Alcohol consumption in early adolescence and medical care

Tania Borrás Santiesteban, M.D.[a]

ABSTRACT

Introduction. Alcohol consumption in adolescents is a risky behavior that can be prevented.

Objective. To determine health care and alcohol consumption pattern in early adolescence and its relation to determinants of health (biological, environmental, social and health system factors).

Method. A qualitative-quantitative, cross-sectional study was carried out in the four schools belonging to Popular Council 8 of Mario Gutiérrez Ardaya health sector in May, 2013. The study universe was made up of adolescents aged 10-14. The sample was determined through a simple randomized sampling. Surveys were administered to adolescents, parents, educators and senior health staff members to determine alcohol consumption, medical care quality and level of knowledge on the problem. A nominal group with health professionals was created.

Results. Two hundred and eighty eight adolescents were included. 54.5% were alcohol users, of which 30.2% were 10-11 years old. Those classified as low risk were prevailing (55.6%). 100% of the senior health staff expressed the need for a methodology of care. 90.4% of education staff considered adolescence as a vulnerable stage. Relatives reported that there should be adolescent-specific medical appointments (61.8%). The nominal group's most important opinions were based on the main features that a consultation for adolescents should have and on the problems hindering proper care.

Conclusions. Alcohol consumption was considered high and early start prevailed. Insufficient care to early adolescents who use alcohol was made evident.

Key words: *alcohol consumption, adolescence, determinants of health, medical care.*

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a. Policlínico Mario Gutiérrez Ardaya, municipality of Holguín, province of Holguín, Cuba.

E-mail address:
Tania Borrás Santiesteban, M.D., taniab@cristal.hlg.sld.cu

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INTRODUCTION

According to the World Health Organization (WHO), adolescence is the period between 10 and 19 years old, in which physical, psychological, biological and social changes take place. It is classified into early adolescence (10 to 14 years old) and late adolescence (15 to 19 years old).[1]

In early adolescence, there is an impact on the emotional, physical and mental capacity.[2]

Alcohol is the most frequently used psychoactive drug among adolescents. It is associated with multiple problems: social, behavioral and developmental.[3]

It largely increases the risk of alcoholic disorders progression, it favors the occurrence of other risky behaviors and therefore it is a reason why interventions to delay consumption should be implemented.[4,5]

In the Americas, research suggests that children start drinking at the age of ten.[6]

In Cuba, there are high-risk drinking patterns and a tolerant attitude towards alcohol misuse.[7,8]

In this country, efforts have been made to update and improve the alcoholism-related program and the draft action plan, which show concern about the excessive and irresponsible consumption pattern among adolescents.[9, 10]

There are programs in different countries (including Cuba) for adolescence care, but there are no specific actions aimed at the group of 10- to 14-year-olds.

A study carried out in the United States suggests that intervention strategies should focus on determinants of health (biological, social, environmental and health system factors).[11]

Our aim was to determine health care and alcohol consumption pattern in early adolescence and its relation to determinants of health.

METHOD

A descriptive, qualitative-quantitative, cross-sectional study was conducted through questionnaires administered to determinants of health (health senior staff, education

staff, family and adolescents) and to the nominal group (the pediatrician of the other Basic Working Group –*Grupo Básico de Trabajo*, GBT– and family doctors, belonging to the health sector and schools of the chosen Popular Council).

The research was carried out in May, 2013, in the four schools of the Popular Council 8, of the municipality of Holguín, province of Holguín, Cuba, belonging to Mario Gutiérrez Ardaya health sector, which was selected based on the results of the analysis of the health situation. In this area, there are seven wineries and four restaurants where alcoholic beverages are sold; 18.9% of identified adult alcoholics. There are a total of 892 adolescents living there, 12 family practice offices (*consultorios médicos de familia*, CMF), and four schools: three elementary schools and one urban secondary school. The prevailing education level is pre-university.

Four questionnaires were designed: one for adolescents, one for the polyclinic senior staff (director, assistant director of Medical Assistance, Teaching, Hygiene and Epidemiology, and heads of GBT), the third one for education staff (teachers, educational and administrative assistants in selected schools) and the fourth one for parents or guardians (*Annexes 1, 2, 3, 4*). These were administered by the author of the study, upon approval from the Municipal Department of Education and Health (Dirección Municipal de Educación y Salud), parents or guardians, and adolescents.

