. If you do not interact with boys, where do you get a man to marry you in future? So, cafés do it well for me''- Female, 20 years

Many participants said that shisha cafes are relaxing settings where they can meet with friends and enjoy time together. They emphasised the ability to develop their social networks through patronage of different cafes. One participant said;

''I sometimes travel a far distance from my home to meet up with my friends in different cafes. It's good to visit other shisha cafes that I am not used to as this increases on the network of friends which relaxes my mind''- Male, 18 years

This network of friends, however, can have negative influence as well. Other participants stated that they used shisha out of peer pressure, rather than a personal desire to use it. They go to shisha cafes to be with their friends and end up smoking while there.

''I have friends who smoke shisha in shisha cafes and I go with them too. When I reach these cafes, I have to take shisha as well because all my friends are taking shisha''- Female, 18 years

Some participants used shisha outside of cafés. For instance, shisha may be served at important functions like wedding functions or burial functions. It functions as a signal of welcoming, complementing other activities like watching TV or having a drink. In these settings, participants viewed shisha smoking as a show of respect.

''If my friends come to visit me, I have to prepare them shisha. When preparing food, I have to prepare shisha as well such that we as a family share with the visitors''- Male, 20 years

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''...... Sometimes just to change home environment, my dad takes us out to shisha cafés where we catch up with other friends and peers''- Male, 24 years

Shisha cafés are pleasurable

In addition to enabling social interaction, shisha cafés brought participants pleasure. Participants described the emotional benefits derived from the experience. One participant stated:

''When I am stressed, I go to a shisha café. When I am there, I meet with my friends and I share with them my problems and I become psychologically fine''- Female, 19 years

Participants also found sensory pleasure through use of shisha. They stated that different flavours put in shisha and the soothing noise of bubbling water coming out of shisha apparatus enticed them to frequent shisha cafés.

''I like different flavours in the shisha. I cannot even take a single day without going to a shisha café because of this flavour. Pineapple flavour is my favourite but there are different flavours''- Male, 25 years

''You can imagine the kind of sound that come from bubbling water in the shisha machine, very relaxing, the sweet smell coming out while smoking. A very sweet smell indeed. I enjoy that all the time''- Female, 18 years

Shisha cafés are implicitly sanctioned when used by respected professionals.

Some participants reported that professionals including doctors, public health officers and university lecturers smoke shisha. Participants expressed respect for these individuals and felt that shisha must be acceptable if they were using it. One participant said:

''I have friends who are doctors and lecturers who smoke shisha with me. If a doctor can smoke shisha, who am I not to take shisha? These are respected people and we have to believe in what they do''- Male, 25 years

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This implicit endorsement of shisha remained even when participants acknowledged the negative health effects of smoking shisha. The behaviour of these respected professionals was seen as an endorsement of safety and/or acceptability of many participants.

> *''Doctors always tell us not to smoke but they smoke, they tell us not to take alcohol but they take it. Some of them even take shisha too. I know all these risks are there but I will keep taking my shisha as doctors and other professionals do''- Male, 20 years*

Most, but not all, shisha smokers acknowledge that shisha cafes are harmful

Many participants clearly stated that shisha smoking has many negative consequences to their physical health. One participant said:

> *''A few months ago, I started experiencing sleepless nights and increased heart rate when I am climbing a steep slope. This started months after start of shisha use.''- Male, 20 years*

Another participant said;

> *''I used to be a footballer and before I began using shisha, I used to run without any problem but when I began using shisha, my ability to run began to decrease''- Male, 21 years*

Many participants specifically felt that shisha puts them at risk of getting cancer, dental problems and cardiovascular diseases.

> *''I have read from different sources that shisha smoking predisposes people who use it to different diseases including cancer of the lungs and cancer of the mouth'' Male, 23 years*

Shisha café use could be reduced through efforts aimed at the individual and the community

When asked about potential ways to reduce shisha use, participants felt that non-tobacco alternatives could be offered in shisha cafés that preserved the ritual of shisha smoking.

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> *''I would use any alternative without tobacco comfortably if the alternatives were served in shisha cafés, share it as we do with shisha but more safety measures should be put to avoid possible cross infections from one person to the other while sharing the mouthpiece''- Male, 22 years*

However, other participants believed that non-tobacco alternatives would not be helpful. Rather, cigarette cessation programs should be adapted to help with quitting smoking of any kind.

