

An identity-based model for adolescent health in the Islamic Republic of Iran: a qualitative study

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نموذج مستند إلى الشخصية لصحة المراهقين في جمهورية إيران الإسلامية: دراسة كيفية سرور برويزي، فضل الله أحمددي، عليرضا نيكبخت نصر آبادي

الخلاصة: أجرى الباحثون هذه الدراسة على 52 مراهقاً في طهران للتعرف على وجهات نظرهم حول الصحة، واستخدموا الأسلوب المرتكز على النظرية مع طريقة تحليلية للمقارنة الثابتة. واتضح أن الشخصية متغير أساسي شأنها في ذلك شأن المودة، والتعليم، والانتماء إلى أسرة، وغياب الحواجز والمجتمع. وأن لها تأثيرها على صحة المراهقين في ما يتعلق بالمفاهيم المستجدة. ويعتقد المشاركون في الدراسة أن العوامل النفسية الاجتماعية المتعلقة بالصحة أكثر أهمية من العوامل الصحية الجسدية والفردية. ومن هنا، فإن الرعاية الاجتماعية والأسر التي يتمتع أفرادها بالصحة، والمودة، ورعاية السمات الفردية لدى المراهقين، هي عوامل ذات أهمية كبيرة في صحة المراهقين.

ABSTRACT We conducted this study on 52 adolescents from Tehran to investigate their perspectives on health. We used the grounded theory approach and the constant comparison analysis method. Identity emerged as a core variable along with the concepts of friendship and relationships, education, family, lack of limitation and community. Identity affects adolescents' health regarding the emerged concepts. Participants believed that psychosocial health-related factors were more important than physical and individual health factors. Therefore, social welfare, healthy family/friendship, and caring for adolescents' individuality are important for healthy adolescence.

Modèle fondé sur l'identité appliqué à la santé de l'adolescent en République islamique d'Iran : étude qualitative

RÉSUMÉ Nous avons conduit cette étude auprès de 52 adolescents de Téhéran afin d'analyser leur conception de la santé. Nous avons utilisé le principe de la théorie enracinée (*grounded theory*) et la méthode de l'analyse comparative constante. L'identité est apparue comme une variable fondamentale, de même que les concepts d'amitié et de relations, d'éducation, de famille, d'absence de limites et de communauté. Elle a une incidence sur la santé des adolescents du point de vue des concepts identifiés. Les participants estimaient que les facteurs psychosociaux liés à la santé étaient plus importants que les facteurs sanitaires physiques et individuels. Par conséquent, la protection sociale, une famille/des amis bien portants et l'attention accordée à l'individualité des adolescents sont essentiels pour garantir une adolescence en bonne santé.

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Introduction

Adolescence plays a fundamental role in both human and community development. The main health risk factors for adolescents are unsafe sexual behaviour, addiction, motor vehicle accidents, mental health problems, suicide [1] and increasing unemployment, which they may encounter in their future [2].

In a study of Finnish adolescents' subjective well-being and realized values, most of the respondents were satisfied with life. However, 25% worried about money and 17% were unusually tired [3]. The effective role of community health centres in providing preventive care to adolescents has been reported in an analytical study [4]. There has also been research in other areas of adolescent health such as violence [5]. Regarding physical health, it has been shown that overweight and obese adolescents had worse self-reported health than those of normal weight [6].

Reproductive health is a further area of importance. A Taiwanese study employed qualitative research to find strategies for resolving adolescent pregnancy. The researchers suggested enhancing the understanding and participation of parents, church and schools on sex education [7]. An investigation on sexually transmitted diseases (STD) among adolescents found higher risk in females, black teenagers whose mothers had a lower level of education, and those with prior STD infection [8].

A significant amount of research has been carried out on different aspects of adolescent addictive behaviour and the effect of advertising, taxes and peer pressure [9–12].

The Islamic Republic of Iran, with 15 million adolescents, is one of the youngest countries in the world. The National Youth Organization studied the situation of

75 000 Iranian youth in a national survey. Good educational improvement and social commitment were reported, however, 51% of the sample did not have appropriate life skills. Thinking of the possibility of unemployment in the future and the difficult university entrance examination also increased their problems [13]. In a study conducted in Shiraz in the south-east of the country, 25.4% of high-school students smoked, 9.6% drank alcohol and 3.5% used opium [14]. Adolescents, therefore, are an important group in the country, with significant problems which need to be studied. So far, however, few studies have been carried out on their health and even fewer on their perspectives on health using qualitative methodology.