The questionnaires were validated through pilot testing in Francisco Laguado Jaime (primary) and Juan José Fornet Piña (basic secondary) schools, belonging to another Popular Council, of the same district, with similar characteristics to those of the schools where the definitive study was carried out.

Data were processed and the agreement coefficient (Cohen's kappa) was used to determine the criterion validity; a score of 0.84, showing strong agreement, was obtained.

After making the proposed changes, the final questionnaires were prepared and administered to the selected sample, with the necessary prior instructions.

The study universe was made up of 1,647 adolescents aged 10-14 years old. The sample was determined through a simple random probability sampling using the random number table. The minimum sample required was calculated on the basis of 5% of the registration of the selected groups. The following inclusion criteria were considered: adolescents residing in the area of Popular Council 8 and who agreed to take part in the investigation.

The risk was classified as no risk, low, medium and high risk; and care, as very good, good, fair and poor (*Annexes 5, 6, 7, 8*). The study was based on the ethical principles of the Declaration of Helsinki and the informed consents already mentioned.

The 12 family doctors working in the area of the selected Popular Council and the pediatrician of the other GBT were applied the nominal group technique with the aim of obtaining consensus on elements related to risky behavior and health care received by this age group. Although the other pediatrician does not provide direct care to the adolescents in the sample, he was included in the study because of the importance given to pediatricians in the field of early adolescence health care.

RESULTS

288 adolescents were included: 142 girls (49.3%) and 146 boys (50.7%). 54.5% were alcohol users, of which 30.2% were 10-11 years old (*Table 1*). Out of those who drunk, 43.8% still have the habit.

Among alcohol users, those with risk perception and who had received information on the habit prevailed; among those who did not use alcohol, most had no risk perception and had not received information (*Table 1*).

In the research, adolescents classified as low risk prevailed, medium risk came second and a minimum percentage were high risk; there were no adolescents classified as no risk (*Table 2*).

Most adolescents said that their last visit had been in the office and the polyclinic. A high

TABLE 1. *Alcohol consumption according to education level, risk perception and information received*

	Alcohol consumption			
	Yes		No	
Education level	**N**	**%**	**N**	**%**
	157	54.5	131	45.5
Primary (n: 87)	24	27.6	63	72.4
Secondary (n: 201)	133	66.2	68	33.8
Risk perception				
Yes	146	93	116	88.5
No	11	7	15	11.5
Information received				
Yes	154	98.1	109	83.2
No	3	1.9	22	16.8

percentage reported having received information about their care. The prevailing sources of information were the family and television; only a 24.3% reported having received the information from health staff (*Table 3*). Most adolescents claimed that, during visits, there was no privacy, trust or confidentiality. A large percentage stated that the doctor did not explain the importance of preventing this habit and they felt that the most appropriate professionals for their care were pediatricians in the first place and then family doctors (*Table 4*).

The health professionals in the nominal group (12 family doctors and a pediatrician from another GBT) noted that adolescents' visits should be planned, educational, personalized, and comprehensive, and that the family doctor and pediatrician should both participate. They argued that the problems hindering proper care for adolescents were their failure to attend visits, and lack of privacy, teaching materials and doctors' availability.

They felt doctors were moderately trained for their care.

In the questionnaire administered to health senior staff, when asked about the roles of family doctors, they mentioned adolescent care, referrals to other specialists, risk and family assessment. As regards the roles of pediatricians, they suggested follow-up by these specialists and medical consultation with Psychology and Psychiatry professionals. All of them reported that there was no documentation that would determine alcohol consumption and that current health services did not conform to adolescents' expectations and needs.

Regarding the implementation of the Adolescents Care Program, they expressed the need for checkups and referrals to pediatricians and psychologists, and educational activities in schools and the community. All of them suggested adolescent-tailored visits should be planned.

All of them agreed that visit requirements should include qualified staff; private, nice location; appropriate environment and educational materials. The monthly meetings between the Ministry of Public Health, the Ministry of Education and the social prevention group was pointed out as a coordination between the health sector and schools. All of them mentioned the need for a methodology to set the necessary care for early adolescence.

