

Prevention and Management of Risky Behaviors in Adolescents, Focusing on Suicide, Substance Use, and Risky Sexual Behaviors through Empowerment Programs: A Narrative Review

Abstract

Background: Empowering adolescents to manage and reduce unhealthy behaviors and promote adaptive behaviors is a promising approach to promoting healthy behaviors. This review was an attempt to evaluate adolescent empowerment programs aimed at preventing and managing risky behaviors. **Materials and Methods:** This narrative review was conducted in 2023. The texts were reviewed in two sections: (1) a review of articles and books in databases and (2) a review of international websites. The keywords used to search for studies and programs included substance-related disorders, risky behaviors, empowerment, program, adolescent, suicide, and risky sexual behaviors. These keywords were individually searched in international databases such as “PubMed, Scopus, and Web of Science.” In the second section, a search was conducted on the websites of international organizations such as the World Health Organization (WHO). The inclusion criteria included having the full text of the original articles, articles in English, articles related to the development and evaluation of the effectiveness of empowerment programs, and the age range of adolescents. The texts that only had abstracts and were in non-English languages were excluded. **Results:** The programs designed to empower adolescents were in three areas: (1) community-based and peer-based programs, (2) family-based programs, and (3) comprehensive programs. Most programs focused on peer group participation and skill interventions. **Conclusions:** A powerful and effective empowering program for adolescents to prevent and control risky behaviors should be designed in the form of comprehensive programs in social, educational, economic, and health dimensions, and with the active engagement and participation of adolescents.

Keywords: Adolescent, empowerment, health risk behaviors, program

Introduction

According to United Nations Children’s Fund (UNICEF), adolescents are now the largest group of people in the world during its history. There are 1.2 billion adolescents aged between 10 and 19 years. The way they grow and develop has impacts and outcomes reflected among generations.^[1] Psycho-social problems, as an emerging challenge for adolescents, put them at greater risk for risky behaviors and harm.^[2,3] Risky behaviors include a diverse range of potentially harmful behaviors. The most prevalent of them is related to the adolescent period. Unprotected sexual behaviors, suicide, and substance abuse are among the most serious risky behaviors among adolescents.^[4-6] These behaviors happen simultaneously or sequentially. According to problem-behavior theory,

engaging in a problematic behavior increases the probability of engaging in other problematic behaviors.^[6] Data from the Youth Risk Behavior Survey released in 2019 in the United States revealed that 18.8% of adolescent students had serious suicidal ideation. Its rate was 24.1% among adolescent girls.^[7] Suicidal ideation and behaviors in adolescents living in low-income and middle-income countries, especially among adolescent girls aged between 15 and 17 years, have a higher rate compared to other countries.^[8]

Adolescents engaged in multiple risky behaviors suffer from a greater number of mental health problems than their peers. Also, engaging in numerous risky behaviors increases the risk of chronic diseases and mortality.^[9] The results of a study by Baiden *et al.*^[10] revealed that substance

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abuse in adolescents is associated with an increase in suicidal ideation. The results of another study also showed that students with a higher risk index for alcohol consumption and substance abuse use fewer prevention methods in their sexual relations.^[11] Several approaches have been developed to cope with risky behaviors. Empowerment programs are considered among the most powerful approaches.^[12] Empowerment is a process of awareness and capacity building leading to greater participation, decision-making power, and transformative action. Empowerment equips adolescents with knowledge and skills that enable them to make informed choices and take control of decisions that affect many aspects of their lives.^[13] In this regard, the results of a cross-sectional survey conducted on 63 young people aged 15–25 years revealed that empowerment was significantly associated with more future orientation. Thus, it is crucial to evaluate protective factors and emotional health structures within the framework of empowerment in adolescents.^[14]

Additionally, empowerment-based approaches have emphasized improving health outcomes and reducing risky behaviors in the area of social work.^[15] Although there is a good consensus among adolescents regarding the significance of empowerment programs, there is no consensus among them about the desired approach and content. Thus, the present study introduces and discusses empowerment approaches in the prevention and management of risky behaviors in adolescents, focusing on suicide, substance use, and risky sexual behaviors.

