Adolescent's Health Needs in Aran Bidgol city in 2015-16: A Cross-Sectional study

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Research

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Abstract

Background

Paying attention to the health of adolescents, especially girls, is one of the Millennium Development Goals and one of the missions of the member countries of the World Health Organization. Considering the importance of the health of this age group and that the first step in designing a comprehensive health plan is to assess the needs of the target group in the community, so this study was conducted to determine the health needs of adolescents in Aran and Bidgol in 2015-16.

Method

This cross-sectional study was performed on 497 students of 12-18 years in Aran and Bidgol in 2015-16. The data collection tool used in this study is the Adolescent Health Needs Questionnaire which is a psychometric instrument in accordance with Iranian culture. Data were analyzed using SPSS software version 16 (IBM, Armonk, NY, USA) with the help of descriptive statistics and Chi-square test.

Results

Participants in the study were 53.30% girls and 46.70% boys. The mean score of students' health needs in order of priority included nutrition (22.09 ± 3.80), physical activity (10.19 ± 2.90), health education services (64.30 ± 15.90), healthy communication with parents (44.60 ± 7.60), personal hygiene (21.10 ± 2.71), mental health and counseling services (52.50 ± 7.90) and spiritual health (21.90 ± 3.70).

Conclusion

According to the results of this study, it is suggested that educational programs and interventions be designed and implemented in schools in order of priority to address the needs in various areas such as nutrition, physical activity, and healthy communication with parents, personal hygiene and spiritual health.

Background

Adolescence is one of the most important and valuable periods of every person's life. This stage is the beginning of physical, mental and social changes that affect his performance in adulthood and will lead to the creation of different needs for this age group [1]. Statistically, about half of the world's population are adolescents [2] and according to the 2016 census, about 12.5% of Iran's population are 10 to 19 years old [3]. Also, the population of 10-19 year old adolescents in Aran and Bidgol cities was 14.3% in 2014 [4].

Adolescents are a vulnerable group in society because many of the physical, psychological, social, and unhealthy behaviors, failed marriages, high-risk pregnancies, infertility, sexually transmitted diseases and AIDS, mortality, and bad habits are rooted in adolescence [4]. Understanding the health needs of adolescents is important in promoting strategies to prevent high-risk behaviors in adolescents and

provide care services to them and leads to the health of adolescents and the promotion of community health [5]. Needs assessment is in fact the cornerstone of health promotion programs. Needs assessment can be considered as a way to identify health needs as well as presentation of suggestions for actions that be able to meet such needs [6]. Explaining adolescents' health needs begins with exploring health priorities from their own perspective and can be combined with the experiences and perspectives of other aware sources of adolescents' health needs [7].

There has been little research on adolescent health, and what is mostly available is information about measuring awareness and beliefs about the phenomenon of puberty with quantitative perspectives and methods. A study by Mohammadi et al. on Iranian adolescents in 2006 showed that their in-depth knowledge about reproductive and sexual health and sexually transmitted diseases was limited and misconceptions were widely seen about the dangers of unsafe sex and its consequences [8]. A study on 12-18 year-old Chinese students shows that there is a lack of appropriate information on puberty issues [9]. In a study by Afshari et al., it was found that girls' awareness of puberty, menstruation and fertility is low and the greatest need felt by girls is related to sex and menstruation [10].

Due to the different health needs of adolescents in each region due to its cultural background and social structure and the importance to pay attention to the health needs of adolescents due to the vulnerabilities of this age group and the research gap in this field, researchers to conduct a study to determine the health needs of adolescents in Aran and Bidgol in the year 2015-16. It is hoped that the present study can take a step towards promotion nowadays health and country's future of the future makers of the country.

Materials And Methods

This cross-sectional study was performed on 947 high school students in Aran and Bidgol in 2015-16. The sampling method was clustering. First, a list of all 53 high schools in the city was prepared. Then, based on the population covered by them, the number of schools in each area was determined and the schools in each area were selected at random. In the next step, according to the population of students in each school, the number of students that should be selected from each school was determined. Then, the proportion of students in each grade was determined and the students of each class were selected randomly. If each student was eligible to study and wanted to participate in the study, a questionnaire would be completed for them. Considering the number of 6321 students in the high school, the sample size was obtained using Cochran's formula and with 95% confidence, the sample size was 465 people, who finally entered 500 people by predicting possible defects in completing some questionnaires.