> *''I am a shisha smoker but I want to stop smoking completely. Alternatives should not be a priority to any person. I believe that smoking shisha is not good and to all people who smoke should be supported to stop smoking completely'' Female, 19 years*

Some participants also advocated for laws to reduce shisha access.

> *''I smoke because I have a right to do anything I want. I propose that excessive rights especially those that make people vulnerable should be reduced so as to have a healthy society. Otherwise, it becomes hard to convince people not to take shisha.'' Male, 24 years*

Regulations, however, would have to be specific to shisha, and some participants did not think general tobacco legislation applied.

> *''In UK, there is a general regulation about tobacco use but i think specific regulations should be adopted so as to reduce shisha use in our communities.'' Female, 19 years*

Another participant believed that use of their peers to pass on information that would help peers to change their behaviour would be of help.

> *''Use of people who previously used shisha in their life in giving information about the effects of shisha to fellow youth would be of help.'' Female, 21 years*

Finally, other participant suggested that alternative forms of socialising like sports and drama would help reduce shisha smoking.

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''Instead of going to shisha cafes as a socialising setting, we young people should get involved in sports like playing football, volleyball and netball or even get involved dance and drama aimed at educating other young people'' -Male, 21 years

''It's more healthy for us as young people to get involved in sports than smoking shisha.'' –Female, 20 years

Discussion

This study found that shisha cafés provide a place for people to come together and find pleasure. Shisha use is voluntary, but also influenced by peers and other cultural expectations. Despite being pleasurable, many participants recognised the harm that can arise through shisha smoking and suggested various individual and community level interventions to reduce it. Several promising interventions based on recommendations found on this study include peer-based interventions, alternative social events, and informed legislation.

Peer-based interventions may be appealing as they have been shown to be acceptable, feasible, and low cost in other settings, especially in comparison to more formal interventions that rely on professional health care providers. Peers share common characteristics, circumstances, and experiences- all of which are thought to facilitate their acceptability to target populations and increase their influence and authenticity.[29] Prior research has shown that people are more likely to hear and internalize messages, and thus to change their attitudes and behaviours, if they believe the messenger is similar to them and faces the same concerns and pressures that they face .[30,31] Importantly, peer-based interventions have been successful in projects aimed at reducing the incidence of cigarette smoking among young people .[32] A study involving an informal, school-based, peer-led intervention for smoking prevention in adolescents showed a reduction of 22% in the odds of being regular smoker compared with a control .[33] These types of interventions could be readily adapted for use with shisha smoking.

Promotion of alternative social events is another promising intervention approach to reduce shisha smoking among young people. Examples include sports, music, dance, and drama among others. The mechanism of effect may lie in the fact that social events enable people of compatible backgrounds to come together to achieve a common goal .[34] For example, some studies on sports show that participants are linked by shared perspectives, language, and

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activities, thus creating a shared network and bonds that go beyond a desire to compete .[35] Other studies on sport participation also place emphasis on the value of shared experiences and linkages to others .[36] Sports may also be used to pass on information in different areas. Educative sessions for instance, may be provided during or after sport events. Coaches, teammates, and other respected persons may serve as guest speakers to engage the audience. This approach was taken in India where sexual and reproductive health including HIV/AIDS and life skills to empower youth has been integrated with sports. [37]Drama has been widely employed in prevention of HIV/AIDS through community mobilisation and raising awareness in Uganda and South Africa. [38] Also in a study from India, use of information, education and communication (IEC) activities in form of drama and folk dances have shown success in increasing awareness about HIV/AIDS from 58% to 70% ($P<0.01$) and in increasing knowledge regarding prevention of HIV by using condoms increased from 42% to 61% .[39]

Informed legislation specific to shisha maybe a third avenue for reducing use of shisha. Major breakthroughs regarding public health policies in tackling cigarette smoking have been seen in many countries of the world, including the UK. Some examples are smoking bans in public places, tax policies, and limits on smoking advertisements .[40] Several studies aimed at reducing tobacco use globally have shown that increasing taxes on tobacco products can be used as a tobacco control strategy as long as this strategy is well implemented .[41] High prices can greatly reduce tobacco use .[42] Studies from high income countries finds that an increase of 10% price will reduce the overall use of tobacco by 4% on average [42] compared to low and middle income countries where the results are even higher. However, most of the regulations and policies are focused on cigarettes rather than other types of tobacco products like shisha .[43,6] In many countries including UK, shisha is exempted from tobacco policies including reduced means of enforcing relevant policies to control tobacco. This situation has led to the explosion of shisha cafes and restaurants across the globe. [43,6] Lessons learned from anti-cigarette campaigns need to be applied to shisha smoking as well.

