Armenia: experiences of a country in transition

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Executive summary

Armenia declared its independence in 1991. Immediately following this, disruption of trade and production led to a severe economic crisis and a rise in poverty. The crisis was complicated by the consequences of the devastating earthquake and armed conflict over Nagorno Karabagh.

Economic progress has been evident in Armenia since 2000, but inequalities between social groups are still present. These factors have combined to impact critically on the health status – including mental health – of the population. The rapid changes have also significantly affected the general health and mental health status of children and young people. Indeed, the whole population has been forced to change their behaviours and overall lifestyle to adapt to the new situation.

The recent HBSC survey has shown how transition has affected the behaviour of young people in Armenia. Participating adolescents who lived in villages were less satisfied with life than their high-school counterparts living in the capital city of Yerevan and in other towns (this was an expected result, reflecting geographical inequalities). Adolescents considered themselves generally healthy, but reported a number of complaints. Unexpectedly high levels of bullying and abuse were identified. Although the suicide rate in Armenia is not high, 9% of boys and 10% of girls had thought about suicide; the same number of young people considered using alcohol to overcome psychological difficulties.

Some 90% of males and 85% of females reported having close friends, and the rate of reported sexual activity in Armenian adolescents was among the lowest in Europe.

Generally, the survey results show that the traditional Armenian family structure still plays an important role in the lives of adolescents and, in some situations, can be considered a positive health asset. On the other hand, the family is not able to fully protect adolescents from new threats, and the role of social factors and mechanisms for establishing social cohesion in Armenian society is also crucial.

According to the Association of Child Psychiatrists and Psychologists, risk factors that have an impact on adolescent mental health include: poverty, parental loss, child abuse and family conflict; problems related to parental migration; chronic health problems in family members; and parental substance misuse. Many children do not receive treatment for mental health problems due to lack of awareness, fear of stigma or lack of access to appropriate services. At the same time, "old-fashioned" approaches to health, which eschew social and psychological elements of health in favour of biomedical ones, remain popular with some care providers.

The HBSC data emphasized the scope of problems faced in Armenia in relation to adolescent mental health. In response, the Ministry of Health has developed the concept of "Youth-friendly health services" which are now being introduced with support from UNICEF. The Association of Child Psychiatrists and Psychologists has launched the "Child-adolescent mental health care service" project and has developed a position paper on reforming mental health care for children and adolescents.

The mental health status of children and adolescents should be thoroughly and continuously assessed. Appropriate policies and interventions are crucial for meeting the existing and future challenges in child and adolescent mental health in Armenia.

Social and historical context

Historical and socioeconomic status

Armenia is a land-locked country located in the southern Caucasus with a population of 3.5 million. Administratively, Armenia consists of 10 regions and the capital city of Yerevan. At 29 800 km², Armenia is one of the smallest countries in Europe. Currently, about 97% of the population is native Armenian; one third live in the capital, one third in smaller cities and one third in villages.

Armenia has a long and complicated history. The capital city of Yerevan was founded in 782 B.C. In 301 A.D., Armenia became the first state in the world to adopt Christianity. In 1828, eastern Armenia was taken into the Russian Empire, becoming a Soviet Republic in 1920. Some 1.5 million people who lived in the western part of the Armenian plateau (under Ottoman power) were killed during the First World War; hundreds of thousands of survivors were forced to leave the country. Their descendants form the large Armenian diasporas which currently account for some 7 million living in the United States, France, the Russian Federation, Lebanon, the Syrian Arab Republic and other countries.

Contemporary Armenia declared its independence in 1991. Immediately following independence, the collapse of the Soviet Union and disruption of trade and production led to a severe economic crisis and rise in poverty. The social and economic crisis was complicated by the consequences of a devastating earthquake and armed conflict in Nagorno Karabagh. The hidden unemployment rate in the 1990s was estimated to be as much as one third of the adult population. In the late 1990s, 55% of the population lived in poverty, one third of whom were in extreme poverty. Public expenditure on health care fell from 2.7% of GDP in 1990 to 1.3% in 1997. Actual expenditure on health was very low at US\$ 20 million, or US\$ 5.4 per person, in the 1990s.