The data collection tool consisted of two parts: the first part included students' demographic information and the second part was the questionnaire of health needs of adolescents in the high school. This section was a psychometric instrument in accordance with Iranian culture, which was designed by Shah Hosseini and her colleagues in 2010 [5]. This questionnaire had 65 items that addressed the health needs of adolescents in the areas of personal hygiene (5 questions), nutrition (6 questions), physical activity (3 questions), mental health and counseling (15 questions), healthy communication with parents (12

questions), school health education (19 questions) and spiritual health (5 questions). Answers were selected based on the Likert scale, 5 points, which were determined after calculating the sum of scores and the difference between the desired and existing needs in each area. Scores of every area was computed in percentage according to following formula. Need priority was done [11].

Score of every area in percentage = $\text{Sum of achieved scores} \times 100 / (\text{Maximum Score} - \text{Minimum Score})$

Due to the approval of the questionnaire in Sari and possible cultural differences, the content validity was used to confirm the validity, so that after obtaining the opinions of 15 faculty members of Kashan University of Medical Sciences and experts with knowledge and experience in the field of adolescent health, its validity was confirmed. Also, to determine the reliability of this questionnaire, the bisection method was used, so that first the questionnaire was completed for 40 students, then questionnaires were randomly divided into two parts and the correlation coefficient was obtained between two sections ($r=0.73$). Data were analyzed by SPSS16 software (SPSS Inc., Chicago, IL, USA) and using descriptive and comparative statistics.

Results

53.30% (265 people) of the study participants were female students and the rest were male (46.70%). The age range of the subjects was 12-18 years and their mean age was 15.08 ± 1.59 years. The present study showed that 51.50% (256 people) of the adolescents were in the first year of high school and the others were in the second year of high school. The 77.1% of the students lived in the city and the rest in the village. The education of the 65.8% of mothers and 61.2% of fathers was below the diploma level. The average scores of adolescents are given in the field of health needs in different areas in Table 1. Based on the difference between the scores obtained and the percentage of scores obtained, the health needs of the adolescents were prioritized, which is shown in Table 2. The mean of scores obtained in the items of each area are given separately in Table 3.

In terms of personal hygiene needs, the lowest score is related to the items "I sleep at least 8 hours a day" and "I brush my teeth every night", in the field of nutrition, the items are "Free food is given at school" and "My food looks decorated", in the area of physical activity, the items "I have restrictions for outdoor sports (cycling, walking,)" and "I have access to healthy sports facilities", in the field of mental health, the items "My counselor blames and ridicules me" and "If I go to the counselor, others will misjudge me" "They discriminate" and "My family tells my secrets to others", in the field of health education services, the items "Special education are provided for adolescents under domestic violence" and in the field of spiritual health, the items "Religious matters are told to me with reason" and "I am presented with a beautiful manifestation of religion" and "adolescents needed more in these areas".

Chi-square test showed that the status of personal hygiene needs of adolescents by gender was significantly different ($P = 0.030$); so that the personal health needs of male students were significantly higher than female students (19.00% vs. 12.50%). The status of personal hygiene needs of adolescents according to location showed a significant difference ($P = 0.003$), So that the personal hygiene needs of

adolescents living in rural areas were significantly higher than students living in urban areas (24.60 vs. 12.80%). Based on the results of the study, the status of students' personal hygiene needs did not show a statistically significant difference in other related factors (age, level of education and parents' occupation) ($p>0.05$).

The results of this study showed that the nutritional needs of 48.90% students were moderate and only 5% of the adolescents in the study reported high nutritional needs and 46.10% of them had lower nutritional needs. The results of chi-square test showed that the nutritional needs of adolescents had a statistically significant difference ($p=0.005$) according to their place of residence, so that the nutritional needs of adolescents living in rural areas were significantly higher than adolescents living in cities (7.90% vs. 4.20%). The nutritional needs of students did not show a statistically significant difference in other related factors (age, gender, educational level, education and parents' occupation) ($p>0.05$).