The aims of this study were to gain an understanding of adolescents' perspectives on health and to develop a categorical model for adolescent health.

Methods

A qualitative approach was employed to allow the researchers to explain adolescents' perspectives on health. Data were analysed using the grounded theory method: this has been important in developing nursing knowledge and explaining nursing phenomena [15]. The primary purpose of using this approach is to generate a comprehensive explanation of phenomena that are grounded in reality [16]. It was selected as our research method because health is an interdisciplinary and multidimensional concept within the social context in different individuals, groups and societies. Health has emotional, political, cultural, economic, educational and biological dimensions [17].

Adolescents aged 11–19 years were approached in a number of different places

such as schools, sport clubs, the home and parks in randomly selected areas of Tehran, which covered neighbourhoods of a variety of socioeconomic levels. The researcher explained to each participant the research goals and the interview guide questions, and an appointment was made for the time and place of interview. There were no refusals to participate in the study.

The guided questions were: How do you view your health as an adolescent? What factors affect adolescents' health? Who is a healthy adolescent? Additional points raised by the participants helped researchers to develop the interview guide over time. The semi-structured, focused interviews were conducted in 1–3 sessions taking an average of 70 minutes. They were audio-taped and transcribed as fully as possible. Data were collected and analysed during an 11-month period from mid-2003 until data saturation, i.e. until no additional data were found for development of the properties category. When one category is saturated, nothing remains but to go on to a new group for data on other categories [18]. The categories became saturated after the 52nd subject was interviewed and the codes added to the analysis.

The analysis process included open coding, axial coding, and selective coding. Constant comparison analysis and theoretical sampling were also used in the data analysis process. Open coding is a process that requires line-by-line scrutiny of the data to identify key words, phrases or themes. In this stage, 840 key words, which reduced to 96 themes, were refined after several readings of the transcripts. The last 96 themes were categorised and labelled in 5 categories.

In selective coding (the third phase), categories and subcategories were systematically linked with the core. Through the in-depth data collection and constant

comparative analysis, identity emerged as the core category through the process of linking among categories. This concept came up repeatedly in the interviews and was therefore a referral category. It can also be generalized to other categories and create linkages among categories [19].

Identity, as core variable, had multiple linkages among the concepts. The process of data collection is controlled by the emerging theory. The core becomes a theoretical guide to the further collection and analysis of data. Therefore, emerging categories and the main category (identity) led the researcher toward interviewing several key informants in late adolescence who provided rich data about identity (theoretical sampling).

Rigour

Credibility and consistency were confirmed through several methods. First, the evolving results were discussed continuously among the authors. A second review of the transcripts, codes and grouped codes, concepts and designed relationships was carried out by a number of colleagues as a peer check and some of the participants as a member check. This was then also checked by 5 adolescents who had not participated in the survey to verify the fitness of the results. Through the variation in sampling, the opportunity was offered to adolescents from different socioeconomic backgrounds to describe the factors that affect their health. Quotations were used to illustrate participants' key points. Finally, prolonged engagement with the adolescents and their circumstances enabled the investigator to gain the participants' trust and obtain deeper and more reliable data.

Ethical considerations

Ethical approval was obtained from the Nursing Faculty Research Committee at

Tehran University of Medical Sciences. Permission for interviews and recording was obtained from both the Area School Organization Chief Executive Officers and school principals when required. All of the adolescents were informed of the purpose and design of the study and that participation was voluntary with concern for confidentiality and anonymity. Verbal consent was given and also audio-taped. To protect privacy, interviews were conducted with the participation of only the interviewer and the interviewee.

Results

The participants consisted of 52 adolescents aged 11–19 years, with equal numbers of males and females. Thirty (58%) were 17–19 years old, 14 (27%) were 14–16, and 8 (15%) were 11–13 years. In terms of education, 5 (10%) were university students; 47 were in school, 26 (50%) in high school and 21 (40%) in guidance school (years 6–8 in the Iranian education system). On average, participants had completed 9 years of schooling. Four participants (8%) (all males) were employed, 2 (both females) were married.

Five concepts and the core variable, with 2 dimensions each, emerged through constant comparison analysis. These are presented in Table 1. The following section explains these dimensions.