As a country in transition, Armenia faces economic, political and social problems. The development of a market economy, a burgeoning democratic and civil society and integration into the global community has created a number of challenges. Declining industrial and agricultural production has resulted in food insecurity, poor sanitation and increased vulnerability to diseases. Individuals and families have been forced to change their behaviours and lifestyle. These factors have combined to critically impact on the health status of the population, including their mental health.

Economic progress has been evident since 2000 with an annual economic growth rate of more than 10%. This has led to an improving social situation, with only 34% of the population reported to be living in poverty in 2006, and among them only 5.5% in extreme poverty (1). In the same year, the state financing of the health sector was 39.4 billion Armenian drams or approximately US\$ 98 million. However, the percentage of public health expenditure in GDP did not increase substantially and now accounts for only approximately 1.5%, one of the lowest indicators in the European region (2). There are, however, large inequalities among social groups and between populations in the capital and provinces.

Child and adolescent health

Armenia inherited the Semashko's model health care system from the Soviet era, with both positive and negative effects. The Ministry of Health started reforming the health sector in the 1990s with assistance from WHO, UNICEF and other international, bilateral and Armenian diaspora organizations. This has involved decentralizing management of the health system. The health care system budget has been based on a government-funded basic benefit package since 1997, but the package is restricted. Health care services for children and adolescents are provided through children's hospitals and specialized centres, "policlinics" and rural health centres. Family doctors began operating in Armenia in 1999.

Regardless of difficulties, the government of Armenia has always shown commitment to improving the health status of children and young people. Armenia signed the Declaration of Children's Survival, Protection and Development and the Plan of Action in the 1990s, setting out specific goals such as reducing mortality and morbidity caused by acute respiratory infections, diarrhoea and malnutrition. As a consequence, Armenia has made visible progress in reducing infant mortality rates. Official statistics and demographic health survey data indicate that child mortality rates have significantly reduced over the last decade as a result of the fruitful partnership involving the country, WHO and UNICEF (3).

The Armenian Government adopted the National Plan of Action for Maternal and Child Health in 2003, and the Ministry of Health (with support from UNICEF) developed the concept of "Youth-friendly health services" in 2005 (4). The Ministry of Health instigated the development of the National Strategy on Child and Adolescent Health and Development in 2006, with adolescent mental health issues expected to be high in the list of priorities. Support was provided by the WHO Regional Office for Europe for the exploration of the policy/legislative and strategic fields related to child and adolescent health, and potential steps for the development of said strategy. This indicates how things have progressed since the early 1990s, when priority areas were about promoting child survival.

Child and adolescent mental health

During the Soviet era, approaches to psychiatry ignored the social and psychological elements of mental illness and were biased towards those that were biomedical in origin. Interventions such as family therapy and psychotherapy were consequently undervalued, with great store being set on the provision of drug therapy. While great efforts have since been made to encourage the adoption of internationally recognized approaches to therapy, "old-fashioned" and outmoded practices which reflect only biological considerations remain popular.

After independence, social and behavioural habits of Armenians were affected by the opening of society to "western" influences, with the adoption of different attitudes towards sexual habits and eating habits, among others. These factors created a number of risks to health, especially for young people. Currently, the new attitudes are confronting national traditions. Current lifestyle patterns and behavioural habits of adolescents in Armenia are therefore arising as the consequences of many factors, some of them controversial. As adolescence is a period of experimentation and risk-taking behaviour, habits and lifestyles established early in life and the influences of the surrounding environment have a profound impact on future health and development.

There are several centres which provide specialized mental health care for children, including the National Psychiatric Hospital, the Institute of Child and Adolescent Health and the Lusavorich Medical Centre. In the provinces, care is provided by psychiatric regional centres and by some recently established psychological services provided by NGOs.

The Association of Child Psychiatrists and Psychologists (ACPP) was established in 1997 as a NGO, uniting all child psychiatrists and many psychologists. ACPP has launched a number of activities since its inception (5).

Policies and interventions

The Institute of Child and Adolescent Health, with support from UNICEF and under the auspices of the Ministry of Health, is currently introducing the "Youth-friendly health services" concept. The WHO Orientation Programme has been used to develop the relevant materials, and formal criteria for youth-friendly health services and relevant guidelines for health care providers in Armenia are expected to be developed in the near future.