Two aspects of shisha warrant unique legislation. The first is related to packaging and associated warning labels. [44] Globally, the packaging of cigarettes is nearly uniform with the same number of cigarettes in the similarly sized packs and cartons. In contrast, shisha is packaged in various amounts and in differently shaped containers. Moreover, shisha is often used communally and individuals may not see the packaging. Shisha users may therefore be unaware of the risks related to the tobacco, burning charcoal, or even the infections that

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would spread through sharing of the waterpipe; [6,45,46] non-removable labelling may be needed for the waterpipes specifically. Recently, some countries have started to implement policies for warning labels on shisha packaging. In Turkey, for instance, legislation dictates that these labels should be placed on all the shisha packaging, covering at least (65%) of the package. [47] Secondly, flavoured shisha has a small amount of tobacco relative to the profit margin ;[22] policies aimed specifically at tobacco only may therefore be inadequate and specific legislation aimed at flavoured shisha may be needed to be effective.

Conclusion

Shisha use is rising and may pose significant health risks for those who smoke it and those who are exposed to it. This study provides informative perspectives on the role shisha plays in social interactions, factors influencing shisha use, and potential means for reducing it. Future work should focus on intervention development to prevent the negative individual and public health consequences of shisha use without sacrificing the importance of social interactions.

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BMJ Open

Pleasure and practice: A qualitative study of the individual and social underpinnings of shisha use in cafes among youth in the United Kingdom

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Pleasure and practice: A qualitative study of the individual and social underpinnings of shisha use in cafés among youth in the United Kingdom

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Key Words: shisha cafes, young people, socialisation, peer influence, alternative for non-tobacco products

Abstract

Objectives: To explore 1) the social function of shisha cafés for young people living in the UK and 2) other alternative activities (existing or potential) that do not involve tobacco smoking.

Methods: We conducted qualitative interviews with young adults (age 18- 30) in Leeds, UK. Snowballing sampling was used in selecting the participants. Interviews were audio-recorded and explored the perspectives and experiences of young people in as well as potential alternative activities. Data were transcribed and analysed thematically.

Results: Shisha use plays a central role in social interactions. Youth described using shisha because of emotional and sensory pleasure. Shisha use was implicitly endorsed by respected professionals, such as doctors and university lecturers, who were seen smoking it. Most, but not all, shisha smokers acknowledged that shisha use is harmful. Suggestions for reducing shisha use included use of non- tobacco alternatives, legislation to reduce access, and alternative means for socialising, such as sports.

Conclusion: For young people in the UK, the known health dangers of shisha are outweighed by its social benefits and shisha is perceived as acceptable. Interventions to reverse the increase in shisha cafes should focus on both individual smoker, as well as the community, without sacrificing the importance of social interactions.

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ARTICLE SUMMARY

Article focuses

- To explore the social function of shisha cafes for young people living in the UK.
- To explore other alternative activities (existing or potential) that do not involve tobacco smoking.

Strength and limitations of the study:

- This study is one of the few studies done in UK with an aim of exploring the use of niche tobacco, a case of young people's perception of shisha cafes.
- All the participants recruited were found to be students; results may not reflect the views of young people who were not in school.
- Majority of participants were South Asians; results may not necessarily represent the views of all young people in UK.

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Introduction

Shisha is a tobacco product that is smoked communally in a water pipe, narghile or hookah. Shisha smoking has origins in the Middle East, South East Asia and Northern Africa. [1] It commonly takes place in a cafe setting/restaurant [2] or other social gathering over one or more hours. Like any tobacco smoking, shisha contains harmful materials such as carbon monoxide, nicotine, and lead among others. [3,4,5] According to the first international conference on water pipe tobacco research held in 2013, shisha smoking is a worldwide epidemic that needs urgent public health attention. [6] Shisha smoking is a particularly widespread practice among young people. [7,8] Studies from two universities in America found that the prevalence of any life time hookah use was 25- 28% among university students, [9,10] while studies from the UK indicated that shisha smoking was between 11-18% among university students and 8% among secondary school students.[11,12] Other studies have shown that shisha smoking is more in the general population than in University students, [13,14] and shisha smoking starts at a mean age of 18.7 years,[2] meaning that interventions to prevent the usage of shisha should start at an early age.

