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Formation of health-threatening behaviors amongst students: a qualitative study

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Abstract

Health risk behaviors are identified as the common feature of the contexts young people live their lives. This study was designed to explore the determinants influencing the formation of the high school students' health risk behaviors in Tehran. Using qualitative content analysis, 130 people voluntarily participated in the focus group discussions. The participants purposively were drawn from students, the parents and the teachers. Four of the principals were individually interviewed three times during the study. Research was focused on two main concepts: (1) Description and meanings of health and unhealthy behaviors; (2) how and why young people engage risky behaviors. We employed content analysis to extract the major themes and sub-themes. Rigor of the data was accomplished. Two major themes were emerged from content analysis (Impact of interactions with parents and with peers). These were all identified as the core determinants of the students' health risky behaviors in this study. Our findings emphasizes on the impact of the interactional factors in shaping of the risky behaviours in young people participated in the study. Implementing positive parenting program and empowerment of parents to care and management of adolescents" risky behaviours are suggested. Due to a serious impact of peers on risky behaviours of the participants, we suggest development and implementation of peers education program as well as using the community potentials to prevent and reduce risky behaviours. Development and implementation of effective interventions in the process of adolescents" sexual socialization seems necessary in Iran.

Keywords: Adolescence, Behavior, Health risk, Qualitative, Student

Introduction

Health, education, community and family are among factors affecting health and well-being of young people. Previous reports have also emphasized gender, age, geographical and family conditions as influential factors. In addition to these factors, social determinants clearly have important effects on health and well-being of youths. Reports on students' health behaviors emphasize the effects of social context, health consequences, and proper and dangerous health behaviors on

adolescents' life opportunities and health in a complex manner [1].

Health-threatening behavior is referred to any behavior that is actually or potentially harmful to health, and causes damage in the individual, including: alcohol and drug use, psychotropic drug abuse, high-risk sexual behaviors, aggression, and driving hazards [2]. Many adolescents are involved in high-risk sexual behaviors, causing them unintended health consequences. Studying high school students in America in 2011 showed that 47.4% had had sexual relationships at least once, and 33.7% had sexual relationships in the past 3 months, of whom, 39.8% had used condom, and 76.7% had not used contraceptive pills in their last sexual encounter, and 15.3% had sexual relationships with 4 or more partners in their lifetime [4]. According to international studies, 70% of all adolescent deaths occur in 10-24 years age range due to road accidents (31.4%), murder (15.3%), unintentional injuries (12%), and suicide (11.9%) [5].

According to reports by the Center for Control of Diseases, adolescents' tendency toward lifestyles and behaviors affecting their present and future health is formed in the transition from childhood to adolescence [5]. Some believe that behaviors such as unhealthy food habits, lack of physical activity, tobacco and alcohol use, driving-related high-risk behaviors, and high-risk sexual behaviors, and likelihood of developing a variety of diseases and chronic disorders, are all rooted in adolescence [6].

Many factors have been identified and reported in shaping up risky behaviors among adolescents. Although some attribute type and frequency of these behaviors to genetic and environmental factors [7], social factors have been emphasized by many researchers. A study of 280 high school students in Massachusetts based on the hypothesis that family and peers impact high-risk behaviors showed that peers are more influential than families in the formation of a variety of high-risk behaviors [8]. In a study on 255 adolescents from the suburbs of a town in Texas, psychosocial parameters were more emphasized compared to demographic features, and low level of religiosity, poor parental control, poor social relationships and huge peer influence strongly related to the formation of high-risk sexual behaviors in participants. High-risk sexual behaviors are known to exacerbate other risky behaviors such as smoking and alcohol use [9]. In a study on Iranian students, level of religiosity was an influential factor in early sexual relationships, or avoiding such relationships [10]. Social scientists have studied adolescents' behaviors in the process of socialization [11]. Socialization is a complex learning process based on reciprocal actions that modify a person's behavior in such a way to fulfill group's expectations. Socialization begins with birth and continues to the end of adulthood. Socialization aims to harmonize and balance with the group's values and norms; and is influenced by social institution of family, peers, school and educational settings, government, mass media, art and literature, and ultimately religious institutions [12]. Although studies have so far provided important evidence about factors affecting formation of high-risk behaviors among adolescents [7, 17], dependence of behavior-forming process and role-modeling of adolescents on social structure and cultural schemes has restricted application of results obtained in these studies. It seems, to design and implement effective interventions to control, prevent and promote health of this at-risk population, the complex phenomenon shaping adolescents' healthy or unhealthy behaviors should be studied in their natural habitat using exploratory and deductive methods.