A number of projects have been launched by ACPP over last decade, including the Child and Adolescent Mental Health Care (CAMHC) project, which has been funded by the Catholic Aid for Overseas Development charity organization in the United Kingdom since 2000. There has been a marked increase in the number of referred children and adolescents to whom professional care is provided in recent years as a result of the "Training of primary health care system professionals and public education" project, funded by the Global Initiative on Psychiatry.

ACPP implemented the World Psychiatric Association's (WPA) "Global child mental health" programme in 2004/2005. The main purposes of the programme were to increase the awareness of health decision-makers and health professionals, promote primary prevention of mental disorders in childhood and adolescence, and encourage interventions that would contribute to the healthy mental development of children and adolescents.

ACPP and the Global Initiative on Psychiatry launched a project on initiating reforms in child and adolescent mental health care in Armenia. Within the framework of this project, ACPP developed a concept paper for use as a matrix for long-term development of CAMHC in Armenia (6).

Several steps were required before the final development of the system concept. These included:

- gathering epidemiological data and information on available resources;
- determining priority problems and effective strategies;
- performing wide consultations with government ministries (including the Ministry of Health, Ministry of Social Care and Ministry of Finance), parent organizations, NGOs and international organizations such as WHO and UNICEF;
- performing an analysis of international experience; and
- outlining the principles and objectives the future system will pursue, in accordance with WHO recommendations.

The draft concept was recently presented to partners from NGOs and state structures, both executive and legislative, to enable them to form an opinion and suggest amendments. A project of agreement on collaboration between NGOs was also presented, recommending the joining of forces to bring the proposed system concept to life.

■ Mental health and well-being among adolescents

It is well known that most mental and physical illnesses are influenced by a combination of biological, psychological and social factors. Currently, poverty and associated conditions of unemployment, low education levels and deprivation are widespread in Armenia; these factors create barriers to mental health care, especially for disadvantaged elements of society. In addition, economically disadvantaged people often raise mental health concerns when seeking treatment for physical problems.

The recent history of Armenia is complicated by conflicts, including wars and civil strife, and natural disasters which have affected a large number of people and have resulted in mental health problems. A recent study found a high rate of psychiatric and psychological symptoms and a poor quality of life among earthquake survivors. The most vulnerable groups are children and adolescents. Other studies have reported that exposure to stressors during early development is associated with persistent increased likelihood of psychiatric illness later in life (7).

The CAMHC project data show high rates of mental disorders in children and adolescents. Young people are affected by a wide spectrum of mental disorders ranging from mild to severe conditions, and more than one disorder may be present. Common mental, emotional and behavioural disorders identified in the CAMHC project database are classified in Box 1.

Implementing new concepts and mechanisms on mental health care in a country in transition such as Armenia is strongly dependent upon public perceptions. Within the frame of the "Global child mental health" programme presented by the WPA, and using manuals and instruments developed by WHO and the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP), a survey of awareness of mental health issues among students, teachers and parents of the high schools of the capital city of Yerevan was carried out.

A brief, anonymized questionnaire was sent out two weeks to one month before a mental health awareness-raising campaign began and two weeks to one month after it ended. The questionnaire was read out by a member of the survey team or by teachers while students filled out the forms. Children were asked about their opinions on children's mental health and what they had learned from the campaign. They were also asked about their own feelings and behaviours (students' participation in the survey was confidential and voluntary).

Survey results showed there were many risk factors impacting on adolescents' mental health and well-being, including: poverty; early parental loss; child abuse and family conflict; problems related to parental migration; chronic health problems in family members; and parental substance misuse. Many children did not receive treatment for mental health problems due to lack of awareness of the problem, fear of stigma or lack of access to appropriate services. Students who had low social and family support were more likely to report negative levels of health, happiness and well-being. About 15% of scholars reported "being unhappy" every week and around half claimed they had "less than good" health and "felt low" every week. About 80% of respondents reported "feeling nervous" (girls 52% and boys 28%), and 18% of respondents reported difficulties in getting to sleep. Concerns about being "too fat" were much more prevalent among girls and increased with age.

