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Soroor Parvizi and Zeinab Hamzehgardeshi*

Adolescents' view of health concept and its risk factors: a literature review

Abstract

Background: Adolescence is the important period in human life. It is an essential prerequisite for playing social roles.

Objective: The current study conducted a review on the concept, dimensions, and influential factors on health and risk taking, instruments and measurements of high-risk behaviors, risk factors, and high-risk behavior protective factors through adolescent perspectives.

Methods: This literature review was conducted by electronic searching and library study on health and adolescents using Wiley Interscience, ScienceDirect, ProQuest, and Springer (1990–2012). The keywords for searching data collection sources included health, youth, young, adolescents, risk behaviors, risk taking, related factors, protective factors, risk factors, adolescent perspectives, quantitative study, qualitative study, measurement, and instrument.

Results: This literature review led to the arrangement of subjects in nine general categories titled definition of health concept and its dimensions, adolescents and health in adolescence, risk taking in adolescence and its measuring tools, gender differences in adolescence health and risk taking, adolescents' health and relationships, socioeconomic conditions and health, adolescents and psychiatric health, religion, and health, educational facilities and health, non-governmental organizations and their role in adolescents' health. What has been achieved from a review of these articles is that several personal, social, and family factors are associated with health and risk taking in adolescents.

Conclusion: Generally, adolescents cared more about the psychosocial aspects of health than the physical dimensions. They also considered factors such as independence, communication, socioeconomic conditions, mental health, religion, and educational facilities synonymous with the concept of health. Therefore, in formulation and implementation of health promotion programs for adolescents, the concept of health and its various dimensions must be considered from adolescent perspectives.

Keywords: adolescence; health; perspective; risk factors.

***Corresponding author: Zeinab Hamzehgardeshi,** Traditional and Complementary Medicine Research Centre, Mazandaran University of Medical Sciences; and Nasibeh Nursing and Midwifery Faculty, Midwifery Department, Mazandaran University of Medical Sciences, Vesal Street, Amir Mazandarani Boulevard, Sari, Mazandaran Province, Iran, Phone: +98-151-22673425, Fax: +98-151-2268915, E-mail: Hamzeh@razi.tums.ac.ir

Soroor Parvizi: Department of Nursing, Iran Nursing and Midwifery School, Iran University of Medical Sciences (IUMS), Tehran, Iran

Background

Health is undoubtedly the most important aspect in human life, whether individually or collectively. It is an essential prerequisite for playing social roles. People can only be fully active when they regard themselves as healthy and when society regards them as healthy as well (1). Thus, health is a relative concept, with different meanings and manifestations in different cultures. To every individual, health has a specific meaning and status. Adolescent health is essential to the future development and health of society, and studying health in this group is extremely vital (2). Currently, in many low and middle income countries, major changes in healthcare are in progress with an increasing focus on adolescent health (3). Given the important fact that adolescents have their own specific rules for recognizing society, values, and cultures in their own specific dialog (4), and that their high-risk behaviors have a role in creating complications, inabilities, social problems, and individual mortality in adolescence and adulthood, it was decided to conduct a purposive review of the concept, dimensions, and influential factors on health and risk taking, instruments and measurements of high-risk behaviors, risk factors, and high-risk behavior protective factors through adolescent perspectives.

Methods

To conduct this review, researchers used general search engines such as Google Scholar, and then more specific engines such as Wiley Interscience, ScienceDirect, ProQuest, and Springer followed by library study on health and adolescents (1990–2012). The keywords for searching data collection sources included health, youth, young,

adolescents, risk behaviors, risk taking, related factors, protective factors, risk factors, adolescent perspectives, quantitative study, qualitative study, measurement, and instrument.

Inclusion criteria were applied in the following steps. The first step involved the evaluation of all identified articles that explored the concept of health from an adolescent's perspective and instruments of adolescent risk behavior assessment. Inclusion and exclusion criteria were checked by the two authors. Articles that contained these criteria were appraised by the two authors.