48.10% of the students had assessed their needs in the field of physical activity as moderate and only 33.60% of them stated that their needs in the field of physical activity are low. There was a statistically significant difference ($P<0.001$) in the status of physical activity needs in the adolescents at different ages, the need for physical activity of students aged 12 to 14 years was significantly higher than the ages of 15 to 18 years (44.60% vs. 32.40%). There was a statistically significant difference ($P=0.003$) in the physical activity needs related to location, the need for physical activity of students living in rural areas was significantly higher than students living in urban areas (27.20% vs. 15.70%). Based on the results of the study, the status of meeting the physical activity needs of students in other related factors (gender, place of residence, education and occupation of parents) did not show a statistically significant difference ($p>0.05$).

Only 19.40% of students stated that their mental health and counseling needs are low and the majority of them (80.60%) reported their counseling needs as moderate and high. Based on the results of the study, the status of students' mental health and counseling needs in related factors (age, sex, place of residence, education and parents' occupation) did not show a statistically significant difference ($p>0.05$).

The need of the majority (84.10%) of students for healthy communication with parents was moderate and high, and only in 15.90% of them, the needs for healthy communication with parents were low. There was a statistically significant difference ($P<0.001$) in students' need for healthy communication with parents according to gender. The need for healthy communication with parents in female adolescents was significantly higher than male adolescents (38.50% vs. 22%). Based on the results of the study, the status of healthy communication needs with parents in other related factors (age, educational level, place of residence, education and occupation of parents) did not show a statistically significant difference ($p>0.05$).

The needs of the majority (75.20%) of the students in the field of health education services at school were moderate and high and only in 34.80% of them the need for health education services at school was low. There was a statistically significant difference ($P<0.001$) in the needs of health education services in school by gender. The need for health education services in schools in female adolescents was

significantly higher than male adolescents (18.50% vs. 9.10%). The status of health education needs in school did not show a statistically significant difference in other related factors (age, educational level, place of residence, education and occupation of parents) ($p > 0.05$).

The needs of the majority (80.10%) of students in the field of spiritual health were low and 19.90% of students stated that their needs in the field of spiritual health are moderate and high. The situation of adolescents' needs for spiritual health was statistically significant ($P = 0.01$) based on age; so that the need for spiritual health in adolescents over 16 years of age was significantly higher than adolescents of other ages. The status of spiritual health needs in school did not show a statistically significant difference in terms of other related factors (gender, educational level, place of residence, education and occupation of parents) ($p > 0.05$).

Discussion

According to the results of this study, the necessity of adolescents' needs in different areas in terms of priority was as follows: nutrition, physical activity, health education in schools, healthy communication with parents, personal hygiene, mental health and counseling services and spiritual health. Although the results of the study indicated that the students felt less need in the field of personal hygiene, but in most areas they reported a high need. Moeini et al. (2013) also achieved the following 6 areas to promote health-related behaviors in high school students: physical activity, health responsibility, self-fulfillment of nutritional behaviors, social support and stress management [12]. Shah Hosseini and colleagues about the health needs of girls reported importance of the role of the family in health needs and raised the need for emotional support of the family, the need for responsible and informed parents and the need for freedom under family supervision [13].

In accordance with the results of this study, communication between parents and children [14], health-related educational needs [5], personal hygiene, sleep and rest [15], spiritual health [16] are some important issues need to be followed up in adolescents. Therefore, it is suggested that comprehensive planning be prepared according to the diverse needs of student adolescents.

According to the results of this study, meeting the needs of students in the field of personal hygiene in the item "adequate sleep" was not desirable. In the study of Nejat et al., adequate sleep and rest were among the physical needs of adolescents [15]. Adequate sleep in adolescents can affect various aspects of their growth and development. There are many factors that can disrupt normal sleep in them, including age, gender, personal characteristics, nutrition, anxiety, exercise, stress, environment, etc. [17]. It is necessary to make more effective planning to improve the lifestyle of families.