A. Non-psychotic disorders	B. Psychotic spectrum disorders, with schizophrenia being the most serious disabling and often chronic condition
Conduct disorders: many of these children were able to control the behaviour related to their conduct disorder and succeed in school through early diagnosis and intervention, along with therapy and medication from the CAMHC service.	Disintegrative psychosis
Anxiety disorders: CAMHC data have shown that anxiety disorders are the most common mental disorders affecting children and adolescents. Some of these disorders were hard to diagnose, but they can be successfully managed.	Bipolar disorders
Depression: there were observed changes in emotion (sad/cries/hyperactive), motivation (schoolwork declines), physical well-being (appetite/sleep/health), and thoughts (hopelessness/can't do anything right).	Schizo-affective
Learning disorders: these ranged from mild language and reading problems to decreased mental capacity. Early diagnosis and intervention allowed children to function and succeed at school.	Schizophrenia
Eating disorders: according to CAMHC data, eating disorders have increased in Armenia. Children and adolescents with either disorder had: low self-esteem, low sense of self-worth and poor body image; abused laxatives; and/or exercised obsessively.	Pervasive developmental disorders (PDDs), autistic spectrum disorders
Substance misuse: statistics on rates of overall substance misuse were not readily available. Use and abuse of alcohol and other drugs is not common in Armenian adolescents compared to other countries.	

■ HBSC survey ■

The 2005 HBSC survey was carried out by the "Arabkir" Joint Medical Centre – Institute of Child and Adolescent Health of Armenia, with support and participation of the UNICEF Armenian office and in close collaboration with the Ministry of Health and Ministry of Education and Science.

The Armenian HBSC is a school-based survey with a multi-stage cluster sample design to produce a nationally representative sample in the eighth, ninth and tenth grades, covering pupils aged 13–17 (8). The primary sampling unit – the cluster – was a class or, in the absence of a sampling frame in small rural schools, the entire school. The study covered the total actual sampling frame of 1205 students. It should be noted that achieving the recommended sample size of 4500 respondents was not possible due to lack of resources. While this affects the reliability of the results to an extent, this was nevertheless the largest survey of its kind ever held in Armenia.

To best reflect the population distribution, the first stage of sampling divided 60 schools into three groups of 20 schools from Yerevan, 20 from other urban areas and 20 village schools. Data from the National Statistical Service and Ministry of Education and Science were used to identify schools with a representative number of students enrolled. The second sampling stage consisted of random-start systematic equal-probability sampling of the schools that participated in the survey. All eighth to tenth grade classes in the selected schools were included in the sampling frame. One school for children with physical disabilities and one "commercial" high school were included in the list to reflect truly random sampling. All students in the selected classes were eligible to participate in the survey.

The survey instrument was a standard anonymized questionnaire adapted to take the Armenian context into account. The questionnaire consisted of 122 questions divided into 11 main categories: personal; family; general health status; eating behaviours; alcohol, drug and tobacco use; hygiene; mental health; behaviour and violence; physical activity; knowledge, attitudes, life skills and sources of information; and sexual behaviours.

Data collection was carried out in classrooms during school hours. The interviewers asked teachers to leave the room to ensure full anonymity. Each student was provided with an answer sheet upon which he or she recorded responses to each of the survey questions. Data were collected from October to December 2005. All documentation was sent to, and collated by, the Institute of Child and Adolescent Health. The prevalence percentage differences are described in this case study with 95% confidence intervals (CI). Standard deviation, which indicates how widely values are dispersed from the average (mean), was estimated based on the sample size.

Of the 1205 respondents, 758 were female (62.8%) and 447 were male (37.1%), reflecting the predominance of girls in the high schools of Armenia. The geographical distribution of respondents covered 435 students (36.1%) from Yerevan, 375 (31.2%) from other cities and 395 (32.7%) from rural areas. The response rate was 100%, although not all respondents answered every question, as the percentages in the tables below reflect.

Survey results – selected indicators in relation to mental health

Family

The Armenian family generally has a traditional structure with two parents, typically 2–3 children and grandparents all living under the same roof. The role of family and traditions in Armenian society are still held in great esteem. A majority (88.1%) of respondents live with both parents and siblings.

Physical health

Almost half of the students (48.2%) thought they were in good health, with 22.2% believing they were in perfect health. Adolescents nevertheless reported numerous complaints during the previous six months, ranging from headaches and toothaches to abdominal pain, heart pain or heart palpitations, insomnia and other conditions more commonly associated with adults. Nearly half of all young men and women surveyed complained of headaches, followed by toothaches, as the most common health concerns. No significant gender differences were found.

Life satisfaction

Most respondents, regardless of gender, were generally satisfied with their lives; young people living in urban areas, however, were more satisfied than those in rural areas (Table 1). This may provide critical indicators for health interventions among young people in different environments. It should also be noted, however, that around one in seven respondents refused to answer this question.