There are approximately 15 million students in Iran [14], with little basic information known about their high-risk health behaviors. Adolescents' high-risk health behaviors have received little attention from the national healthcare system. Because of the importance and number of the young in Iran, it is essential to obtain sufficient, profound and indigenous knowledge about high-risk behaviors of adolescents, so that effective evidence-based

interventions can be facilitated to provide health, and control and prevent such behaviors. Moreover, the increasing growth of subcultures among adolescents, and also the generation gap emphasize the pressing need for effective educational and health-promoting programs to change attitudes to prevent risky behaviors in this particular population [15].

Accordingly, with prevalence of health-threatening behaviors among adolescents, communities' need for such programs is more deeply felt than ever before. This article aims to report part of the results obtained in a qualitative study aiming to explore determinants of formation of high-risk health behaviors among high school students in Tehran's district 5.

Method

Using an exploratory approach, this study explains views, perceptions and experiences of students, parents, and school officials (principal and teachers) about formation of health-threatening and risky behaviors of adolescent students. This study seeks the number of facts, and credibility of objectivity against subjectivity within the naturalistic paradigm and the model of effect of cultural schemas, and emphasizes recognition of the universality of human phenomena and reflection of culture on study data. This approach was chosen to profoundly understand the world of adolescents and their indigenous contexts, and understand and describe participants in facing health-threatening behaviors.

Public schools in district 5 in the west of Tehran were selected to reach the participants and collect the data. The reasons for choosing this particular district were as follows: 1) district 5 is the biggest district in Tehran with the highest number of schools (24); 2) it was covered by Iran University of Medical Sciences that approved this study; 3) it has cultural diversity due to substantial migrant size, as intended by researchers; and finally 4) due to sensitivity of the subject, only educational authorities in this district cooperated with researchers and issued ethical approval.

First, principals of all high schools in this district (13 high schools) were informed of the study objectives and method in person. Implementation guidelines for inviting participants, holding meetings (time and place) and interview guidelines were prepared by volunteer principals and two main researchers. All high school students in district 5 were invited to take part according to purposive selection. With their parents' consents and permission of principals, first to fourth-year students (mean age 15 years) volunteered and attended meetings. A total of 92 students (48 girls and 44 boys) took part in 9 focus group meetings. To obtain complementary information, parents and teachers were also invited to take part in group meetings. Despite inviting both parents, only mothers participated in group interviews. Participating teachers were of both sexes, and took part separately. Thirty-four mothers (5 meetings), 12 male and female teachers (3 meetings), and 4 principals (three personal interviews) took part in focus interviews. Personal interviews with principals, along with data analysis at every stage, aimed at: evaluation of method, using their key role to facilitate access to participating groups, and their control over coding. Despite the possibility of participation of both mother and child in group meetings, participating mothers were not necessarily mothers of participating students. Written informed consent was obtained from all participants.

Interview guidelines, main questions and list of topics relating to risky health behaviors were prepared with the help of selected principals (Table 1). Main questions were asked as open-ended, and exploratory questions were addressed in the process of conversation.

Data were collected through focus group interviews. By encouraging participants, debate progressed and managed spontaneously in a liberal atmosphere that facilitated open and serious debate by participants' interaction [16]. Cultural values and norms, and understanding and beliefs about health behaviors were explained during group discussion, and analyzed by participants [17]. To create a natural atmosphere and prevent adverse effect

Table1 *An example of the main research questions in the interview guide*

Probing questions	Main questions	Participant
Do you think activities are needed to start in adolescence? What do you mean by danger?	What is your opinion about how to start student activities and endanger himself or herself?	Student
What are your reasons?	Why teenagers are beginning their sexual activities?	Parents -Teachers

of imbalance of power in data, two young facilitators (two women and one man) were present in students' meetings. Interview process and guidelines were monitored by at least one of the executers in principal's office or randomly present in girls' meetings. Meetings lasted between one and two hours. With participants' verbal consent, all interview sessions were recorded and transcribed for analysis in three copies.