In this study, it was found that the needs related to personal health were better and more met in girls than boys and adolescents living in rural and deprived areas had more unmet needs in this area [16, 19]. In the family than boys at younger ages and adolescence, it is suggested that more attention be paid to the implementation of effective interventions in boys' schools and rural areas.

According to the results of the study, the nutritional needs of the majority of students were moderate to low. Breakfast, meat and legumes, dairy products and fruits and vegetables were more common among teenagers, and students needed free school meals and decorated food. In the study of Jalalinia et al., it was found that the adolescents were aware of the importance of nutrition but did not do well in choosing the appropriate diet [18]. The presence of students from morning to afternoon in school, which includes at least two meals, is a great opportunity that principals and officials improve students' nutritional needs; because assimilation with peers affects the health behaviors of adolescents [19]. There are more unmet nutritional needs in rural areas, and it is necessary to pay more attention to schools in deprived and rural areas.

According to the results of the study, inadequate activity and low mobility were more common in adolescents living in rural areas. Adolescents in this study stated that they need to remove restrictions on sports such as cycling, walking, etc. outside the home. Given that sedentary behaviors and low levels of physical activity (watching TV and computer) can affect obesity and subsequent problems in adulthood [20], and the need that adolescents felt, centers can be equipped for riding and exercise for girls and boys to increase their level of physical activity in order to modification weight and prevent further complications.

According to the results of this study, the majority of adolescent students had many unmet counseling and mental health needs. According to them, programs and the provided trainings should have group counseling, and the appropriate and non-judgment approach of the counselor. Various studies have emphasized the existence of counseling needs of adolescents such as counseling for puberty problems, appropriate educational methods and appropriate educational content [5, 21, 22]. The results of the study of Mirzaei et al. indicated that adolescents in the field of various physical, psychological, educational and social problems during puberty need counseling and educational services. They have suggested that hours of the week be devoted to counseling students by experts in the school [23]. The study of Sepehr Manesh et al. showed that about 10% of high school adolescents in Kashan were suspected of mental disorder and therefore considered it necessary to activate school counseling centers [24]. It is suggested that this category be one of the first priorities of planning and care in adolescents and given that physical and mental health problems are usually affected by each other, provide services related to these two areas together and referrals and feedback. In addition, according to the request of adolescents is necessary that counselors receive the necessary training on the basics of communication with trust and confidentiality.

The majority of adolescents in this study believed that their parents needed to pay more effective attention to adolescents. They believed that their parents were not good confidant for their secrets and did not treat their children fairly. They did not consult with their parents and needed their parents to devote more hours to them. As stated in other studies, there were significant differences between the views of adolescents and parents regarding communication problems in the areas of independence, sexual maturity, personality, mental health assurance and identity acquisition [14]. A study has shown that 38% of adolescents have a stressful relationship with their parents [25]. It is suggested that officials

pay more attention to the implementation of educational programs, counseling, and intervention for the parent and the family relationship. In addition, although some studies have pointed to the weaker relationship between boys and parents than girls [14], but in this study, girls mentioned more unmet needs than boys and wanted to communicate more effectively with parents, so perhaps cultural considerations in region has led to such a difference, so it is recommended to conduct specific studies in this area and design programs based on the needs of girls.

The results of this study showed that the educational needs of adolescents in school are not adequately met and the majority of them recommended education in the areas of mental disorders, sexual health, adverse effects of friendship with heterosexuals, puberty health, personal hygiene and the internet. The rate of high-risk behaviors of students, especially in the areas of unintentional injuries, smoking, sex, inactivity and poor nutrition has been significant [26]. The need for appropriate educational content in the fields of reproductive health, life skills and prevention of high-risk behaviors along with appropriate educational methods, improving media performance and social media participation to educate adolescents and families has been emphasized in another study [5]. The results of the present study also showed that the educational needs of girls were underestimated. This result confirms the study of Ali Moradi et al. who examined the challenges of girls 'health education during puberty and identified many problems in the field of girls' lack of knowledge [22].