Body image

There are no scientific data on the prevalence of obesity in Armenia. Results of the survey, however, show that 18% of girls thought they had "some-to-severe" weight problems; among boys, this figure was about 10% (Table 2). Approximately 15% of girls and 23% of boys noted that their body weight was lower than they would like. Generally, gender did not appear to be a significant determinant for body image, as rates of dissatisfaction with the body were at 34% for both boys and girls.

Behaviour, physical fighting and injuries

One third of boys and one fifth of girls surveyed reported that they had been injured in the past year. Ten per cent of girls and eight per cent of boys noted that someone had bullied them during the month prior to being surveyed. Significantly fewer children from rural areas had been bullied (Table 3), perhaps as a result of the closeness of rural communities and differing means of addressing and resolving conflict compared to urban centres.

Only 35% of boys and 40% of girls responded that they were not abused verbally by a teacher during the past year. Some 12.3% of boys and 1.2% of girls stated that they were abused frequently, indicating up to 12 occurrences of verbal and physical abuse per month, or nearly every school day (Table 4).

 Table 1

 Overall life satisfaction by location

	Yerevan		Urban		Rural	
"How satisfied are you with your life (on a scale of 0–10, with 10 as the highest mark)?"	Number (N)	Percentage (%)	Number (N)	Percentage (%)	Number (N)	Percentage (%)
0–2	6	1.4	4	1.1	4	1.1
3–7	72	16.5	60	16.0	98	24.8
8–10	299	68.8	248	66.1	230	58.2
No response	58	13.3	63	16.8	63	15.9
Total	435	100	375	100	395	100

Table 2
Self-perceived weight by gender

	В	oys	Girls		
"How do you describe your weight?"	Number (N)	Percentage (%)	Number (N)	Percentage (%)	
Severely underweight	13	1.9	14	2.6	
Somewhat underweight	102	23.0	97	12.7	
Normal	279	62.6	493	64.7	
Somewhat overweight	40	8.9	137	18.0	
Severely overweight/obese	2	0.6	2	0.2	
No response	12	3.0	15	1.8	
Total	448	100	758	100	

Some children – 10% of boys and 5% of girls – reported that they had refused to go to school due to fear at least once and sometimes more frequently (Table 5). A significant number of students did not respond to these violence-related questions, raising concerns about the perceived and actual safety afforded to students within schools.

Suicidal ideation

During the year prior to the survey, 9% of boys and 10% of girls reported that they had considered suicide (Table 6). Approximately the same number of young people considered using alcohol or drugs to overcome their difficulties.

Eighty-nine per cent of males and eighty-four per cent of females reported having close friends, but those in the cities appeared to have more friends than those in rural areas (Table 7).

Some 77% of boys and 53% of girls surveyed said that they rarely or never felt lonely (Table 8).

Male students preferred discussing issues with their friends. When they turned to family members, they preferred to speak with their mothers and older brothers/sisters rather than with their fathers (Table 9). Girls liked to discuss issues with their mothers and friends, with few ever talking things over with their fathers. In both rural and urban areas, mothers seemed to be the partners of choice with whom young people could discuss their issues. It is therefore critical that mothers play a role and have opportunities to participate in interventions designed to improve the health and well-being of their children.

Table 3

Frequency of bullying by location

	Yerevan		Urban		Rural	
"During the past 30 days, how many times were you bullied?"	Number (N)	Percentage (%)	Number (N)	Percentage (%)	Number (N)	Percentage (%)
0 times	376	86.4	330	88.0	321	81.3
1 or 2 times	24	5.5	26	6.9	19	4.8
A few times	15	3.4	7	1.9	9	2.3
Often	2	0.5	3	0.8	2	0.5
Always	1	0.3	1	0.3	1	0.2
No response	17	3.9	8	2.1	43	10.9
Total	435	100	375	100	395	100

Table 4

Frequency of verbal abuse by teachers by gender

	Boys		Girls	
"During the past 12 months, how many times were you verbally abused by a teacher?"	Number (N)	Percentage (%)	Number (N)	Percentage (%)
0 times	159	35.5	305	40.2
1 time	58	13.0	116	15.3
2 or 3 times	62	13.8	54	7.1
4 or 5 times	15	3.3	8	1.0
6 or 7 times	11	2.4	2	0.3
8 or 9 times	6	1.3	4	0.5
10 or 11 times	1	0.2	2	0.3
12 or more times	55	12.3	9	1.3
No response	81	18.2	258	34.0
Total	448	100	758	100