Rigor of execution and data:

Qualitative studies emphasize uniqueness of human experience that may be difficult to validate [18]. First, sufficient knowledge and experience of the selected samples about health-threatening behaviors should be assured. Accordingly, to observe principles of purposive selection of samples, interviews were conducted with principals of schools in the whole district. Principle of data saturation was used to ensure appropriateness and adequacy of data, and thus collection of data continued until no further new data could be obtained. The following methods were used to ensure acceptability and objectivity of data:

The researcher used bracketing to discard his personal opinions and pursue data as an external assessor. An intimate and trusting atmosphere was created by prolonged engagement, concurrent analysis of data, feedback, and allocation of ample time with participants in their preferred location. Sessions were managed by two of the main researchers using motivational and interactive method [18].

Observers' review: Modifications were implemented following review of transcriptions and recommendations made after peer-check and member-check.

Informed verbal consent including: explaining study objectives and method, advantages and disadvantages of participation, data collection and recording methods, roles of researcher and participants, providing comfort and privacy during cooperation [19-20], confidentiality of data, participants' right to withdraw at any stage, availability of results if requested, obtaining letter of introduction and following legal processes were among ethical considerations observed in this study.

Meaning units were extracted, from one word to several statements, such as high-risk behaviors, and unhealthy or unacceptable behaviors following collection and arrangement of data, and using key study concepts, previous experience of researchers and preliminary analysis (Figure 1).

After ensuring completion of cognitive process [16] , project executors along with two research assistants analyzed data obtained after every group session using content analysis method [21] (Figure 2). Qualitative content analysis is an appropriate technique for understanding human phenomena and clarifying concepts that aim to construct a model, meaning system, and conceptual classes [21,22].

The transcribed interview text was reviewed verbatim several times and broken down into smallest meaningful constituent units (free

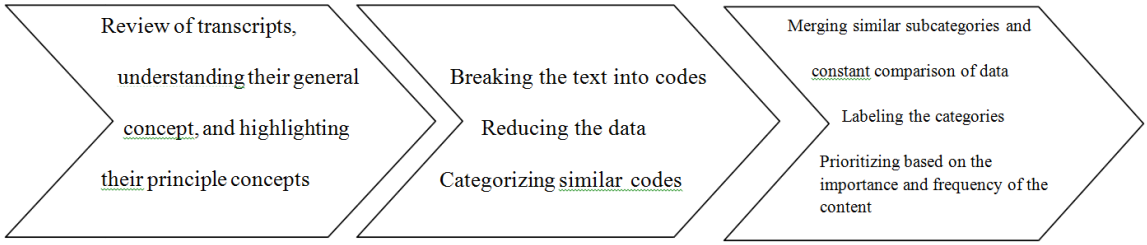

Figure 1 *Content analysis process*

coding). Coding was carried out according to rules for frequency of occurrence of one concept unit. Then, codes were reviewed several times and categorized according to core semantic similarities. Irrelevant data were discarded, and those with low relevance modified category names and content accordingly. Ultimately, researchers and participants reached consensus about meaning of data, categories, contents and meaning units [22].

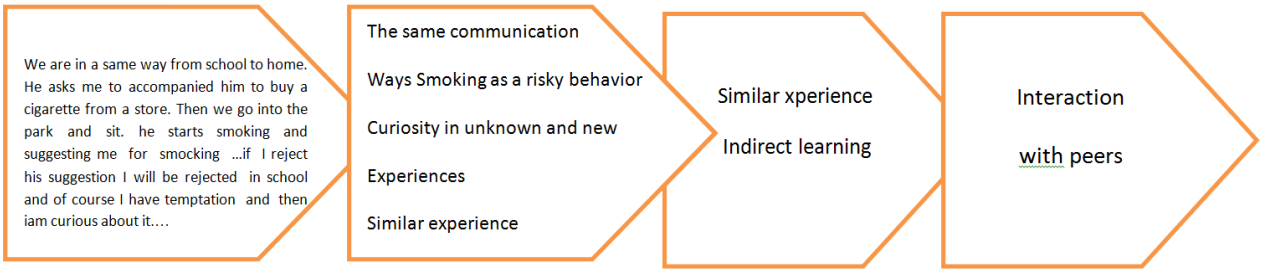

Figure 2 *Analysis process*

Results

Through content analysis, two decisive themes were identified in shaping health-threatening and risky behaviors in high school students, and each is described by secondary categories (categories and sub categories) as follows:

1- Effect of interaction with parents

The main theme of interaction with parents is described by two categories: "generation gap" and "father's role" and sub categories as presented in Table 3. The majority of participants (students, teachers, and parents) agreed upon and emphasized the effect generation gap on children's interaction with parents.

1.1- Generation gap

Most participants stressed differences in tastes, values, thoughts, and beliefs from parents. Students' stories indicated that they regard risky behaviors as part of normal life, and considered the difference with parents due to parents' perception of adolescents' lifestyle and behaviors based on their own past adolescence. Maryam, a first year high school student describes distancing from parents by reference to differences in eras that is the cause of generation gap as follows: "They impose their own ideas on us… the way they think about us... for example; my mother tells me how she used to do such and so. Well that's in the past, now is now. They compare us to themselves. They should compare us to today's generation… "(S12. Maryam, student)

Agreeing with Maryam, Mina considers the conflict between her own interests and her mother's as causing the gap with parents: "They like us to be like what they used to be, and they force us … for example; maybe she likes to have strict hijab, but I don't like that, hence the conflict … " (S13. Mina. Students).

Certainty, trust and distrust were concepts that participants frequently insisted on as factors affecting process of shaping high-risk behaviors among students. Students considered lack of mutual understanding between youths and parents as the basis for distrust between these generations; while the majority of parents and teachers considered adolescents' secrecy, loss of constant parental control and lack of close relationship between children and parents as cause of distrust. Although friendly and intimate relationship with adolescents was emphasized by

Table 3 *Themes and sub themes comprising impact of parent interaction on adolescents*

Main domain	Theme	Sub Theme
Interaction with parents	Generation gap	Different tastes and values Different opinions Distrust
	Father's role	Fear and blame Lake of presence in the home Control, restriction, violence Doubt and distrust

parents, it seemed most parents were unable to establish such relationships. In the opinion of participating teachers and principals, the gap between parents and children and growing distrust between them was because of limited social interactions of parents and their lack of knowledge about adolescents' new lifestyles and cultures.

"They should be talked to a little; to parents, and then to children. You know, kids don't take any advice these days". (S7. Parents)

For parents, behaviors outside their own framework of values and norms are abnormal behaviors, and seeing an abnormal behavior from an adolescent means loss of confidence and trust in them. For instance, parents considered adolescents' sexual behaviors as abnormal and dangerous, and no behavior with sexual connotation from girls or boys was acceptable by participating parents. For adolescents, such parental attitudes and beliefs compel them to be secretive, and this widens the gap between them, and begets distrust between the two generations. It seems, Ahmad does not consider his own sexual behavior as normal, since he thinks if it was revealed, it would destroy his father's trust in him: "I have a problem at home. For example, a few years back, I did something (masturbated) and my father saw me. I have not done that ever since. But, my father no longer trusts me, and always watches me to see what I'm doing or where I'm going. He still doesn't trust me. I don't know why …" (S1, Ahmad)