According to the results of this study, the needs of students in the field of spiritual health have been met to a large extent, and some of them stated that it is necessary for religious issues to be explained to them with reason and a beautiful manifestation of religion to be provided. Shah Hosseini et al. found that concepts such as reliance on God, the need to do homework as inner peace, the need for God as a refuge, and the recourse to imams in adolescent girls were important [27]. Fabricator [28] also found that religiosity plays a mediating role in times of stress and alters the relationship between stressors and mental health. Zeighami et al. [16] in their study stated that the promotion of hopeful resources such as strengthening the spiritual dimension and hope therapy seems necessary in adolescents to improve their mental health.

Conclusion

Based on the results of this study, it was found that adolescents in all areas of nutrition, school health education, physical activity, mental health and counseling, personal hygiene, healthy communication with parents and spiritual health have many unmet needs. It is necessary to design and perform comprehensive schedule with cooperation for all beneficiaries including teenagers, teachers and parents. With regards to the cultural context of each society and socio-economic conditions, the needs are different and also change over time, it is appropriate to design research programs in offices and related organizations to be updated in regular intervals and teenagers' needs are applied in programs.

Abbreviations

AIDS: Acquired immunodeficiency syndrome; TV: Television

Declarations

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Authors' contributions

A.Z conceived the study, analyzed the data, and wrote the manuscript. E.L, M.M, L.D, Z.S and S.N conceived, supervised the study procedures, and revised the manuscript. S.N critically reviewed and edited the manuscript. All authors have reviewed and approved last version of the manuscript.

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Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Ethics approval and consent to participate

The study was approved by Kashan University of Medical Sciences. Informed writing consent was taken of the participants in the study. Ethical approval for the study was obtained from the Kashan University of Medical Sciences number IR.KAUMS.REC.1395.107.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

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References

- [1] Olfati F, Aligholi S. A study on educational needs of teenager girls regarding the reproductive health and determination of proper strategies in achieving the target goals in Qazvin. JQUMS. 2008;12(2):76-8.
- [2] Christie D, Viner R. Adolescent development. BMJ. 2005;330(7486):301-4.
- [3] Statistical center of Iran. Iran statistical Yearbook 2016, Tehran: Office of the Department of Public Relations and International Cooperation, First Edition, 2018.
- [4] Medicin HK. Health deputy health indicators in 2013. Kashan Univercity Of Medical Sciences. 2014.
- [5] Shahhosseini Z, Simbar M, Ramezankhani A. Female Adolescents Health-information Needs : A Qualitative Study. J-Mazand-Univ-Med-Sci. 2011;20(80):82-5.
- [6] Iran. Sco. Iran statistical Yearbook 2003: Population by ageand sex 1996 Census. Tehran Statistical center of Iran. 2007.
- [7] Organization WH. Giving adolescents a voice :conducting a rapid assessment of adolescents health needs. WHO:Geneva. 2001.
- [8] Mohammadi M, Mohammad K, Farahani FK, Alikhani S, Zare M, Tehrani FR, et al. Reproductive Knowledge, Attitude and Practice of Tehranian adolescent boys aged 15-18 years, 2002. J of Reproduction & Infertility. 2003;4(3):237-51. Avicenna Research Institute.
- [9] Qi Y, W. T. Needs of Chinese for reproductive health China papul Today. 2000;17:11-3.
- [10] Afshari P, Pajuhideh S.Z, Yazdizadeh H, Mohammadi S, Tabesh H. Investigating the educational needs of 11-14 years old girls about sexual health. Journal of Holistic Nursing and Midwifery 2016; 25(79): 1-9.
- [11] Zare E, Simbar M, Shahhosseini Z, Alavi Majd H. The Priorities of Iranian Male Adolescents Health Needs. American Journal of Men's Health. 2017;11(4):1255-9.
- [12] Moeini B, Dashti S, Teymoori P, Mousali AA, Sharifi M, Akbar Zadeh M, et al. Health-promoting behaviors among high school students in Hamadan in 2013. Pajouhan Scientific J. 2015;13(3):49-57.
- [13] Shah Hosseini Z, Simber M, Ramadan Khani A. Adolescent girls' health needs: Explaining the role and importance of family. Payesh 2012; 11(3): 351-9.
- [14] Nasiri M, Tefagh M, Maghsoudi J, Hasan Zade A. Com parative investigation of adolescent's communicational problems wttthparents from the points of view of these two groups. J of Shahrekord

Univ of Med Sci. 2001;3(2):31-8.