Sexual experiences

One in every five males surveyed reported that they had already had sexual intercourse, but only one in a hundred females stated they had engaged in sexual intercourse. This number is lower even than the former Yugoslav Republic of Macedonia's 3.6% and Greece's 9.6% and significantly lower than the United Kingdom (England's) 40% (9). Most young women explained their primary reason for delaying first sexual intercourse as being respectful of tradition and a desire to remain a virgin until marriage (Table 10).

Lessons learned

Data from the HBSC and other relevant surveys clearly indicate that while child and adolescent mental health is currently a high priority for Armenia, problems related to mental ill health among this group require increased attention.

A number of controversial factors affect the mental and health status of Armenian children and adolescents. Some "traditional" factors sometimes play a protective role, but due to rapid changes in the social, economic and cultural context of Armenia, the situation changes very dramatically and leads to changes in the scope and character of mental health problems, especially in adolescents.

Table 5
Frequency of truancy due to fear for safety by gender

	В	Boys	Girls		
"During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?"	Number (N)	Percentage (%)	Number (N)	Percentage (%)	
0 days	306	68.0	450	59.4	
1 day	21	4.9	13	1.7	
2 or 3 days	17	3.8	17	2.2	
4 or 5 days	5	1.1	4	0.5	
6 or more days	6	1.3	3	0.4	
No response	93	20.9	271	35.8	
Total	448	100	758	100	

Table 6

Frequency of suicidal ideation by gender

	Boys		Girls	
"During the past 12 months, how many times did you actually attempt suicide or think about it?"	Number (N)	Percentage (%)	Number (N)	Percentage (%)
0 times	374	83.5	617	81.3
Once	22	4.9	58	7.6
2 or 3 times	6	1.3	13	1.7
4 or 5 times	0	0.0	2	0.3
6 or more times	13	2.9	6	0.9
No response	33	7.4	62	8.2
Total	448	100	758	100

Table 7

Relations with peers

	Boys		Girls		
"Do you have close friends?"	Number (N)	Percentage (%)	Number (N)	Percentage (%)	
Yes	397	88.6	641	84.4	
No	19	4.2	56	7.4	
I don't know	11	2.4	13	1.7	
No response	21	4.8	48	6.5	
Total	448	100	758	100	

The rationale for establishing new policies for children's and adolescents' mental health is currently strong (10). The government and many professionals recognize the importance of this field, and all policies on adolescent health adopted by the Ministry of Health in recent years have considered mental health an important area.

Despite some achievements, significant barriers for successful implementation of projects remain, including:

Table 8

Frequency of feeling lonely by gender

	Boys		Girls	
"During the past 12 months, how often did you feel lonely?"	Number (N)	Percentage (%)	Number (N)	Percentage (%)
Never	249	55.6	263	34.6
Rarely	94	21.0	140	18.4
Sometimes	51	11.4	191	25.5
Most of the time	16	3.6	76	10.0
Always	7	1.6	27	3.5
No response	31	6.8	61	8.0
Total	448	100	758	100

Table 9

People with whom students discuss their problems by gender

	Boys		Girls		
"With whom do you usually discuss your problems?"	Number (N)	Percentage (%)	Number (N)	Percentage (%)	
With mother	58	12.9	292	38.6	
With father	40	8.9	6	0.8	
With older sister/brother	49	10.9	63	8.3	
With grandparents	1	0.2	5	0.6	
With female friends	23	5.1	226	29.8	
With male friends	183	41.0	17	2.2	
No response	94	21.0	149	19.7	
Total	448	100	758	100	

Table 10

Reason for delaying first sexual intercourse by gender

	Boys		Girls	
"What is the main reason you have not had sexual intercourse?"	Number (N)	Percentage (%)	Number (N)	Percentage (%)
I have had sexual intercourse	89	19.9	7	0.9
I want to wait until I am older	130	29.0	85	11.2
I want to wait until I am married	59	13.2	431	56.9
I do not want to risk getting pregnant	6	1.3	5	0.7
I do not want to risk getting a sexually transmitted infection, such as HIV or AIDS	28	6.3	7	0.9
I have not had a chance to have sex or met anyone that I wanted to have sex with	43	9.6	19	2.5
It is against my religious values	2	0.4	9	1.2
Some other reason	30	6.7	12	1.6
No response	61	13.6	184	24.1
Total	448	100	758	100