Table 2. *Risk classification in adolescents according to their education level*

	Risk classification							
	High		Middle		Low		Total	
Education level	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Primary	3	10.7	14	14	70	43.8	87	30.2
Secondary	25	89.3	86	86	90	56.2	201	69.8
Total	28	100	100	100	160	100	288	100

Explanatory note: * percentage calculated based on the line marginal total.

Table 3. *Sources of information according to participants*

	Education staff		Parents		Adolescents	
Sources	**N**	**%**	**N**	**%**	**N**	**%**
Television	82	87.2	163	56.6	184	63.9
Radio	48	51.1	41	14.2	46	16.0
Press	37	39.4	28	9.7	43	14.9
Relatives	0	0.0	3	1.0	190	66.0
Health care staff	0	0.0	79	27.4	70	24.3
Teachers	0	0.0	120	41.7	126	43.7
Friends	0	0.0	0	0.0	85	29.5

In the questionnaire administered to parents or guardians, 65% of them reported that, during adolescence, teenagers behave in a way that may be dangerous to their health, and that the most common characteristics were confusion, inappropriate behavior and inexperience, but that these were not characteristic of their children. 61.8% reported that adolescent-tailored visits should be available and that the most appropriate time should be between 5:00 and 9:00 p.m.

The prevailing source of information was television (*Table 3*). They said the most appropriate specialists for their care were primarily psychologists and then family doctors; there were no great differences between pediatricians and psychiatrists (*Table 4*).

Regarding the questionnaire administered to education staff, the most relevant data were: the age group 20-29 years old (34.0%) prevailed; time spent on the care of adolescents was mostly from one to nine years (36.2%); 90.4% considered adolescence as a vulnerable stage; they said that early adolescence was the group that should receive the most attention (59.6%); most of them argued that there was no documentation to determine adolescent alcohol consumption (78.3%); the actions for the prevention of this behavior claimed by teaching staff were parent education, educational lectures, grade councils, methodological preparations, among others; most of them expressed the need for coordination between the health sector and schools (68.1%); all of them agreed that it was necessary to implement adolescent-tailored visits.

Motivation-related aspects were also analyzed: 70% assisted them with pleasure; 56% assisted them with patience; 88% felt committed to their assistance; and 72% often showed affection. They stated that the most frequent source of information about prevention of alcohol consumption was television, and none of them mentioned health care staff (*Table 3*).

Regarding the quality of care for this age group, the prevailing criterion was very good according to health senior staff; good, according to education staff and family; and fair, according to adolescents, but in this case there was a difference of only one participant in relation to those who considered it good (*Table 5*).

TABLE 4. *Most appropriate professionals for the care of adolescents according to participants*

	Adolescents		Parents	
Specialties	**N**	**%**	**N**	**%**
Comprehensive General Medicine	97	33.7	66	22.9
Pediatrics	156	54.2	64	22.2
Psychology	26	9.0	95	33
Psychiatry	9	3.1	63	21.9
Total	288	100	288	100

Explanatory note: * percentage calculated based on the line marginal total.

DISCUSSION

Adolescent alcohol consumption begins at increasingly younger ages.[12]

This is worrying since an early start has negative consequences and a high risk of future dependence, so it is important to delay drinking onset, which agrees with the revised literature.[13-16] Teenagers who use alcohol do not have a full appreciation of the damages to which they are exposed: the feeling that there are no consequences to this behavior and that they have the situation under control is characteristic of this stage.

Similar results were found in a study carried out in Chile; as per the information received, a lower percentage was obtained in that investigation.[17]

TABLE 5. *Classification of care quality according to participants*

	Classification of care quality									
	Very good		Good		Fair		Poor		Total	
Participants	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Administrative	4	66.7	2	33.3	0	0.0	0	0.0	6	100
Education staff	24	25.6	54	57.4	14	14.9	2	2.1	94	100
Family	108	37.5	131	45.5	49	17.0	0	0.0	288	100
Adolescents	7	2.4	137	47.6	138	47.9	6	2.1	288	100

Explanatory note: * percentage calculated based on the line marginal total.

Adolescents' satisfaction with the quality of the care they receive matches the reviewed literature, which reveals they are satisfied in almost all aspects.[18]

Although in this research low-risk teenagers prevailed, it is important to take timely actions that will strengthen protective factors and reduce the risk factors, so as to prevent these teenagers from running a higher risk, which may jeopardize their health condition.