Community: contrast and/or obedience

The importance of community was emphasized by all the participants. Furthermore, according to their views, despite all their useful applications, the Internet, satellite television, films and CDs teach a variety of behavioural patterns that are contradictory to Iranian culture and reli-

Table 1 Main concept, core variable and their dimensions emerging from analysis of adolescents' perspectives on health

Concept	Dimension
Community	Contrast Obedience
Friendship and relationships	To be accepted To be dependent
Education	Worries Hopes
Family	Individuation Nurture
Lack of limitation	Trial Error
Identity (core variable)	Identity formation Emergence of identity

gion. Unemployment and the availability of cigarettes, alcohol and narcotics in society were challenges to adolescent health. Feeling healthy in a caring community means that people can attain their goals and adolescents are able to develop their identity.

“Contrast” (the opposite of obedience) is found in an unhealthy community and this means “protest by doing wrong in order to find oneself”. On the other hand, “obedience” is another dimension reflected in an unhealthy community. This was another dilemma for adolescents: “ignore oneself, one’s identity, and obey wrong norms”.

Friendship and relationships: to be accepted or to be dependent

Friendship/relationships is one of the main concepts in relation to adolescent health, and almost all our participants mentioned it one way or another. To be accepted, based on the participants’ perspectives, meant “join peers”, “independence from the family”, “to gain personhood” and “to

be identified as an adult". In contrast, being dependent (on the family) equates with not being accepted by friends or "being counted as a kid".

Friends were considered more influential than parents although the participants talked about some of their experiences of undesirable behaviours (smoking, drinking, playing hookey, and exchanging inappropriate, forbidden films) and seldom mentioned the positive effects of friendship. Being accepted by their peers was extremely important for adolescents; in other words it was independence from the family. Therefore, they sometimes started smoking and drinking and continued doing so to be identified as a member of the group and pretend independence. As 1 participant said "we usually start smoking after friends offer and are forced to continue because of our friends' persistence".

Education: worries and hopes

Education, with the dimensions of worry and hope, has been emphasized in relation to adolescent health. Worry could also affect their identity. Examples given of adolescents' worries acting against the development of their identity were "school authorities and repeated dos and don'ts" and "being fed up with school regulations". They also experienced "anxiety", "nothingness", "disappointment through the difficult and exhausting university entrance exam" and the enforced major subjects. Participants revealed that sometimes they chose their majors based on their parents' wishes, social preferences or job markets, and not their own talents and interests.

In contrast, their hopes included planning and provision of educational facilities with regard to students' talents, expert teachers as role models, higher education as a job prerequisite, and education that prepared them to be ready for real life.

Informing adolescents about the dangers of smoking and addiction was considered one of the responsibilities of educational media, "The most important thing is being aware about smoking. The schools teach us lots of useless things but not the useful and necessary points."

Family: individuation or nurture

The participants emphasized effective familial factors on health. Individuation could be a result of some familial factors which helped adolescents' identity. Family induces a sense of being understood, being respected and personhood; thus the "adolescent child could be identified as a perfect man". In contrast, some parents who are excessively nurturing may inhibit adolescent health. These parents "highly protected adolescents as if they were little kids" and "cared too much about clothes, food and education but not adolescents' emotional needs." The participants complained about parents' repeated dos and don'ts. These were challenging for adolescents with normal independence-seeking behaviours. The family can have a negative effect on the health of adolescents by not regarding them as independent individuals.

Communication problems between adolescents and their parents were important challenges in the individuation and nurture dimensions. This is caused by a widening gap between the generations. Communication problems create feelings such as "a sense of loneliness", "not having been guided by parents", and "less participation in family activities". Adolescents expected of their parents such things as good communication, learning life skills and growth of self-esteem: "If parents trust their children, the trust will grow both ways and the children will also talk to their parents and won't hide things so much."

Lack of limitation: trial and error

Lack of limitation was important to the participants; trial and error helps them to find themselves as complete individuals. Not being limited had a vital role in the formation of identity in adolescents. Owing to the emergence of independence-seeking characteristics among adolescents, they believed that they could achieve a more perfect self through freedom, even if this meant making errors which they would later regret. Many of the participants, especially females, who had experienced more restrictions, could recall when they sensed limitation. They revealed a sense of not being respected through limitations at home, in the school and the community because of differences in viewpoint and the generation gap. One of the participants said, "Adolescents know that such shackles as religion, tradition, morality, and social norms could guarantee adolescents' health relatively, but we want to try everything."