Research to date suggests that shisha use among young people is promoted primarily through peer influence, [12,15,16] as well as percieved benefits, such as reduced anxiety and entertainment. [17,18,19] Many young people learn to smoke from friends, especially in high school or university. [17] Youth are either taken to shisha cafes by their friends to smoke or they watch their friends smoke at their homes or at school. [17] Shisha use is also promoted through flavoured tobacco products, [5,7,8,20] use of the internet, [9,21,22,23,24] and gaps in implemetation of smoke free policies. Cases of non-compliance with smoke free legislation among the owners of shisha cafes has been reported. [22,25] Interventions targeting these reasons for shisha use have not been successful to date; additional approaches are needed.

Shisha is well known to carry important meaning socially and among families, [7,26,27,28] yet little research has explored how this meaning could inform shisha ceasation interventions. Given the high prevalence of shisha use among youth, we conducted qualitative interviews of people aged 18-30 years in the UK to explore the social functions ascribed to shisha cafes with a goal of identifying areas of intervention.

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Methods

Participants

Inclusion criteria for this study were being 18-30 years of age, speaking English, smoking shisha in a shisha cafe at least once a week in the last one month, having lived in Leeds UK for more than one year, and being willing to provide signed informed consent. To recruit participants, one shisha smoker was initially identified from a shisha cafe in an inner city neighbourhood of Leeds who then identified friends for potential recruitment. These friends also identified their respective friends for potential recruitment (snowball sampling). Recruitment was performed with the help of community engagement officers at a local community centre.

Data Collection

After obtaining informed consent, an interviewer trained in qualitative methodology collected socio-demographic information and conducted a single face-to-face semi-structured interview with each participant that lasted 30-40 minutes. The interview consisted of open-ended questions aimed at exploring young people's perceptions of shisha cafes in Leeds, UK. The interview guide was piloted to help in testing the adequacy of the questions [29] and modified accordingly. Data was collected at the office of the local community centre. Interviews were audio-recorded. The primary questions asked were: ‘‘How do you feel when you visit this café?’’, ‘‘What would you say has changed in your life when you started coming to this shisha café or any other?’’, ‘‘What would you say is the significance that you attach to going to a shisha café?’’ and ‘‘If there was to be an alternative to shisha, what would that be and why?’’ Additional questions were probes to further explore responses to the primary questions.

Data Analysis

Recorded interviews were transcribed and the generated textual data was analysed using thematic approach. [30,31] In brief, codes were initially identified from the first eight interviews. Following an iterative process with additional interviews, the codes were refined and formalised as a codebook. All interviews were then coded. Themes were generated and supported with illustrative quotations from the interviews. Participants were enrolled until thematic saturation was achieved.

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Ethical approval

Ethical approval was obtained from Leeds Beckett University and the local community centre.

Results

Participants

A total of 48 participants were identified and screened. Of these, 31 enrolled in the study. Eight people declined due to lack of time for interviews, five did not give any reason and four people were not comfortable to be interviewed by a stranger. Participant socio- demographic characteristics are shown in Table 1. The majority were single, male, students in their 20s. Approximately half were South Asian, with the remainder split between blacks and whites.

Table 1. Participant socio- demographic characteristics

Characteristic		N (%) or Mean (SD)
Age (Years)		24.8
Gender:	Male	21
	Female	10
Race/ethnicity	South Asian	16
	Whites	8
	Black	7
Marriage status	Single	26
	Married	5
Occupation	Student	27
	Working	4

SD= Standard Deviation

Themes

The following themes were identified: 1) Shisha use plays a central role in social interactions, 2) Shisha cafes are pleasurable, 3) Shisha cafes are implicitly sanctioned when used by respected professionals, 4) Most, but not all, acknowledge that shisha cafes are harmful, and 5) Shisha cafe use could be reduced through efforts aimed at the individual and the community.

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Shisha use plays a central role in social and cultural interactions

Most participants used shisha in cafés, which served as a place where young people could meet to socialise.