Materials and Methods

This narrative review was conducted in 2023 to evaluate empowerment programs for adolescents to prevent and manage risky behaviors. The texts were reviewed in two sections: (1) a review of articles and books in databases and (2) a review of international websites. At the beginning of this study, related keywords were searched based on Mesh and Thesaurus. The searched keywords included substance-related disorders, risky behaviors, empowerment, program, adolescent, suicide, and risky sexual behaviors. These keywords were individually searched in international databases such as PubMed, Scopus, and Web of Science, using “AND” or “OR” operators. The retrieved articles were screened based on inclusion and exclusion criteria.

The inclusion criteria included having the full text of the original articles, articles in English, articles related to the development and evaluation of the effectiveness of empowerment programs (experimental, quasi-experimental, mixed methods, pilot, and feasibility studies), and the age range of adolescents. In this study, we reviewed programs that were developed, evaluated, or revised between January 2013 and April 2023. We excluded texts that only had abstracts or were written in a non-English language. After removing duplicates in Endnote software, the titles and abstracts of the retrieved articles were reviewed by one of

the researchers based on the inclusion criteria. Then, the full texts of the remaining articles were reviewed based on the inclusion criteria. Finally, 13 articles that were related to the introduction or presentation of a program were finalized for review. In the next step, the websites of international organizations related to the fields of health and social welfare, such as the United Nations and its subsidiary departments, such as the United Nations Office on Drugs and Crime, the UNICEF, the World Health Organization (WHO), national organizations related to social harms and health, and universities and research institutes were examined to achieve the developed programs. Finally, in this section, 11 national and international programs were identified for examination [Figure 1].

Ethical considerations

This study was approved by the Research Ethics Committee of the Isfahan University of Medical Sciences (IR.MUI.NURAMA.REC.1401.094). All attempts were made to prevent any types of biases in retrieving, reviewing, and reporting articles.

Results

This study examined programs aimed at empowering adolescents, which were categorized into three areas: (1) community-based, school-based, and peer-based programs consisting of ten programs and guidelines, (2) family-based programs consisting of five programs, and (3) comprehensive programs consisting of four programs and guidelines that aim to empower adolescents in various fields. Most of the programs were community-based and school-based. Also, most of the programs focused on a problem and risky behavior (suicide, substance abuse, or risky sexual behavior). Family-based programs, compared to other programs, had more emphasis on the economic capability of the family and the adolescents. The programs presented in the form of articles often included the development of small programs (low executive level) or were studies that

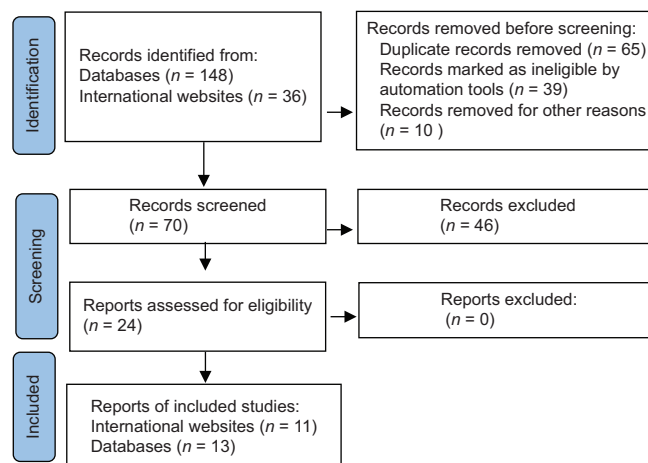


Figure 1: The flowchart for the selection process of the articles

evaluated the effectiveness of international programs in the form of intervention plans.