Core variable: identity formation and emergence of identity

Identity became apparent as a major avenue through which adolescents maintained their health through living in a healthy community, accepting friendships, effective education, living in a family respecting individuation, not being limited, and developing their identity.

Identity was a special concept which was revealed by the participants in different ways, e.g. goal attainment through social facilities, materialization of wishes, enjoyment and satisfaction with activities. They considered social problems such as poverty and availability of drugs detrimental to both their health and their identity, and factors such as the following could develop their identity: affecting instead of being affected, performing important tasks, being the centre of attention, smoking and having

girl-friends (for boys), taking risks and having a tendency towards wrong-doing. The importance of identity in adolescents is such that it causes them to be identified with these very features: "I felt perfectly healthy when I was so important and could have a determining role for others".

Discussion

Different methods were used to increase the credibility and the conformity of the results. Through maximum variation of sampling and constant comparison analysis, a variety of different adolescents were interviewed, and the categorical model that arose seemed consistent across adolescents. Peer check and member check showed more than 90% of the codes in common. We also tried to interview adolescents of different socioeconomic status regarding pluralistic diversity. However, the findings may not be generalizable to other adolescents.

More in-depth data and a better-fitting model may have emerged using a same sex interviewer and narrowing the participants into special age groups (early, middle or late adolescence). In this study a female investigator carried out all of the interviews regardless of the participants' sex and the period of adolescence which they were in. Furthermore, the data were generated from adolescents who participated voluntarily; this may not reflect those who refused to participate—neither their characteristics nor their health perspectives were known.

We found that adolescents' health factors were undergoing changes to identity-oriented factors through main concepts. Identity as the core variable of this study interacts with adolescents' health and also with the 5 concepts mentioned. Community was the most important field for the participants. It also had a wider

range, superior position and interactional connections with the main concepts of identity and adolescents' health.

The community

Our findings indicated that a healthy community is related to adolescents' health. This seems congruent with studies on the health of elderly Iranian emigrants. It was found that cultural meaning and practices are not static or monolithic. Life context also influences health-and-illness-related perceptions and experiences. Furthermore, Cowley in a grounded theory study on nurse health visiting perspectives suggested that positive health is promoted within a broad, acceptable sociocultural context [20]. Community health was important in our participants' view. Drug availability, because of the geographical situation and being in the drug transition path, and the unemployment problem were the main reasons for their panic. This, combined with unemployment, could threaten both adolescents' health and adolescents' identity. Having a job in the future was a prerequisite for health in our participants' viewpoints. However, to have money [21] to be well paid and to have a respected job [3] were valued for adolescence health in other studies.

Friendship and relationships

Friendship, with the dimensions of acceptance or dependency, was another concept. The participants stated that their health was affected by their friends in different ways. In contrast, in a 2000 study, a mutual relationship with friends was not found to be a predictor of adolescents' global well-being [3]. Accordingly, recreation, music, clothing and expenses will be affected by peers. Moreover, adolescents' psychological liveliness helps them acquire a better identity in peer groups [22]. Although there

are some public education programmes in the media and schools, neither adolescents nor parents have enough experience to manage a healthy transition using the positive role of friendship. As a result, some parents continue protecting their adolescent children from undesired consequences of friendships. However, some social changes such as changing families from extended to nuclear families, mothers' employment, modernity and urbanization, could increase the role of peers, thereby decreasing the role of the family.

Education

Education forms the bulk of participants' worries and hopes. Our findings indicated that school was among the factors affecting adolescents' self-esteem and their identity. These findings are similar to those of the McFeely study [23], which found that there was a positive relationship between school satisfactions on the one hand, and total life satisfaction, self-esteem and better healthy behaviours on the other hand. In contrast, examination stress, competition, excessive homework and school regulations may cause adolescent depression and anxiety [24]. Adolescents have said that they are afraid of facing daily problems, and are dependent on and even addicted to their families' advice and encouragement. This is caused by the teacher-centred education, which ignores problem-based learning. Therefore, health education in different areas, education regarding knowledge and prevention of addiction, say-no skills, teaching and the other fields considered necessary and important in adolescents' health tasks were all emphasized by the participants. Similarly, schools are expected to educate regarding globalization, increasing use of satellite and the Internet, and social situations such as the transition from tradition to modernity.