The majority of participants agreed upon many causes of differences between adolescents and parents and teachers. Teachers believed that level of religiosity, access to satellite TV channels and information technologies such as satellite, internet, and family attributes are factors that weaken parental control over children. In their opinion, loss of control not only widens the gap between the two generations, but also leads to shaping of risky behaviors. According to school officials, poor knowledge of parents about adolescents' daily life and behaviors leads to loss of control over children. They stressed that imposing restriction instead of intelligent control causes further secrecy, risky behaviors and distrust between parents and adolescents. In contrast, by accepting the effect of above factors, parents considered school education, and peer effects as the main factors in shaping adolescent behaviors. In other words, parents considered school and educational community in general, responsible for creating proper interaction between parents and children and preventing high-risk behaviors. Morteza, a 44 year-old parent points out the effect of two social institutions in shaping adolescents' behaviors: "school" and "family". He believes that the mismatch between characteristics of families is inevitable, and school is responsible for creating balance between these differences and controlling students: "My kid may study a lot, and we make the effort to put him in a totally educational atmosphere, but another family may be liberal and let their kids watch satellite TV and so on … another family maybe religious. Children of all these families go to the same school. I cannot keep my kid at home, so as not to be in the same place as kids from those families. I can get the best teacher for him, but what's gonna happen when he enters the society? Therefore, it's the responsibility of government and educational officials to elevate families' and kids' knowledge, and close the gap between tastes and cultures" (S7. Morteza, a parent).

It seems the conflict between behavioral stereotypes in two generations and parents' effort to match their children's behavior with their own framework of values and norms leads to conflict and widening of the gap between adolescents and parents.

1.2- Father's role

Results indicate that fathers play an important role in the interaction between parents and adolescents. Unlike with mothers, students had little interaction with their fathers. In an interaction with parents, most students described their fathers with the following attributes: "fear", "rebuke", "little physical presence at home", "imposing restriction", "doubt", and "control and violence". Unlike mother that is the source and reminder of cultural values and behavioral stereotypes,

students perceived their father as the executor of "discipline" in the family. It seems that imposing behavioral restrictions is part of a father's duty; and a "strict father" was the common image depicted in students' testaments: "My father is very strict. I'm always scared of talking to him … I'm frightened to even look at him" (S7, Ahmad, student)

Father's poor physical presence at home due to being busy, working hours, etc., has increased the distance between father and children. The majority of students cited having experienced their fathers' absence. A number of them believed that unacceptable behavior occurs when adolescents are sure of their fathers' lack of active presence in their lives. In other words, there is no control or monitoring. But others, especially girls considered their misbehavior was because they wanted to attract their fathers' attention. According to boys, using defense mechanisms such as: "aggression", "violence", "alcohol use" was as a result of lack of proper interaction with their fathers. It seems, father-son relationship may be associated with high-risk behaviors, which leads to further disobedience of sons from fathers. One of the participating boys described responding to father's restriction as abnormal sublimation: "His father wouldn't allow him out. Always argued with him and called him in. He would send his younger brother to watch over him. It made things worse. Every time he came out, he had a knife in his pocket, or drank alcohol. That is why a father should be friendly. Because one always does whatever one wants in the end" (S2, Maysam, student)

Inappropriate relationship with parents reinforces tendency toward close and constant interaction with peers. Violent and restrictive behaviors of fathers were described as an important deterrent of close interaction with parents.

2. Effect of interaction with peers

Peers play an essential role in students' lives, and have a strong influence in their behavior change. "Friend" is a reinforcing or inhibiting factor in shaping risky behaviors. This theme includes the following categories: friendship, information source and social stratification, and is described with subcategories in Table 4.

2.1- The concept of friendship was emphasized by all students, parents and teachers. "Friend" has a central role in an adolescent's life. Two attributes of "good and bad" were decided for "friend". Although students' testaments showed they had experienced the interaction with both good and bad types of friends, choosing a permanent friend was rather associated with personal, social and family structure attributes. Almost all participants agreed upon definition of a good friend. Anyone with the following attributes is worth having as a friend: etiquette and propriety, family nobility, benevolence (not wishing you evil), no addiction (non-smoker), reformer (constructive criticism, leading to good deeds), and encouraging. According to students, anyone influential and with self-efficacy is worth interacting with. The majority of parents believed that in the current social atmosphere, any kind of friendship can be dangerous. In response to researcher's question: "why do students prefer an influential friend?" A young mother in group 9 with diploma education, negatively rated this kind of friendship: "This can't be trusted.