Despite the results, the need to improve care for this age group is considered to prevail because, in medical practice, it is clear that they do not receive the care they need.

When analyzing the results of the criteria set forth by health professionals, it is thought that doctors who took part in the research do not even consider facing care of early adolescents who use alcohol from the start, perhaps because they do not consider themselves well-trained. This means they need to feel supported by the psychologist and the psychiatrist, who, traditionally, are the professionals who have paid more attention to these patients.

As regards the criteria set forth by the health senior staff in relation to scheduling an adolescent-tailored visit, they agree with other authors who suggest that this age group deserves specific attention and requires the implementation of actions to improve their health; in addition, it is important to carry out further research.[19,20] The view that there should be a methodology to promote care matches other studies that suggest that wider investigations with systematic methodologies are needed in order to obtain representative results on alcohol consumption.[21]

It is believed that current health services do not fit in with the real expectations and needs of this stage, related to the lack of professional training, lack of adolescent-tailored visits under the required conditions, and the lack of a methodology to encourage early adolescence care. These results match other authors who suggest that lack of time and training are important barriers to take into account.[22-24]

Regarding education staff, it is considered that they should be better prepared, as a young faculty prevailed for their care and they did not have enough experience, so it is necessary to provide training and the information they demand. It is important to remember that it is in the school environment where teenagers spend most of their time, and teachers play a key role in their development.

A strong commitment between adolescents and teachers reduces the use of substances. The school environment can protect early adolescents and their families against behaviors that pose a risk to health.[25-27]

The relationship between students and their school is considered an important way for reducing behavioral problems in adolescents.[28]

The information provided by parents or guardians evidences their ignorance and lack of risk perception. Perception of risk is a subjective judgment, which greatly depends on the person's reasoning ability, knowledge, cultural perception and social construction, the characteristics of the information they receive, the interpretation of messages, and they also influence the peculiarities of adolescence, including the lack of risk assessment. Family, school, peers, community and culture are also a great influence. Perception was not related to behavior.[29-32] According to adolescents' criteria, care in CMFs should be improved. These health centers are the gateway to the national health system.

As for the relationship with the doctor, actions should be taken so that adolescents' medical visits meet the above requirements. This agrees with other authors who suggest that adolescents should trust their doctor and should provide him/her with the necessary information.[33,34]

This study is limited by the internal validity common in all self-report measures. Its strength lies on being the first contribution of local data necessary to estimate the size of the problem, and to trigger actions focused on improving the dissemination and implementation of preventive measures.

CONCLUSIONS

Alcohol consumption was considered high and early start prevailed. Insufficient care to early adolescents who use alcohol was made evident. ■

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Annex 1.

Questionnaire for adolescents

This questionnaire was developed in order to analyze health care and alcohol consumption pattern in adolescents. It was developed for you to answer the questions according to what you actually believe. The research results may be useful to improve your health.

Institution sponsoring the research: Policlínico Mario Gutiérrez Ardaya.
Questionnaire number:
Date:
Location where it will be filled out: classrooms of relevant institutions.
Professional collecting the information: *Tania Borrás Santiesteban, M.D.* (responsible of the investigation).

Instructions for filling out:
Read the questionnaire carefully before completing it.
Do not write your name.
Answers will be private.
Circle the answer you consider correct.
Use pencil only.
Make dark marks.
If you change your answer, erase your previous answer fully.
Thank you for your help.

General data
Age: ____. Sex: ____. Grade: ____.

Medical care
1. Your last visit to the doctor (if you have visited one at all) was in the:
A: Doctor's office. B: Policlinic.
C: Children's hospital. D: You haven't visited the doctor.
2. Have you received information about adolescence health care from anyone?
A: Yes. B: No.
If the answer is Yes, mark where.
A: Doctor's office. B: Policlinic. C: Children's hospital.
D: School. E: Other. Where? _____
3. Do you feel at ease in the office waiting room with other people who are not your age?
A: Yes. B: No. C: I don't mind.
4. When you go to the doctor's, do you talk to him/her in private?
A: Yes. B: No.
5. Can you speak about any subject with your doctor?
A: Yes. B: No.
6. Are you afraid that your doctor may tell your parents what you tell him/her?
A: Yes. B: No.
7. When you go to a visit, you feel:
A: You are assisted quickly. B: You have to stay in the waiting room for too long.
8. Do you agree with being appointed a visit with the doctor even though you are not sick?
A: Yes. B: No.
9. When the doctor assists you, you feel:
A: Satisfied. B: Moderately satisfied. C: Unsatisfied.
10. When the doctor assists you, does he talk about the importance of avoiding alcohol?
A: Yes. B: No.
11. Of all the health care staff members, you think you should be assisted by the:
A: Family doctor. B: Pediatrician (doctor who takes care of children and adolescents).
C: Psychologist. D: Psychiatrist.