Results and discussion

The literature review led to the arrangement of subjects in nine general categories titled definition of health concept and its dimensions, adolescents and health in adolescence, risk taking in adolescence and its measuring tools, gender differences in adolescence health and risk taking, adolescents' health and relationships, socioeconomic conditions and health, adolescents and psychiatric health, religion, and health, educational facilities and health, non-governmental organizations and their role in adolescents' health.

Health concept and its dimensions

Although defining health as complete physical, mental, and social well-being, and not merely the absence of sickness and disability appear simple (5), it is particularly difficult and complex in adolescence. Understanding and discovering health as a fundamental, extensive, and fluid concept with personal meanings can be effective in various development planning programs (6). Because health is a dynamic and multidimensional concept, its various dimensions have been mentioned in several studies including physical, psychological, psychiatric, emotional, philosophical, spiritual, cultural, family, social, and economic dimensions. Health affects every dimension of a person's daily life (2).

Adolescents and health in adolescence

Adolescence is a period of complex development and transition from childhood to adulthood. According to the World Health Organization's definition of health, the age group of 10–19 years is considered adolescent (7). Adolescents comprise 1.2 billion people of the world population (8). During this developmental period, in addition to physical and developmental changes, adolescents experience a tendency for independence from the family, joining with their peers, and heightened relationships with friends. A part of their identity is shaped within their peer groups. Unsafe sexual behaviors, addiction, road accidents, psychological problems, suicide attempts, unemployment are some of the risk factors in adolescence that may cause involvement of adolescents in long-term problems well into their future lives. Additionally, many adolescence risk factors begin and intensify with normal changes in this period (9), while adolescence is usually considered a period of health, and thus, with this assumption, adolescents remain deprived of preventative care services (10).

Understanding adolescents' perception of health, within the framework of health issues, could lead to a planned participation in policy making, and should be studied before developing policies. The fact is that failure of adolescents' health policies could be due to non-involvement of adolescents' perceptions and their understanding in decision-making, and decisions are focused on individual risk behaviors such as obesity, suicide prevention, and sex education, with limited success. In one study, adolescents described health as a common responsibility between themselves and adults, emphasizing the key role of adults' support at initiating and continuing health behaviors (11).

Adolescents' definition of health may be a reaction to the conditions they are experiencing. Adolescence is regarded as a period of gaining independence, and its experience could be accompanied by considerable growth (12). The importance of independence in this period is because it is considered a component of health. Accordingly, health is a personal and exclusive goal, and varies from one person to the next. Given that independence and idealism are important attributes of adolescents' development, provision of healthcare as independence will be more important at this juncture (13). Adolescents' perception of health means resistance against peer pressure in a society that is not safe, where cigarettes and other substances are commonplace. Furthermore, in boys, health has psychosocial origins, and in girls, it is conceptually related to physical and mental conditions. In Eastern Muslim societies, with freer and more social links, boys consider not having mental and social problems as the more important issue, whereas girls with more restrictions or feeling more restricted tend to study more and pay more attention to physical and aesthetic aspects of health.

Risk taking in adolescence and its measuring tools

In adolescents' perception, with unknown and uncontrollable consequences, danger is necessary in life. They

also regard transition from adolescence challenging, and believe that they have high control and sufficient knowledge in their decisions about high-risk behaviors (14). For example, in adolescents' view, availability of unhealthy foods in a university campus, snacks, late night binging, eating following alcohol consumption, eating when stressed and sad, and presence of food in dorms are related factors in weight gain. Also, negative experience in using university campus facilities, bad weather, insufficient time, lack of time management and social support for sporting and exercise were described as related factors in their physical activities (15).

It is stated that high-risk behaviors increase destructive physical, psychological, and social consequences for the person. These behaviors cause many deaths in adolescence and early adulthood (16). Behaviors related to unintentional and intentional injuries, smoking, alcohol and substance use, high-risk sexual behaviors, behaviors related to unhealthy food consumption and insufficient physical activity are declared as adolescents' high-risk behaviors by the Centers for Disease Control and Prevention (CDC) (17, 18).