Community-based, school-based, and peer-based programs

The Youth Aware of Mental Health (YAM) intervention program is one of the school-based programs. It is a universal school-based mental health promotion and primary suicide prevention intervention for adolescents. In this program, students are actively engaged in the topic of mental health through role-playing and group discussions.^[16] The YAM program has been evaluated and implemented in different countries. Hart *et al.* (2019) implemented this program on Australian adolescents, and Kahn *et al.* implemented it on adolescents with suicidal ideation in France. The results revealed that coping strategies played a key role in suicidal ideation.^[17,18] The Model Adolescent Suicide Prevention Program (MASPP) is another public health-oriented suicide prevention and intervention program supported by the Suicide Prevention Resource Center at the University of Oklahoma Health Sciences Center and financed by the US community mental health service. The suicide prevention curriculum presents community education, screening, and clinical services, and informing through health clinics, social service programs, and peer counseling.^[19]

It is crucial to use the peer group to provide education and interventions related to mental health for adolescents. In this regard, we can refer to the Story PRIME program. This web-based program includes stories of personal resilience in emotion management delivered by adolescents who have shared experiences regarding suicide in the form of short and effective messages to their peers who are at risk.^[20] The suicide awareness training program of safeTALK is another school-based program conducted by Kinchin *et al.*^[21] This program includes a three-hour training session for high school students (15–16 years old) in the state of Queensland, Australia. The results of the study revealed that safeTALK is feasible and cost-effective in the school environment. Population-based implementation of safeTALK is promising, especially in high-risk communities.

The International Standards on Drug Use Prevention, presented by the United Nations Office on Drugs and Crime in the form of several programs, are among the significant cases regarding the prevention and reduction of substance abuse. This program was presented for the first time in 2013, and its second edition was presented in 2018. It summarizes the prevention of substance abuse at the global level to identify effective strategies and ensure the growth of children and adolescents.^[22] The Alcohol and Other Drug Abuse (AODA) program is a well-known program presented by the Wisconsin Department of Public Instruction (DPI) in the United States. This program provides both prevention and intervention services for

students.^[23] Youth Empowerment Solutions for Positive Futures (YES-PF) is an intensive, theory-based, five-week summer enrichment program designed to prevent dropout and substance abuse by promoting youth empowerment, school engagement, and future orientation. Stoddard *et al.*^[24] (2020) evaluated the feasibility and acceptability of this program. The results revealed that the participants in the program reported higher levels of efficiency and a feeling of control over their lives and possible problems.

Ojonuba *et al.*^[25] evaluated the effectiveness of the empowerment training intervention in reducing the risk of substance abuse in inter-city adolescents in Abuja. The intervention group participated in an empowerment training intervention for 11 sessions. The results revealed positive and significant changes among adolescent users, including a significant reduction in positive attitudes toward drugs. The International Conference on Population and Development and Related Resolutions has repeatedly called on governments to provide Adolescents and Young People (AYP) with comprehensive sexual education (CSE). CSE seeks to empower young people, especially girls and other marginalized youth, to see themselves and others as equal members of their relationships and to protect their health.^[26] Sexual education plays an essential role in preventing unwanted pregnancies and sexually transmitted infections (STIs). One of these programs is the Adolescent Girls Empowerment Program (AGEP), designed by the AGEPOP Population Council in Zambia. The AGEPOP program was designed to address these challenges by creating social, health, and economic assets for adolescent girls and improving sexual behavior, pregnancy, and education in the long term.^[27]

Additionally, a school-based sexual education program was evaluated by Grose *et al.*^[28] for eighth-grade students. The results revealed that participation in the sexual education program is associated with an increase in the level of sexual health and sexual knowledge. Improving the economic resources of adolescents with risky behaviors or their economic empowerment may be effective by motivating positive future planning to prevent the risk of risky sexual behaviors. In this regard, a study evaluated the effect of a saving-based economic empowerment intervention on changes in the cash savings of orphaned adolescents and human immunodeficiency virus (HIV) prevention practices over time. The results revealed a significant relative increase in HIV preventive attitude scores over time.^[29]

Family-based programs

The evidence suggests that the process of treating depression and suicide among adolescents depends on their family environment. Thus, the use of family-based approaches to reduce suicidal behaviors in adolescents seems to be significant.^[30,31] Family-based crisis intervention is a model of care for adolescents with suicidal ideation. Wharff *et al.*^[32] (2019) investigated the effectiveness of

a family-based crisis intervention program. The results revealed that people receiving the intervention reported significantly higher levels of empowerment and satisfaction with care.