> *''I like going to shisha cafés because I meet different people while I am there. We share different issues including school, friendship and even families''- Male, 27 years*

Some female participants of South Asian origin highlighted that shisha cafes are the only places they can socialise with boys. One of the participants said;

> *''My father does not allow boys to come to visit me. The only place I can meet the boys is a shisha café because my father allows me to go there. This makes me interact with the boys and even share contacts. If you do not interact with boys, where do you get a man to marry you in future? So, cafés do it well for me''- Female, 20 years*

Many participants said that shisha cafes are relaxing settings where they can meet with friends and enjoy time together. They emphasised the ability to develop their social networks through patronage of different cafes. One participant said;

> *''I sometimes travel a far distance from my home to meet up with my friends in different cafes. It's good to visit other shisha cafes that I am not used to as this increases on the network of friends which relaxes my mind''- Male, 18 years*

This network of friends, however, can have negative influence as well. Other participants stated that they used shisha out of peer pressure, rather than a personal desire to use it. They go to shisha cafes to be with their friends and end up smoking while there.

> *''I have friends who smoke shisha in shisha cafes and I go with them too. When I reach these cafes, I have to take shisha as well because all my friends are taking shisha''- Female, 18 years*

Some participants used shisha outside of cafés. For instance, shisha may be served at important cultural functions like wedding functions or burial functions. It functions as a signal of welcoming, complementing other activities like watching TV or having a drink. In

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these settings, participants viewed shisha smoking as a show of respect. This was more common in South Asians compared to other cultures.

''If my friends come to visit me, I have to prepare them shisha. When preparing food, I have to prepare shisha as well such that we as a family share with the visitors''- Male, 20 years

''...... Sometimes just to change home environment, my dad takes us out to shisha cafés where we catch up with other friends and peers''- Male, 24 years

Shisha cafés are pleasurable

In addition to enabling social interaction, shisha cafés brought participants pleasure. Participants described the emotional benefits derived from the experience. One participant stated:

''When I am stressed, I go to a shisha café. When I am there, I meet with my friends and I share with them my problems and I become psychologically fine''- Female, 19 years

Participants also found sensory pleasure through use of shisha. They stated that different flavours put in shisha and the soothing noise of bubbling water coming out of shisha apparatus enticed them to frequent shisha cafés.

''I like different flavours in the shisha. I cannot even take a single day without going to a shisha café because of this flavour. Pineapple flavour is my favourite but there are different flavours''- Male, 25 years

''You can imagine the kind of sound that come from bubbling water in the shisha machine, very relaxing, the sweet smell coming out while smoking. A very sweet smell indeed. I enjoy that all the time''- Female, 18 years

Shisha cafés are implicitly sanctioned when used by respected professionals.

Some participants reported that professionals including doctors, public health officers and university lecturers smoke shisha. Participants expressed respect for these individuals and felt that shisha must be acceptable if they were using it. One participant said:

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> *''I have friends who are doctors and lecturers who smoke shisha with me. If a doctor can smoke shisha, who am I not to take shisha? These are respected people and we have to believe in what they do''- Male, 25 years*

This implicit endorsement of shisha remained even when participants acknowledged the negative health effects of smoking shisha. The behaviour of these respected professionals was seen as an endorsement of safety and/or acceptability of many participants.

> *''Doctors always tell us not to smoke but they smoke, they tell us not to take alcohol but they take it. Some of them even take shisha too. I know all these risks are there but I will keep taking my shisha as doctors and other professionals do''- Male, 20 years*

Most, but not all, shisha smokers acknowledge that shisha cafes are harmful

Many participants clearly stated that shisha smoking has many negative consequences to their physical health. One participant said:

> *''A few months ago, I started experiencing sleepless nights and increased heart rate when I am climbing a steep slope. This started months after start of shisha use.''- Male, 20 years*

Another participant said;

> *''I used to be a footballer and before I began using shisha, I used to run without any problem but when I began using shisha, my ability to run began to decrease''- Male, 21 years*

Many participants specifically felt that shisha puts them at risk of getting cancer, dental problems and cardiovascular diseases.

> *''I have read from different sources that shisha smoking predisposes people who use it to different diseases including cancer of the lungs and cancer of the mouth'' Male, 23 years*

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Shisha café use could be reduced through efforts aimed at the individual and the community

When asked about potential ways to reduce shisha use, participants felt that non-tobacco alternatives could be offered in shisha cafés that preserved the ritual of shisha smoking.