Family

Family also had a strong influence on adolescents' behaviour and reducing risky behaviour in this age group. Independence is one of the developmental changes seen in adolescence. In contrast, "becoming depressed" and "feeling unhealthy" were revealed as consequences of limitation. Adolescents complained about their parents in relation to limiting them and ignoring their ability to make decisions and choices. The sense of limitation and intergenerational differences to establishing identity were also reported by Canadian adolescents [21]. These challenges between adolescents and parents are common in adolescent research literature [25,26]. It has been reported that the respondents who perceived the parental relationship in the family to be moderate or poor felt lower satisfaction, lower self-esteem and a more depressive mood than those who reported a good parental relationship [2]. Parents need more knowledge and skills regarding adolescent health in a changing world. The appropriate parent-child relationship and parents' expectations should be reviewed through the notion of the modern changing world.

Lack of limitation

Lack of limitation was a common concept of trial and error. These limitations need more awareness and tolerance with regard adolescents instead of restricting them as the simplest method of discipline. This was revealed as a prerequisite for healthy adolescence. The link between a sense of not being limited and being healthy has also been shown in a phenomenological study by Haggman-Laitila using other words. Health was defined as an individual way of existence, an independent coping, a control of lives fully and autonomously, and a right to disclose oneself as one wants [27].

Senderowitz also considered that limitations could affect adolescents' identity formation. To acquire a new and independent identity and gain more freedom are among the reasons why adolescents start risky behaviour [25]. Unlike Rosenbaum and Carty's study that found religion was only occasionally mentioned as an important value by Western adolescents, this was highly valued by many of our participants. There is a great difference between adolescents' views and those of parents and school authorities. The gap, which is due to the characteristics of this transitional period and to their access to such media as computers, the Internet, and satellite TV, has made adolescents feel limited [21].

According to our participants, the rejection of these religious and cultural shackles, a negative outcome of globalization and the price of modernity, can be challenging for adolescents' families and societies. Similar to our finding in this area about the effect of modernity changes on adolescents' health, Tsai and Wong found the same phenomenon in their qualitative study. They reported that a fast rising society, widening gap between generations, insufficient communications, weakening family bonds and cultural changes were the cause behind adolescent pregnancies in Taiwan [7].

Identity

Identity was the core variable in this study and was related to other variables and adolescent health. Adolescents have different understandings of identity, freedom and democracy at different stages of development. The most important aspects of decision-making and the right to choose in this period are the right to choose one's friends, school, and field of study. As they grow up, adolescents are inclined towards their right to choose social variables such as voting [28]. Clothes, hair and music were

metamorphoses for adolescents gaining identity [21].

There are some useful considerations in adolescents' health. Firstly, informing parents of adolescents' developmental process and of behaviours appropriate for this process can bring about the desired identity. Secondly, adolescent participation in social affairs can also help stabilize their identity. The symbolic move of the Ministry of Education to establish a students' parliament, and school mayors who encourage participation in school affairs are but 2 examples [29]. Thirdly, the availability of satellite television and the Internet can play a role in destroying national identity. Of course, it is not limited to our country. The opponents of globalization criticize this phenomenon more than others, i.e. subcultures which lack information technology (IT) are gradually dissolved into cultures having IT. The participants' comments showed the importance of being fashionable, with their patterns taken from the satellites and/or the Internet.

Conclusion

Understanding the views of adolescents can enhance their health during this period. Different understandings of the concept and process of health and their related needs have been shown this study. The participants emphasized the importance of identity and its role in their health. Cultural factors, globalization and social changes were also important for understanding, and to maintain and enhance adolescent health.

As a result, the interdisciplinary efforts among families, health, industry, education, and economics could be directed towards the following areas:

- concern about adolescents' participation which can enhance their personhood,
- strengthening religious beliefs, and also the holy basis of the family,
- preparing safe and healthy friendship through adolescence period,
- improving the economic conditions and increasing the job opportunities, social welfare services for more recreational facilities,
- creating the appropriate culture for making use of international media and the Internet,
- enhancing public knowledge, especially that of parents about changes and risk factors in adolescents.

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