Fang *et al.*^[33] evaluated the effectiveness of parent-child programs in reducing substance abuse in girls and modifying risk and protective factors at the individual and family levels in a sample of Asian American adolescent girls and their mothers. The intervention included a nine-session substance abuse prevention program presented online. This study revealed that a family-based prevention program is effective in strengthening parent-child relationships, improving girls' resilience, and preventing substance use behaviors among Asian American girls.

Family Economic Empowerment (FEE) interventions are a family-based program whose effect on health outcomes, sexual health, and health performance was evaluated by Tozan *et al.*^[34] among orphaned adolescents with AIDS in Uganda in a four-year follow-up. The results revealed that most of the effects of the intervention were maintained two years after the intervention. These results encourage the integration of FEE interventions into national social protection frameworks.

Stark *et al.*^[35] investigated the effect of a social empowerment program on the economic vulnerability of adolescent refugee girls in Ethiopia. The subjects participated in 40 sessions with a fixed curriculum, once a week over 10 months. Caregivers of the girls also participated in 10 discussion sessions held once a month. They were informed about issues related to the welfare and safety of adolescent girls. The results revealed that the girls participating in the intervention period went to school more, but sexual exploitation was high among these adolescents due to economic conditions. Shato investigated the impact of FEE and family support intervention on sexual risk behaviors among adolescents with HIV in rural Uganda. The results revealed that higher levels of social and caregiver support were significantly associated with a reduction in sexual risk-taking. Additionally, more parent-child communication was significantly associated with a reduction in sexual risk-taking.^[36]

Comprehensive programs

These programs are often supported by national and international institutions and organizations that focus on youth empowerment in various areas. These programs are not only for adolescents engaged in risky behaviors but also as a comprehensive program to empower all adolescents in psycho-social, health, and economic areas. The empowerment program presented by UNICEF has identified four key components to support adolescents throughout their empowerment journey. These components are: (1) increasing the access to and use of assets (which includes acquiring skills to access and use these assets), (2) increasing critical

awareness, (3) strengthening agency, and (4) increasing opportunities for voice and participation.

In this regard, some executive programs of the UNICEF empowerment program are programs to empower girls to share their voice in Egypt, the program to participate in social cohesion activities in Colombia, and the program to provide services for adolescents by adolescents to strengthen critical awareness and agency in Africa.^[37] Dawwie is a national girls' empowerment initiative that promotes girls' voices and access to essential skills and services. Dawwie is led by the National Council for Childhood and Motherhood in partnership with the National Council for Women with the technical support of UNICEF and in collaboration with many partners. In Arabic, "Dawwie" is the verb translated to "loud sound with impact and echo."^[38] The program of services for adolescents, by adolescents, amplify critical awareness and agency in Africa argues that adolescents themselves are a powerful resource to help raise critical awareness and promote agency in other adolescents. In Africa, UNICEF works through U-Report (a social messaging tool and data collection system to improve citizen participation, inform leaders, and create positive change) to make such peer-to-peer support possible.^[37]

My Body, My Life, and My World is the United Nations Population Fund (UNFPA) strategy for AYP, in which the unique talents, hopes, and needs of young people are at the center of sustainable development.^[39,40] Also, the researchers of the School of Public Health of the University of Michigan with the help of the Centers for Disease Control and Prevention developed Youth Empowerment Strategies (YES) and evaluated them. YES is an evidence-based program that empowers young people to make positive changes in their communities and work with adults who support their efforts.^[41]

Discussion

The present study investigated some of the programs presented to empower adolescents to reduce risky behaviors (with a focus on suicide, substance use, and risky sexual behaviors). Most of the programs were school-based and peer-based. Given the significant role of peers and the modeling of adolescents from each other, school-based and peer-based programs can be significant and increase the possibility of following the programs among adolescents. The effect of peers on the formation of risky behaviors is nowadays clear. However, addressing the elements of the family and the adolescent's growth and development environment is also considered one of the essential issues in the pathology of this challenge. Therefore, exposure to primary life stress, such as exposure to a dysfunctional family, was observed in 54% of the substance abuse population.^[42]