- the continued existence of outmoded perceptions and approaches to adolescent mental health issues;
- controversies in existing legislation, with discrepancies in laws related to adolescent health and in regulations on health care and education;
- the low capacity and inadequate structure of the health system, including lack of resources and trained staff, especially in the provinces;
- lack of coordination of the efforts of governmental bodies, health institutions and different NGOs;
- limited experience of comprehensive interventions which involve all levels of mental health care;
- lack of programme experience connected to other fields of adolescent health and lack of intersectoral interventions involving education and social sectors;
- existing social and geographical inequalities complicating the prospects for social cohesion; and
- lack of clear definition and scope of parental consent.

Consequently, the following issues are presented for consideration.

- The development of proper legislation and policies related to adolescent mental health within the comprehensive child and adolescent health strategies in Armenia is high on the agenda.
- There is an urgent need to coordinate existing adolescent-friendly health services and mechanisms and relevant education institutions to create a collaborative network for improving mental health care.
- These services need to be unified through the system to make them more effective, enhance their ability to collect precise epidemiological data and ensure sustainable financial resources through cooperation with the state.
- Any interventions and/or field activities in adolescent health should be connected to other aspects of young people's health and welfare, including general health, reproductive and sexual health and prevention of unhealthy habits such as smoking and drug and alcohol use.
- All newly planned interventions (whenever possible) should take into account the rapid changes in attitude of Armenian young people and focus on preventing expected negative outcomes of lifestyle changes.
- The health, education, youth, social and justice sectors should develop awareness-raising activities on adolescent health issues for the public and policy-makers.
- Family doctors, paediatricians and other relevant health care providers should be educated on adolescent mental health issues; relevant staff in education institutions should also be trained in adolescent mental health and rights issues, with a focus on mental health.
- Key adolescent health and rights issues, including integration of new topics such as violence prevention and dealing with psychological problems, should be added to the curriculum of high schools and colleges in Armenia.
- Further studies, including regular HBSC surveys, should be carried out to enable better understanding of current issues and trends in mental health and psychosocial well-being of adolescents; taking into consideration the rapid transitions in Armenia, the regular implementation of the HBSC survey, an internationally accepted tool for measuring trends in health behaviour of young people, is crucial.

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References

- 1. Poverty reduction strategic program in Armenia (revised version). Yerevan, International Monetary Fund, 2007.
- 2. World health statistics 2007. Geneva, World Health Organization, 2007.
- 3. Mother and child health care strategy for 2003-2015. Yerevan, The Government of Armenia, 2003.

- 4. The Ministry of Health of Armenia and UNICEF Armenian office. Concept paper on youth-friendly health services. Yerevan, UNICEF, 2005.
- 5. Yeghyan M, Najaryan L, Gasparyan K. Armenian Association of Child Psychiatrists and Psychologists. International Psychology Reporter, 2005, 9:3:25–27.
- 6. Yeghiyan M, Danelian A, Gasparyan K. The development of child mental health care in Armenia. *Mental Health Reforms Geneva Initiative on Psychiatry*, 1999, 4:11–13.
- 7. Sogoyan K, Gasparyan K. The impact of social disturbances and natural disaster on mental health in Armenia. In: Abstracts Vol. 2, XII World Congress of Psychiatry, Yokohama, 2002:68.
- 8. Babloyan A et al. School-based health survey report. Yerevan, UNICEF/Institute of Child and Adolescent Health, 2005.
- 9. Currie C et al., eds. Young people's health in context. Health Behaviour in School-aged Children (HBSC) study: international report from the 2001/2002 survey. Copenhagen, WHO Regional Office for Europe, 2004 (Health policy for children and adolescents No. 4; http://www.euro.who.int/InformationSources/Publications/Catalogue/20040601_1, accessed 22 May 2008).
- 10. Babloyan A et al. Adolescent health in Armenia. In: Abstracts of 13th Congress of International Association of Adolescent Medicine, St. Petersburg, Russian Federation, 2007:12.