Studies have shown that many risk factors are involved in the occurrence of high-risk behaviors. For example, several risk factors for substance abuse among adolescents have been identified including parents' believing the substance to be safe, lack of anger management in a family, lack of intimacy and parental involvement in children's affairs, passive mother, academic problems, concurrent incidence of psychiatric disorders such as conduct disorder and depression, peers and parents drug abuse, impulses, and early onset of smoking (19).

Drug use is one adolescence problem (20) that leads to various physical, social, and academic impairments. For instance, drug abuse in adolescence has negative consequences in younger years including addiction, depression, suicide, interpersonal problems with family and peers, injuries or death due to road accidents, destructive effects on economics of the family and society (21, 22). In addition, high-risk behaviors tend to occur simultaneously (23).

Studies found a relationship between smoking, concerns about appearance, alcohol consumption, and dietary disorders in adolescence (24). In addition, social status, family, peers, personality, racial and ethnical differences are risk factors in the onset of high-risk behaviors such as use of alcohol (25). Also, mood disorders, history of rape, access to guns, parental mental disorders, and history of suicide attempts have a significant relationship with high-risk behaviors such as self-harm and suicide in adolescents (26). Therefore, several personal, social, and environmental factors play a role in adolescents' high-risk behaviors (27).

The role of family and parental supervision in occurrence of high-risk behaviors cannot be denied. For instance, parental supervision (monitoring) probably delays the onset of adolescents' sexual activity through one of the following three hypotheses: first, parents' monitoring reduces opportunities and thus reduces adolescents' intention to engage in sexual activity; second, parents' monitoring could play a role in changing adolescents' attitudes and beliefs about such behaviors as sexual activities, and third, parents' monitoring may restrict adolescent's contact with high-risk peers (28).

The Youth Risk Behavior System Surveillance (YRBSS) is a systematic epidemiological surveillance system prepared by the CDC for the purpose of monitoring youth risk behaviors. It focuses on risk behaviors that develop during youth and will result in mortality, morbidity, complications, and behavioral problems in youth and adulthood. These behaviors include unintentional and intentional injuries, tobacco use, alcohol and other drug use, high-risk sexual behaviors that lead to HIV infection, other sexually transmitted diseases (STDs) and unintended pregnancies, dietary behaviors, physical activity, as well as weight gain and asthma (18, 29–31).

There are also other tools for monitoring health and risk behaviors in adolescence. The CTC-YS questionnaire (Community That Care-Youth Survey) has been formed on a social development model. This tool enables communities to identify risk and protection profiles in adolescents in their community, and to choose evidence-based policies and preventative programs to target risk and protection factors in that community. This questionnaire assesses 23 risk factors and 10 protection factors that have been shown to have associations with behavioral problems in adolescents such as violence, leaving school, and early pregnancy. Researchers consider the CTC-YS questionnaire as unique due to the widespread assessment of risk and protection factors, having a theoretical basis, and a wide use in social prevention programs (32). In fact, Community That Care (CTC) system is one of the known "risk protection" oriented systems that enable communities to design and implement prevention programs based on multidimensional and multisectional evidence with the aim to prevent adolescents' behavioral problems (drug use, delinquency, violence, teen pregnancy, school dropout, and mental health problems) and reinforce positive development in adolescents.

Another scale is the Adolescent Health Promotion (AHP) scale, which is a 40-item Likert-type self-report instrument used to detect unhealthy lifestyles in

adolescents. The content validity was supported based on a panel of 14 content experts. This instrument has six domains, including social support, life appreciation, health responsibility, nutritional behaviors, exercise behaviors, and stress management (33).

Gender differences in adolescence health and risk taking

Studies reveal the presence of gender differences in prevalence and influential factors in adolescents' risk taking (34). The difference in incidence of high-risk behaviors based on gender is related to the differences in social norms, customs, culture, socioeconomic status, and demographic factors (35).