[15] Nejat N, Kashaninia Z, Memarian R. Healthy behaviors of female teenagers living in orphanage centers and living with their families. J of hayat. 2008;14(1):49-59.

[16] Zeighami Mohammadi S, Tajvidi M. Relationship between spiritual well-being with hopelessness and social skills in Beta-thalassemia major adolescents (2010). 2011.

[17] Tanaka H, Taira K, Arakawa M, Masuda A, Yamamoto Y, Komoda Y, et al. An examination of sleep health, lifestyle and mental health in junior high school students. Psychiatry and clinical neurosciences. 2002;56(3):235-6.

[18] Jalalinia S, Ramezani Tehrani F, Baradaran Eftekhari M, Peykari N. Qualitative study of adolescences opinion among nutritional habits and believes. Med Sci J. 2011;20(4):258-64.

[19] Cusatis DC, Shannon BM. Influences on adolescent eating behavior. J of Adolescent Health. 1996;18(1):27-34.

[20] Jago R, Baranowski T, Yoo S, Cullen KW, Zakeri I, Watson K, et al. Relationship between physical activity and diet among African-American girls. Obes Res. 2004;12 Suppl:55S-63S.

[21] Shahhosseini Z, Simbar M, Ramezankhani A, Alavi Majd H, Abedian Kasgary K, Belbasi S. Psycho-emotional needs of female adolescents in mazandaran - iran. European Psychiatry. 2012;27(Supplement 1):1.

[22] Alimoradi Z, Simbar M. Puberty health education for Iranian adolescent girls: challenges and priorities to design school-based interventions for mothers and daughters. 2014.

[23] Mirzaei K, Olfati F. Educational needs of adolescent girls for reproductive health in teachers' views. J of Qazvin Univ of Med Sci. 2014;18(2):67-76.

[24] Sepehrmanesh Z, Ahmadvand A, Yavari P, Saei R. Assessing the Mental Health of Adolescents in Kashan, 2004. Iranian J of Epidemiology. 2008;4(2):43-9.

[25] Barron CR, Yoest P. Emotional distress and coping with a stressful relationship in adolescent boys. J Pediatr Nurs. 1994;9(1):13-20. Epub 1994/02/01.

[26] Garmroudi GR, Makarem J, Alavi S, Abbasi Z. Health related risk behaviors among high school students in Tehran, Iran. 2010.

[27] Shahhosseini Z, Simbar M, Ramezankhani A. Study of Religious Needs in Adolescent Girls in the Way of Spiritual Health in Sari City (2009).

[28] Fabricatore AN, Handal PJ, Rubio DM, Gilner FH. Stress, religion, and mental health: Religious coping in mediating and moderating roles. The International Journal for the Psychology Of religion.

Tables

Table 1: mean of adolescent scores about need necessity in different area

Score Need area	Minimum	Maximum	mean	Standard deviation
Nutrition	6	30	22.09	3.8
Physical activity	3	15	10.19	2.9
health training in school	19	95	64.3	15.9
Healthy relationship with parents	12	60	44.6	7.6
Personal hygiene	5	25	21.1	2.71
Mental Health and Consulting	15	74	52.5	7.9
Spiritual Health	5	25	21.9	3.7

Table 2: Frequency distribution of adolescent' need priority in different areas

Score Need areas	mean	Standard deviation	Percentage of achieved score	Priority
Nutrition	22/09	3/8	39	First
Physical Activity	10/19	2/9	26/4	Second
Health education in schools	64/3	15/9	26/4	Third
Healthy relationship with parents	44/6	7/6	14/5	Fourth
Personal hygiene	21/1	2/71	13/7	Fifth
Mental Health and Consulting	52/5	7/9	11/1	Sixth
Spiritual health	21/9	3/7	10/9	Seventh