12. In relation to the health care you have received so far, would you like it to be improved?
A: Yes. B: No.

Alcohol consumption

1. Have you ever drunk alcohol?
A: Yes. B: No.
2. f you have, the first time was during:
A: Primary school. B: Secondary school.
3. Do you still drink alcohol?
A: Yes. B: No.
4. If you still drink, over the last month, when have you done it?
A: On weekends. B: On other week days. C: Any days of the week.
5. Do you think drinking alcohol is bad for your health?
A: Yes. B: No.
6 Have you been given information about the dangers (harm) of the drinking habit?
A: Yes. B: No.

If the answer is Yes, mark the source of information.

A: Television. B: Radio. C: Newspaper. D: Relatives.
E: Doctors and nurses. F: Teachers. G: Friends. H: Other. Which or who?

Annex 2.

Questionnaire for senior health staff

This questionnaire was designed to analyze the features of the care provided to early adolescents who use alcohol. It has been developed for you to answer the questions according to what you actually believe, and the goal is to improve adolescents' health status by means of the research results.

Institution sponsoring the research: Policlínico Mario Gutiérrez Ardaya.
Questionnaire number:
Date:
Location where it will be filled out: policlinic classroom.
Professional collecting the information: *Tania Borrás Santiesteban, M.D.* (responsible of the investigation).

Instructions for filling out:
Read the questionnaire carefully before completing it.
Do not write your name.
Answers will be private.
Circle the answer you consider correct.
Make dark marks.
Thank you for your help.

1. Within your health sector, are the roles of family doctors clear in relation to the care provided to early adolescents who use alcohol?
A: Yes. B: No.
If you answer Yes, list their roles in order of priority, from the most to the least important.

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2. Are the roles of pediatricians clear in relation to the care provided to early adolescents who use alcohol?
A: Yes. B: No.
If you answer Yes, describe their main roles in order of priority.

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3. Is there documentation within the health sector that can determine alcohol consumption patterns in early adolescence?
A: Yes. B: No.
If you answer Yes, mention which.
A: Guides. B: Programs. C: Models.
D: Methodologies. E: Other. Which?

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4. Do current health services for adolescents match the actual needs and expectations of this age group?
A: Yes. B: No.
Please support your answer.

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5. In order of priority, please list the main actions that have been carried out in the area to allow for the implementation of the National Program for Comprehensive Care of Adolescent Health in relation to risky behaviors during adolescence.

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6. You think that planning an adolescent-tailored visit in primary health care is:

A: Very necessary. B: Necessary. C: Not necessary.

7. If adolescent-tailored visits were implemented, what time of the day do you think would be most suitable?

A: From 8:00 a.m. to 12:00 a.m. B: From 1:00 p.m. to 5:00 p.m. C: From 5:00 p.m. to 9:00 p.m.

8. Describe the requirements you consider an adolescent visit should meet.

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9. Do you think there is enough coordination with schools in your health sector to ensure proper adolescent care?

A: Yes. B: No.

Please support your answer.

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10. Will it be necessary to develop a methodology for the provision of care to adolescents who use alcohol within primary health care as a general guidance for family doctors and pediatricians?

A. Yes. B: No.

Please support your answer.

Annex 3.

Questionnaire for education staff

This questionnaire was designed to analyze the features of the care provided to early adolescents who use alcohol. It has been developed for you to answer the questions according to what you actually believe, and the goal is to improve adolescents' health status by means of the research results.

Institution sponsoring the research: Policlínico Mario Gutiérrez Ardaya.
Questionnaire number:
Date:
Location where it will be filled out: classroom of the relevant institution.
Professional collecting the information: *Tania Borrás Santiesteban, M.D.* (responsible of the investigation).