Gender could also be involved in the definition of health; studies have shown that in health reports, adolescent girls scored lower marks than boys (36). Furthermore, gender difference is a strong predictor of health in adolescents' high-risk behaviors (37, 38). Boys are reported to show more high-risk behaviors such as carrying guns, participation in physical fights, carrying knives, and subsequent physical injuries than girls (39). There are many reasons for these gender differences. For example, boys are more active than girls, and hence they are more exposed to harm (40, 41). Boys are more inclined to show high-risk behaviors (41) and biologically tend to take more risks (42). Furthermore, there are differences in the process of sociability between boys and girls (42, 43), which leads to a different perception of danger and high-risk behaviors by boys (42, 44).

Communication and adolescence health

Adolescents consider the role of communication in health as a double-edged sword, which can lead to health on one side and threaten it on the other. The role of communication in adolescents' health can be analyzed by considering the following three aspects.

Technology and health

Use of the internet among the new generation in the community is expanding and takes up a large part of people's lives, for shopping, collection of information, chatting with other users, and many other activities (45). Online communication has become the core in the lives of adolescents (46), and 87% of adolescents (12–27 years old) in the USA use the internet (47). Communication technologies could have both positive effects (communication, elevated self-confidence, and quality of friendship) and negative effects (appeals for sexual favors) on health (46). Particularly, at this age, the web world is a magical attraction for adolescents that may take several hours of their time on the computer or at internet cafes spent on chatting and finding friends on the internet. Adolescents that spend large amounts of time on the internet have lower quality of dietary intake, physical activity, and sleep than their peers (48). However, one positive point in this occasional threat is that it could be used as an opportunity for health-promoting activities in adolescents (49). The internet, as a medium of communication and entertainment provides a fun and safe life for adolescents that have been denied to them in the real world. In addition, the internet could be an asylum for adolescents that suffer from anxiety and loneliness, compensating for lack of understanding and support of the family (45).

Communication with peers and health

Adolescence is called a period of separation from the family and bonding to peer groups. Not guiding these towards healthy friendships and lack of parental supervision could have irreparable consequences (12). For the sake of popularity among peers, adolescents might even resort to high-risk behaviors such as higher participation in sexual activities or substance abuse (50). They have mentioned rampant drug addiction in society for attention seeking of friends, easy access to drugs (especially in parks), the get together in parks and coffee shops, and more and extensive communication of adolescents with one another at school, university, or in dorms (51, 52). This could originate from social interactions with peers and the process of sociability of adolescents. Adolescents seek opportunities to contact their peers. Thus, high-risk behaviors such as smoking may be acceptable and attractive to adolescents.

In our society, cultural characteristics, moral and religious commitments to a large extent control and prevent the spread of and exposure to adverse consequences of communication with opposite sex friends. There are still positive and obvious differences with other societies, and compared to other societies, these friendships are still motivated by modernity rather than sex (53). Nonetheless, the disadvantages of the age of communication, transition from tradition to modernity, and signs of adolescent identity crisis add to the importance of this issue (54). For example, studies have shown that half of

adolescents in the USA are sexually active (55), whereas in Iran, sexual relationship statistics are very low compared with Western countries. A study on young boys in Tehran in 2002 revealed that nearly 28% of them had sexual relationships before marriage (51). It seems that a suitable communication model is required that is relevant to adolescents seeking independence and excitement.

Communication in the family and health

There is a close relationship between parental communication style and children's healthy feelings. Sometimes adolescents are not understood by their parents, and sometimes parents' concerns feel like inquisition to adolescents, which conflict with their sense of independence and disturb them. Owing to developmental changes in adolescence, these issues may provoke other expectations for adolescents and parents, and change the family communication pattern (previously controlled by parents) towards a communication pattern in which children also have a say (12). Moreover, an unfriendly relationship between parents and children could cause feeling of loneliness, depression, lack of being understood, and lack of being guided by parents, resulting in reduced involvement in family activities (51). Because increased level of family support has always been accompanied by reduced risk factors in adolescence, reassessment of parents-adolescents relationship towards a respectful and rational relationship, counseling, and preparation for accepting a collective life is imperative in adolescents (50). A study conducted in Iran showed that preference of boys by parents and decision-making solely by the father of the family without involvement of other members of the family are among factors associated with intentional harm to adolescent girls. Use of punishment by parents is among factors associated with intentional harm to boys (38). It seems that with schools and counseling centers, teaching life skills in adolescence, with indirect and distant supervision of adolescence friendships could help parents to behave in such a way that would keep their independent young child healthy and provide them with peace of mind from the usual adolescence problems such as smoking, addiction, and unhealthy sexual relationships and friendships.