> *''I would use any alternative without tobacco comfortably if the alternatives were served in shisha cafés, share it as we do with shisha but more safety measures should be put to avoid possible cross infections from one person to the other while sharing the mouthpiece''- Male, 22 years*

However, other participants believed that non-tobacco alternatives would not be helpful. Rather, cigarette cessation programs should be adapted to help with quitting smoking of any kind.

> *''I am a shisha smoker but I want to stop smoking completely. Alternatives should not be a priority to any person. I believe that smoking shisha is not good and to all people who smoke should be supported to stop smoking completely'' Female, 19 years*

Some participants also advocated for laws to reduce shisha access.

> *''I smoke because I have a right to do anything I want. I propose that excessive rights especially those that make people vulnerable should be reduced so as to have a healthy society. Otherwise, it becomes hard to convince people not to take shisha.'' Male, 24 years*

Regulations, however, would have to be specific to shisha, and some participants did not think general tobacco legislation applied.

> *''In UK, there is a general regulation about tobacco use but i think specific regulations should be adopted so as to reduce shisha use in our communities.'' Female, 19 years*

Another participant believed that use of their peers to pass on information that would help peers to change their behaviour would be of help.

> *''Use of people who previously used shisha in their life in giving information about the effects of shisha to fellow youth would be of help.'' Female, 21 years*

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Finally, other participant suggested that alternative forms of socialising like sports and drama would help reduce shisha smoking.

> *‘‘Instead of going to shisha cafes as a socialising setting, we young people should get involved in sports like playing football, volleyball and netball or even get involved dance and drama aimed at educating other young people’’ -Male, 21 years*

> *‘‘It’s more healthy for us as young people to get involved in sports than smoking shisha.’’ –Female, 20 years*

Discussion

This study found that shisha cafés provide a place for people to come together and find pleasure. Shisha use is voluntary, but also influenced by peers and other cultural expectations. Despite being pleasurable, many participants recognised the harm that can arise through shisha smoking and suggested various individual and community level interventions to reduce it. Several promising interventions based on recommendations found on this study include peer-based interventions, alternative social events, and informed legislation.

Peer-based interventions may be appealing as they have been shown to be acceptable, feasible, and low cost in other settings, especially in comparison to more formal interventions that rely on professional health care providers. Peers share common characteristics, circumstances, and experiences- all of which are thought to facilitate their acceptability to target populations and increase their influence and authenticity. [32] Prior research has shown that people are more likely to hear and internalize messages, and thus to change their attitudes and behaviours, if they believe the messenger is similar to them and faces the same concerns and pressures that they face. [33,34] Importantly, peer-based interventions have been successful in projects aimed at reducing the incidence of cigarette smoking among young people. [35] A study involving an informal, school-based, peer-led intervention for smoking prevention in adolescents showed a reduction of 22% in the odds of being regular smoker compared with a control. [36] These types of interventions could be readily adapted for use with shisha smoking.

Promotion of alternative social events is another promising intervention approach to reduce shisha smoking among young people. Examples include sports, music, dance, and drama

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among others. The mechanism of effect may lie in the fact that social events enable people of compatible backgrounds to come together to achieve a common goal. [37] For example, some studies on sports show that participants are linked by shared perspectives, language, and activities, thus creating a shared network and bonds that go beyond a desire to compete. [38] Other studies on sport participation also place emphasis on the value of shared experiences and linkages to others. [39] Sports may also be used to pass on information in different areas. Educative sessions for instance, may be provided during or after sport events. Coaches, teammates, and other respected persons may serve as guest speakers to engage the audience. This approach was taken in India where sexual and reproductive health including HIV/AIDS and life skills to empower youth has been integrated with sports. [40] Drama has been widely employed in prevention of HIV/AIDS through community mobilisation and raising awareness in Uganda and South Africa. [41] Also in a study from India, use of information, education and communication activities in form of drama and folk dances have shown success in increasing awareness about HIV/AIDS from 58% to 70% and in increasing knowledge regarding prevention of HIV by using condoms increased from 42% to 61%. [42]