Instructions for filling out:
Read the questionnaire carefully before completing it.
Do not write your name.
Answers will be private.
Circle the answer you consider correct.
Make dark marks.
Thank you for your help.

I) General data
1. Age: _____.
2. Sex: F M
3. Years of professional practice as a teacher: _____.
4. Years of professional practice with adolescents aged 10-14: _.
5. Grade you teach: _____.

II) Adolescent-related aspects
1. Do you consider adolescents (people aged 10 to 14) as young people who could present features that may be dangerous to their health?
A: Yes. B: No.
Please support your answer.

---
2. Which stage of adolescence do you think should be taken more care of?
A: Primary school. B: Secondary school. C: Both.
Please explain the reasons for your answer.

---
3. Is there documentation in the school facility that can provide knowledge on alcohol consumption patterns in early adolescence?
A: Yes. B: No.
If you answer Yes, mention which.
A: Guides. B: Programs. C: Models.
D: Methodologies. E: Other. Which?

III) Specific aspects of care

1. Does the teaching staff take measures aimed at preventing adolescent alcohol consumption?

A: Yes. B: No.

If the answer is Yes, please mention what measures.

---

2. If you answered Yes to the previous question, are the measures systematically planned?

A: Yes. B: No.

3. Within the school facility, are there guidelines for differentiated care of adolescents aged 10-14?

A: Yes. B: No.

If the answer is Yes, please mention what guidelines.

---

4. Do you think there is enough coordination between health sectors and schools to ensure proper care for early adolescents who use alcohol?

A: Yes. B: No.

If the answer is Yes, please support your answer.

---

5. Do you consider it useful to implement adolescent-tailored visits?

A: Yes. B: No.

6. If adolescent-tailored visits were implemented, what time of the day do you think would be most suitable?

A: From 8:00 a.m. to 12:00 a.m. B: From 1:00 p.m. to 5:00 p.m. C: From 5:00 p.m. to 9:00 p.m.

IV) Motivation-related aspects

1. How frequently do you assess your motivation towards adolescents in your group taking into account the aspects listed below? Mark with an X.

Assistance	**Very often**	**Often**	**Not often**
You assist them with pleasure.			
You assist them with patience.			
You feel committed to their assistance.			
You show them affection.			

V) Training-related aspects

1. Have you been given information about prevention of adolescent alcohol consumption?

A: Yes. B: No.

If you answer Yes, please mention the source of information.

A: Television. B: Radio. C: Press. D: Health care staff.

E: Other. Which? _____

2. As regards your professional training, do you consider it necessary to receive more information on this risky behavior in adolescents?

A: Yes. B: No.

3. Do you think there are teachers with enough knowledge about this issue within your school facility?

A: Yes. B: No.

4. Do you think there are teachers with enough knowledge about this issue within the district?

A: Yes. B: No.

Annex 4.

Questionnaire for parents or guardians

This questionnaire was designed to analyze the features of the care provided to adolescents aged 10-14 who use alcohol. It has been developed for you to answer the questions according to what you actually believe, and the goal is to improve adolescents' health status by means of the research results.

Institution sponsoring the research: Policlínico Mario Gutiérrez Ardaya.
Questionnaire number:
Date:
Location where it will be filled out: classrooms of relevant institutions.
Professional collecting the information: *Tania Borrás Santiesteban, M.D.* (responsible of the investigation).

Instructions for filling out:
Read the questionnaire carefully before completing it.
Do not write your name.
Answers will be private.
Circle the answer you consider correct.
Make dark marks.
Thank you for your help.

I) General data
1. You are a:
A: Mother. B: Father. C: Guardian. State your relationship:___.
2. Sex:
A: Female. B: Male.
3. Age:
A: 20 to 24 years old. B: 25 to 29 years old. C: 30 to 34 years old.
D: 35 to 39 years old. E: 40 to 44 years old. F: Over 45.
4. Education level:
A: Primary school. B: Secondary school.
C: Pre-university education. D: University education.

II) Adolescent-related criteria
1. Do you consider adolescents (people aged 10 to 14) as young people who could present features that may be dangerous to their health?
A: Yes. B: No.
Please support your answer.

---
2. Do you know whether your child presents any features to be considered an adolescent at risk (behaviors that may be dangerous to his/her health)?
A: Yes. B: No.
If your answer is Yes, please mention the features.