Socioeconomic conditions and health

Physical, financial, and information environments could have a supportive or inhibiting role on health behaviors and outcomes in adolescents (11). Socioeconomic conditions reflect the social nature and class and social status of the adolescent (56). Adolescents have experienced economic deprivation, material and immaterial consequences, and a feeling of being unhealthy (50). In addition, enough family income reduces the likelihood of high-risk behaviors such as violence and self-harm in adolescents (38). Also, adolescents in lower socioeconomic status have a higher tendency to smoke, and are less successful in quitting smoking than those in higher socioeconomic status. This could be due to lack of social supports, less confidence in own capabilities to quit smoking, and a more intense nicotine dependence in poorer and less educated people (56).

The role of leisure time in providing adolescents' health and financing sport and recreation costs could prevent unhealthy recreation and communication between adolescents. Adolescents that spend their free time with their family, with a well-planned schedule, are less affected by social deviation and harm (50, 57).

Adolescents have considered constantly working parents and unemployed parents an obstacle to their health (51). To make a living, parents have to spend vast amounts of time outside the home, and do not have a chance or the time to supervise or talk to their children (50). The presence of parents could mean abstaining from alcohol or smoking for adolescents, due to embarrassment. Many adolescents think of family holidays and outings as a turning point in their lives, because during these times they could not smoke or use alcohol due to the presence of their parents, they felt better and healthier (51).

By contrast, employment of adolescents and its effect on health could be considered. For adolescents a job is not just a means of income, it means independence and being responsible for one's own life. Unemployment is one of the most important tensions in adolescents' lives, especially in current societies. Work environment could provide many learning opportunities and social communication, which results in increased self-confidence in adolescents. Work opportunities are part of social supports, which will have direct effects on physical and mental health of people. Adolescents with higher social support are less involved with smoking, alcohol, and drugs. They have many concerns about unemployment, and consider turning to smoking, alcohol, and other drugs, and abnormal behaviors, a consequence of being unemployed. Adolescents believe that because, as a citizen, having a job opportunity is their right, unemployment is a factor for turning to antisocial behavior (58).

Mental health and adolescence

Most adolescents are vulnerable to various types of stress such as challenges associated with growth and exposure to high-risk behaviors that affect their mental health (59). Around 75% of psychiatric disorders begin in adolescence (60). However, boys more than girls, respond to stress and trauma with aggression against self and others, and tend to deny the problem. However, in stressful situations, girls find refuge in their peers, and attend to the health needs caused by stress (7, 59). In addition to the factors mentioned, there are other factors that adolescents regard as affecting their health including good relationships between parents. They believe that family has an important supportive role in their mental health and conflict between parents has negative effects on them. They consider themselves as innocent victims of these conflicts (51). Conflicts between parents have had adverse consequences for adolescents such as "low scores" and even "failure", "lack of comfort", and "stress". These conflicts together with a negative atmosphere could be intensified by lack of knowledge about developmental changes in this period, lack of communication skills, and financial hardships (50). Family problems such as family instability and poor relationships between adolescents and parents are associated with high-risk behaviors of adolescents (61). Furthermore, severe and irrational restrictions together with disaffectionate parents could encourage antisocial behavior in adolescents (62).