Informed legislation specific to shisha maybe a third avenue for reducing use of shisha. Major breakthroughs regarding public health policies in tackling cigarette smoking have been seen in many countries of the world, including the UK. Some examples are smoking bans in public places, tax policies, and limits on smoking advertisements. [43] Several studies aimed at reducing tobacco use globally have shown that increasing taxes on tobacco products can be used as a tobacco control strategy as long as this strategy is well implemented. [44] High prices can greatly reduce tobacco use. [45] Studies from high income countries finds that an increase of 10% in price will reduce the overall use of tobacco by 4% on average; [45] results were even more pronounced in low and middle income countries. However, most of the regulations and policies are focused on cigarettes rather than other types of tobacco products like shisha. [7,46] In many countries including UK, shisha is exempted from tobacco policies including reduced means of enforcing relevant policies to control tobacco. This situation has contributed to the explosion of shisha cafes and restaurants across the globe. [7, 46] Lessons learned from anti-cigarette campaigns need to be applied to shisha smoking as well.

Two aspects of shisha warrant unique legislation. The first is related to packaging and associated warning labels. [47] Globally, the packaging of cigarettes is nearly uniform with the same number of cigarettes in the similarly sized packs and cartons. In contrast, shisha is packaged in various amounts and in differently shaped containers. Moreover, shisha is often

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used communally and individuals may not see the packaging. Shisha users may therefore be unaware of the risks related to the tobacco, burning charcoal, or even the infections that would spread through sharing of the waterpipe; [7,48,49] non-removable labelling may be needed for the waterpipes specifically. Recently, some countries have started to implement policies for warning labels on shisha packaging. In Turkey, for instance, legislation dictates that these labels should be placed on all the shisha packaging, covering at least (65%) of the package. [50] Secondly, flavoured shisha has a small amount of tobacco relative to the profit margin ;[25] policies aimed specifically at tobacco only may therefore be inadequate and specific legislation aimed at flavoured shisha may be needed to be effective.

Conclusion

Shisha use is rising and may pose significant health risks for those who smoke it and those who are exposed to it. This study provides informative perspectives on the role shisha plays in social interactions, factors influencing shisha use, and potential means for reducing it. Future work should focus on intervention development to prevent the negative individual and public health consequences of shisha use without sacrificing the importance of social interactions.

Author's Contribution: Being the first author, AEKM, designed, collected, analysed and interpreted the data. AEKM also drafted the manuscript. JEH provided significant support for analysis and manuscript preparation. IO supervised and guided the first author throughout the whole process of coming up with the paper.

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Data sharing statement: No additional data available

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Manuscript: Clinicians' perspectives of parental decision-making following diagnosis of a severe congenital anomaly: qualitative study.

Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

Developed from:
Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

No. Item	Guide questions/description	Reported on Page #
Domain 1: Research team and reflexivity		
Personal Characteristics		
1. Inter viewer/facilitator	Which author/s conducted the inter view or focus group?	Page 2
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	Cover page
3. Occupation	What was their occupation at the time of the study?	Cover page
4. Gender	Was the researcher male or female?	
5. Experience and training	What experience or training did the researcher have?	Cover page
Relationship with participants		
6. Relationship established	Was a relationship established prior to study commencement?	Page 2
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	Page 2
8. Interviewer characteristics	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	Page 3

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Domain 2: study design		
Theoretical framework		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	Page 2
Participant selection		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	Page 2
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	Page 2
12. Sample size	How many participants were in the study?	Page 3
13. Non-participation	How many people refused to participate or dropped out? Reasons?	Page 3
Setting		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	Page 2 .
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	Page 2
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	Page 3
Data collection		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Page 2
18. Repeat interviews	Were repeat inter views carried out? If yes, how many?	
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	Page 2
20. Field notes	Were field notes made during and/or after the inter view or focus group?	
21. Duration	What was the duration of the inter views or focus group?	Page 2
22. Data saturation	Was data saturation discussed?	Page 2
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	

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Domain 3: analysis and findings		
Data analysis		
24. Number of data coders	How many data coders coded the data?	Page 2
25. Description of the coding tree	Did authors provide a description of the coding tree?	Page 2
26. Derivation of themes	Were themes identified in advance or derived from the data?	Page 2
27. Software	What software, if applicable, was used to manage the data?	
28. Participant checking	Did participants provide feedback on the findings?	
Reporting		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	Page 2-8
30. Data and findings consistent	Was there consistency between the data presented and the findings?	**Page 8-9**
31. Clarity of major themes	Were major themes clearly presented in the findings?	Page 2-8
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Page 8-9

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