The results of a study conducted on a group of adolescents in Sweden indicated that girls with substance-related

disorders who grew up in an unhealthy family and childhood environment reported a higher rate of substance abuse and they experienced many problems in their childhood environment.^[43] Parenting and inappropriate control play a significant role in the formation of deviant behavior, including self-destructive behaviors and their extreme manifestation in the form of suicidal behavior.^[44] More serious investigations are needed to reveal whether paying attention to the family component and the adolescent's development and growth environment in the formulation and design of programs and as a supplementary element besides school-based programs will increase the comprehensiveness of the program. In this regard, the results of a study by Ibrahim *et al.*^[45] (2019) revealed that effective and transferable social support from the family makes a person feel more like they belong to the family. Additionally, it increases the capability of adolescents to face problems. Moreover, empowering the person and the family and increasing the participation of people in self-care shows the emphasis on health, prevention, and health education.^[46] According to the studies, it seems that the weaknesses and potential of the family should also be considered in the design of adolescent empowerment programs.

The active engagement of adolescents in executive processes is one of the most significant strengths of many of the presented programs. Using peer groups with common experiences can lead to behavioral, emotional, and cognitive conflict in the target group since the active engagement of the participants is known as a significant factor related to the positive growth of young people, adaptation, and continuity of the intervention effect.^[47] The WHO has also introduced intervention programs under the title of meaningful engagement of AYP as a significant strategy in national and local planning. Engaging AYP in the development, implementation, and evaluation of their programs is essential to pave the way for achieving universal goals and can help ensure the best effectiveness of youth and adolescent interventions. Identifying the specific needs of AYP and adopting a holistic approach is essential to planning and engagement. This interaction should have influential, real, harmless, and teen-friendly resources.^[48]

Evaluation and monitoring of programs is another issue in investigating the effectiveness of a program. Several programs developed and presented by international organizations such as the WHO and UNICEF are being implemented in most societies. However, the significant issue is to what extent these programs can be implemented given the socio-cultural context of different societies or whether they have been translated, and the issue of localization of these programs has been considered. For example, the results of a phenomenological study conducted on adolescents in Sweden revealed that a sustainable context for learning about sexual health requires the selection of important topics, that is, values and prejudices,

up-to-date knowledge, and practical skills. These issues should find meaning for adolescents in society in a defined culture.^[49] To what extent do international organizations such as UNICEF and the WHO monitor the effective implementation of these programs in developing societies? Although the effectiveness of many of these programs has been proven, their sustainability and executive guarantee require national investment at the policy level. Also, another requirement for the sustainability of any program is having review mechanisms at regular intervals.^[22] The comprehensiveness of these programs is another issue considered in this regard. A powerful empowerment program should look at the adolescent as a coherent whole and address all his or her physical, psychological, and social dimensions. In this regard, the results of a study by Glass *et al.*^[50] emphasize that the integration of economic empowerment programs with parents and adolescents is necessary to improve economic, educational, and health outcomes for adolescents. Therefore, considering a teenager in individual and social dimensions as an integrated whole can have a synergistic effect on the effectiveness of a program.

Conclusion

Due to the higher prevalence of risky behaviors in adolescents, especially in developing societies, purposeful prevention and control initiatives are needed. They should consider a wide range of countries' cultural and socio-economic contexts and backgrounds.^[8] Thus, the empowerment of adolescents involved in risky behaviors should focus on social, educational, economic, and health support. In light of empowerment, adolescents are equipped with knowledge and skills that enable them to make informed choices and take control of decisions that affect many aspects of their lives.^[13] Hence, it can be stated that a powerful and effective empowerment program for adolescents to prevent and control risky behaviors should be planned with the active engagement of adolescents, family, society, and peers and should focus on all the needs of adolescents comprehensively.

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Conflicts of interest

Nothing to declare.

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