Table 4 *Themes and sub-themes comprising impact of peer's interaction on adolescents*

Main domain	Theme	Sub-theme
Interaction with peers	Friendship	Good- Bad Friend Emotional Gap
	Information source	Unaware friend
	Social stratification	Experiencing Fear of rejection Search for confirmation Mimic

The more influencing a friend is, the more they can steer my child to whatever direction they want. How experienced are they in hardships of life. Some adolescents recommend things to their friends that they wouldn't do themselves. And that worries me" (S9, Somayeh, parent)

In their interaction with peers, in the "realm of friendship", most students had experienced: "smoking", hookah", "drinking", and "relationship with opposite sex", and most teachers confirmed this. Boys believed that encouraging such behaviors is an attribute of a "foe" or a bad friend. Morteza, a third year student identified a bad friend: "A bad friend suggests bad things, like: "let's skip school and go smoking, or let's go out, and come home late" (S3, Hamid, students)

Sina identified bad friends, when they invited him to have risky relationships: "When he (my friend) is bad, he suggests going to girl's schools, or to smoke, smoke hookah, and wander around" (S3 Sina, student)

Girls had a different interpretation of good-bad friends. The majority preferred interacting with those that could keep a secret. It seems, risky behaviors occur by the individual's own decision and not by friend's persuasion. Role of a friend is described as a guide, counselor, or a good listener.

2.2- Information source

In the conceptualization of "friend" in shaping high-risk behaviors in adolescents from the perspective of students, parents considered peers as a non-informative source. Participating parents considered peers and friends as the reinforcing cause of high-risk behaviors, and believed interaction with them was out of control, and that acquiring information from such non-informative sources (friends) worried them. Parents and teachers believed "formation of personality" of their children is affected by their friends. In agreement, Nahid, a 42 year-old parent believed adolescents are influenced by their peers: "Kids are uncomfortable with their parents and can't talk with them. They understand their peers better. If a friend is good, they get along well, and if they are bad, the good kid will turn out bad like them".

At the same meeting, Hossein, a 51 year-old parent considers peer groups a source of concern in shaping antisocial behaviors.

"It's a while since my kid has become aggressive. He goes out with my brother, and goes to work as an apprentice. But he has befriended some of these kids at school, and I'm really worried" (S6, Hossein, a father)

2.3- Social stratification

Forming a group and membership of strata and interacting with peers reinforce antisocial behaviors in adolescents. Antisocial and high-risk behaviors cause differentiation of adolescents and make them join peer groups. Imitating high-risk behaviors is caused by curiosity and desire to experiment and it is a component of entry into strata and group formation. Imitating peers is caused by self-deception, seeking attention, and fear of rejection and humiliation by group members. There is an increasing trend of imitating peers, and if continued, it will lead to exacerbating incidence of high-risk behaviors. Results indicate that group members are unable to cope and do not have the skill to say "No" to high-risk behaviors. Leisure time with friends is an important motivational stimulus in reinforcing tendency toward high-risk behaviors. This means that friends are influential in the decision-making process. Being understood by friends is among causes of being influenced by them. Majid, a first year student considers the need to experiment due to curiosity a predisposing factor in joining peer groups.

"You walk along with them. Then they suggest buying cigarettes, and then we go to a park, and they offer you a cigarette. Obviously you will be tempted".

Mohammadreza, a third year student, while confirming interaction with peers in response to curiosity, believes fear of humiliation and rejection a predisposing factor in performing high-risk behaviors to stay in the group.

"Joining peers and doing bad things and telling others that it's good, is only because we don't want to be humiliated" (S3, Mohammadreza, student)

In the first group discussion session, Nima, a third year student, stated interaction with peer groups has a great effect on adopting a behavior: "Of course, it has a huge effect. One rather likes to interact with peers or even neighbors than with parents or relatives like uncles or aunts".

Mahyar, a second year student, does not consider that only peers can influence decision-making and adopting behaviors, and seeks the concept of friendship and rational behavior from associates and relatives.