Table 3: means of scores obtained on items in each area

Mean (S.D)	Score Need areas	Mean (S.D)	Score Need areas
Personal hygiene		Spiritual health	
4.70 (0.67)	I have access to safe water.	4.64 (0.78)	I consider God my refuge.
4.45 (0.76)	My surroundings are clean.	4.57 (0.77)	Relying on God, my work goes on.
4.44 (0.81)	I take a shower at least twice a week.	4.51 (0.86)	I am calmed by worship (prayer, fasting).
3.78 (1.20)	I brush my teeth every night.	4.20 (1.02)	It gives me a beautiful manifestation of religion.
3.77 (1.20)	I sleep at least 8 hours a day.	4.01 (1.15)	Religious issues are explained to me with reason.
nutrition		Physical activity	
4.56 (0.80)	I eat breakfast every day.	3.50 (1.28)	The sports programs offered are my favorites.
3.98 (1.08)	I eat 2-3 servings of meat and beans a week.	3.37 (1.33)	I have access to healthy sports facilities.
3.98 (1.01)	I consume 1-2 servings of dairy products daily.	3.30 (1.46)	I have restrictions for outdoor sports (cycling, walking, ...)
3.83 (1.01)	I eat 2-4 servings of fruits and vegetables a day.	Healthy relationship with parents	
3.40 (1.15)	The appearance of my food is decorated.	4.52 (1.04)	My parents choose the right name for me.
2.33 (1.39)	Free school meals are provided.	4.45 (0.94)	My parents have a good relationship
Mental Health and Consulting		4.32 (0.97)	My family treats me sincerely.
4.38 (0.99)	My advisor is a secret keeper.	4.06 (1.00)	I am accepted among my peers.
4.26 (1.17)	My advisor is a lady (my own gender)	4.05 (1.07)	If my parents give me advice, they will explain why.
4.17 (0.96)	I am loved by those around me.	4.01 (1.19)	My parents give me enough allowance.
4.01 (0.99)	My decisions are taken care of in the family.	3.87 (1.18)	My parents devote hours of their time to me.

3.82 (1.28)	I'm worried about my future job.	3.81 (1.20)	My parents give me the freedom to act under their supervision.
3.77 (1.15)	I have peace of mind.	3.77 (1.26)	I consult with my parents.
3.62 (1.18)	In law enforcement, justice is observed between individuals.	3.21 (1.21)	I love the educational programs offered in the community
3.62 (1.25)	The teacher or manager reminds us of our mistakes in a calm tone.	2.24 (1.51)	My parents discriminate between their children.
3.64 (1.26)	Exams make me anxious.	2.24 (1.52)	My family tells my secrets to others.
3.56 (1.27)	The volume of courses offered is stressful for me.	Health education in schools	
3.01 (1.39)	Students are discriminated against at school.	3.53 (1.24)	I receive training in life skills.
2086 (1.34)	The training provided comes with side programs and entertainment.	3.68 (1.20)	I receive training in personal hygiene.
2.82 (1.31)	Counseling programs are group discussions.	3.47 (1.29)	I use the experience of those who have had similar problems with me.
2.70 (1.47)	If I go to a counselor, others will misjudge me.	3.66 (1.23)	I receive training on puberty health.
2.18 (1.60)	My counselor blames and ridicules me.	3.45 (1.21)	I can pay for recreational facilities and artistic activities.
Health education in schools		3.61 (1.17)	Health education is provided to me in an understandable way.
3.60 (1.20)	Training programs are regular.	3.36 (1.26)	I receive the necessary training through the mass media (radio and television, newspapers).
3.59 (1.28)	I receive training on the correct use of media (mobile, internet, etc).	3.35 (1.40)	I receive training on the causes of addiction (cigarettes, alcohol ...).
3.55 (1.24)	I receive training on nutrition.	3.31 (1.31)	There are enough educational service centers for teenagers.
3.30 (1.43)	I receive training on the adverse effects of friendship with heterosexuals.	3.22 (1.40)	I receive training on common diseases.
3.29 (1.22)	The training provided is sufficient.	3.21 (1.29)	I receive training on sexual health.
3.24 (1.19)	Awareness of teen service centers is insufficient.	3.05 (1.28)	Specialists and psychologists are invited to the school.

2.78 (1.43)	Special education is provided for adolescents under domestic violence.
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3.68 (1.20)	I receive training in personal hygiene.
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Supplementary Files

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