Because, during adolescence, time spent with parents is reduced (63) and conversely, time spent with peers is increased, dependence is shifted toward peers (64). However, studies indicate that one of the best ways of influencing mental health of adolescents is involvement of parents in this relationship, because parents are the main source of providing mental health for adolescents, and are interested in the future of their child. Therefore, they have the necessary motivation for involvement and cooperation in enhancing their mental health (65, 66).

Religion and health

Religion and health follow each other in a circle, and each is cause and effect of the other. Sometimes health is the effect, instead of being the cause of religious belief (12). Religion can play an important role in the lives of adolescent, and can be an important protective factor in reducing high-risk behaviors. Studies show that religious enrichment, both in beliefs and in action, can cause reduction in sexual activity, alcohol use, drugs, and tobacco. In religious theory, researchers have differentiated between public religious practices (religious services, communication with religious communities, religious practices) and private (personal beliefs about religion), but both have an important role in reducing high-risk behaviors (67, 68). Religion can cause inner commitments in adolescents that would protect them against risk behaviors such as use of alcohol and sexual relationships. It seems modern religious behavior models that preserve and provide adolescents with independence and freedom is more acceptable by adolescents due to being modern. New, practical religious narratives that are easier and less interfering with legitimate freedom of adolescents seem to be more acceptable.

Non-governmental organizations and their role in adolescents' health

Adolescents are considered the most important human resource in a community. Given their important role in the development of a country, it is important to pay attention to health promotion planning. International, national and, local development plans will not be successful without public involvement. Global experiences have shown that non-governmental organizations can play an important role in mobilization of people.

Today, non-governmental organizations as part of civil society, play an increasing role in the formulation, implementation, and strengthening of health policies. With creative strategies, non-governmental organizations can get health messages across to adolescents, families, and society, and by involving adolescents in implementing health promotion plans increase their responsibility for their behaviors. Because many non-governmental organizations in Iran have charitable and religious activities within the country's social and cultural framework, by training their members, this existing potential for adolescents' health promotion could be utilized (69).

An example that can be appropriate to Eastern Muslim countries is the experience of preparation of the National Iranian Youth Document, which contains how to achieve coordinated involvement of governmental and non-governmental agencies in national division of work for organization, management, and planning of adolescents' health promotion affairs, and empowerment of the country's young generation, in order to utilize their actual and potential talents in the development of the country.

Conclusion

This article reviewed dimensions of health and adolescents' health risk factors. Also, independence and health in adolescence, communication, socioeconomic conditions and health, mental health and adolescence, religious factors, educational facilities, and the role of non-governmental organizations in health were investigated. What has been achieved from a review of these articles is that several personal, social, and family factors are associated with health and risk taking in adolescents. Generally, adolescents cared more about the psychosocial aspects of health than physical dimensions. They also considered factors such as independence, communication, socioeconomic conditions, mental health, religion, and educational facilities synonymous with the concept of health. Therefore, in formulation and implementation of health promotion programs for adolescents, the concept of health and its various dimensions must be considered from adolescents' perspectives.

Provision of adolescents' health will ensure health of the future generation. Moreover, many disorders begin in this period, and if undiagnosed and untreated, they lead to drug abuse and delinquency. Therefore, it is necessary to attend to the health of adolescents in the community, activate students' counseling centers, train cognitive and coping skills, and implement a comprehensive plan for providing psychotherapy and counseling related services.

Limitations

Because the current study is a narrative literature review, it therefore has several limitations. Firstly, it may depend on the author's bias. Secondly, methods are not usually specified. Thirdly, the review cannot replicate.

Recommendations

High-risk behaviors have an important role in chronic diseases, and studies have shown that most high-risk behaviors begin before the age of 18 years. In addition, correct information is scarce in relation to many aspects of high-risk behaviors due to the stigma attached. Therefore, it is recommended to run a comprehensive, countrywide program with the aim to determine the prevalence and trend of high-risk behaviors in Iranian adolescents, and explain related adolescents' risk and protection factors through the perspective of all beneficiaries, especially adolescents, for the design and presentation of comprehensive and culture-based strategies for adolescents' health promotion.

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