"I believe friend's influence is irrelevant. To make a choice, I talk with tens of friends, not just one. For instance, I talk to my uncles and aunts, and parents and brother. It is like taking a vote, and I see which is more rational. It may be that my friend has a better view than my family" (S2, Nima, student)

Discussion

Results obtained emphasized the effective role of interaction with parents in shaping health-threatening behaviors. According to students, interaction with parents is challenging. So that, the generation gap is an effective factor in forming interactions and even changing structure of relationships in the transitional period of adolescence. Change in structure of interactions means distancing from parents, not trusting them, increasing conflicts, and tendency toward role-modeling peers [23]. It seems, applying attitude and behavioral stereotypes in the family is rooted in some subjective norms. Formation of subjective norms has motives of obedience instilled by parents in family, and by social institutions like schools. It means greater obedience from subjective norms (peer pressure, norms, social taboo, and …) in the process of behavior formation causes faster and more sustainable beliefs and attitudes to form. However, with conflicts between children and parents, contradictory reactions to attitudes and behaviors are not far-fetched. Thus, any behavior opposing parental value system leads to more severe control and restriction of independence and privacy of adolescents by parents. According to parents, such harsh restrictions are only imposed to prevent reoccurrence of abnormal behaviors (sexual behavior). Therefore, attempts to make children conform to parents' value system always cause contrasting and challenging reactions between adolescents and parents. Many studies have examined parent-adolescent conflicting relationships through psychological and behavioral performance of adolescent. Some of these studies concluded that parent-adolescent conflicts predict adolescent's problem behaviors [24]. On the contrary, others argued for a double-sided relationship between adolescent's problem behaviors and parent-adolescent conflicts [26]. Since family is the first window for children to communicate with the outside world, the first social experiences of children occur at home. Parents teach their children requirements of the society, and this understanding makes them choose a certain behavior and forms their personality. Thus, emotional interactions and talking between family members can create harmony and peace for adolescents, and ultimately lead to their mental health and peace of mind [26].

It seems future generation has specific beliefs, attitudes, and health habits of its own, which will affect their health behaviors. Culture and social context are major factors in shaping them. People use culture to explain beliefs, values and norms that rule their behaviors. Generation gap creates specific cultural patterns in future generations that make understanding and defining structure of risky health behaviors difficult.

The second category explains the role of peers in shaping high-risk health behaviors. According to participants, interaction with peers is more effective than with parents in shaping antisocial behaviors. In supporting the present study results, formation of health-threatening behaviors depends on several factors. As a form of antisocial behavior, high-risk behaviors are rooted in many intertwined causes. Biological, social, and psychological components play a role in adopting any normal or abnormal behavior. According to

Bandura's cognitive-behavioral learning theory in the context of triangle of causes, there are three behavioral, personal, and environmental factors in shaping behavior. Bandura explains human behavior according to five capabilities: symbolization, substitution, foresight, self-regulation and self-reflection [27-30]. The present study showed that role-modeling and observational learning are the bases of behavioral learning in interaction with peers. Similar to the symbolization capability in Bandura's theory, participating adolescent learnt behavior of their peers effortlessly. Thus, attention to the role of peers in the context of environmental factors, and social institutions such as family and school goes beyond attention to personal factors in shaping behavior [31-33]. According to the present study results, behavior formation theory is based on the process of socialization and social factors. That is, socialization is a complex process based on mutual actions, through which individual's behavior changes to conform to the group's expectations. In other words, socialization is a social process affected by group norms, including family, peers, educational settings, media, and religious institutions [34]. Shirazi et al. (2008) proposed religious factor as an important determinant in adopting healthy sexual behaviors [10]. According to participants' statements, learning religious behaviors as a normal behavior, and high-risk behaviors such as smoking and sexual behaviors as an abnormal behavior, are learnt without challenge or debate in interaction with peers in social settings like schools.

Conclusion

As a result of this study, real knowledge was produced according to lived experiences and realities of life of participants about factors affecting formation of high-risk health behaviors. Interactions and determinants of socialization of adolescents are important factors in shaping health-related behaviors. In this study, interactions with parents and peers were identified as two main components in shaping health-threatening behaviors. Subjective conceptualization of the term "friend", implicitly divided normal and abnormal behaviors. Participants emphasized stronger peer effect compared to family effect on formation of healthy or unhealthy behaviors. Thus, given the number of behavior-forming factors, attention to the role of socialization of adolescents in the family and school takes priority in designing and implementing health-promoting and risky-health-behavior-preventing interventions.

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Contributions

Study design: EMKH, SR
Data collection and analysis: FZ, AB,NSH
Manuscript preparation: FZ, EMKH,SR,NSH

Conflict of interest

"The authors declare that they have no competing interests."

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