---
3. Have you been given information about how to prevent alcohol consumption in adolescents aged 10-14?
A: Yes. B: No.
If you answer Yes, please mention the source of information.
A: Television. B: Radio. C: Press.
D: Health care staff. E: Other. Which?_____

III) Aspects related to adolescents care

1. Do you know where to go if your teenage child has any health problem?

A: Yes. B: No.

If the answer is Yes, please choose which you consider the most appropriate place for your child's care.

A: Doctor's office. B: Policlinic.

C: Children's hospital. D: Psychology and/or Psychiatry office.

2. Do you think adolescent-tailored visits should be implemented?

A: Yes. B: No.

3. If adolescent-tailored visits were implemented, what time of the day do you think would be most suitable?

A: From 8:00 a.m. to 12:00 a.m. B: From 1:00 p.m. to 5:00 p.m. C: From 5:00 p.m. to 9:00 p.m.

4. When you take your child to the doctor's, do you feel that issues related to prevention of alcohol consumption (how to avoid it) are addressed?

A: Yes. B: No.

If the answer is Yes, please explain what issues are discussed.

---

5. When going to the doctor's with your child, you feel:

A: Satisfied. B: Moderately satisfied. C: Unsatisfied.

6. Do you think adolescence health care services in the family doctor's office and at the policlinic should be improved?

A: Yes. B: No.

7. In your opinion, which is the most appropriate specialty for the care of adolescents?

A: Comprehensive general medicine (family doctor). B: Pediatrics.

C: Psychology. D: Psychiatry.

8. Has the family doctor told you about educational measures to prevent adolescent alcohol consumption?

A. Yes. B: No.

If your answer is Yes, please mention what measures.

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9. Has the pediatrician told you about educational measures to prevent adolescent alcohol consumption?

A. Yes. B: No.

If your answer is Yes, please mention what measures.

Annex 5.
Operationalization of adolescents' risk based on health care and alcohol consumption pattern

Alcohol consumption.
The higher the indicator value, the higher the adolescent's risk.

1. Alcohol consumption during his/her life.
   – If adolescent has drunk alcohol:one point.
   – If adolescent has not drunk: zero points.

2. Time in which adolescent used alcohol for the first time.
   – At primary school: two points.
   – At secondary school: one point.

3. Ongoing habit.
   – If adolescent still uses alcohol: one point.
   – If adolescent does not drink anymore: zero points.

4. Time in which adolescent uses alcohol (if he/she still has the habit).
   – Any days of the week: three points.
   – Week days: two points.
   – On weekends: one point.

5. Awareness of the dangers of using alcohol (risk perception).
   – If adolescent considers it harmful: zero points.
   – If adolescent does not consider it harmful: one point.

6. Information about the dangers (harm) of the drinking habit.
– If adolescent has received information: zero points.
– If adolescent has not received information: one point.

7. Sources of information.
   – If adolescent has received information through one or two sources: one point.
   – If adolescent has received information through three or more sources: zero points.

High risk adolescent: if the score is between seven and ten points.
Medium risk adolescent: if the score is between four and six points.
Low risk adolescent: if the score is between one and three points.
No risk adolescent: if the score is zero points.

Quality of care based on adolescents' judgment.
The higher the item value, the better the care quality criterion.

1. Adolescent's visit to the doctor.
   – If the last visit was in the office: three points.
   – If the last visit was in the policlinic: two points.
   – If the last visit was in the children's hospital: one point.
   – If adolescent has not visited the doctor: zero points.

2. Information about adolescence health care from anyone.
   – If adolescent indicates he/she has received information: one point.
   – If adolescent indicates he/she has not received information: zero points.

Places where information was given to him/her.
- If adolescent mentions four or five places: six points.
- If adolescent mentions two or three places: five points.
- If adolescent answers 'doctor's office': four points.
- If adolescent answers 'school': three points.
- If adolescent answers 'policlinic': two points.
- If adolescent answers 'hospital': one point.
- If adolescent mentions another place: zero points.

3. If adolescent feels at ease in the office waiting room with other people who are not his/her age: two points.
- If he/she doesn't mind: one point.
- If he/she doesn't feel at ease: zero points.

4. Privacy: when the situation allows the adolescent to talk with the doctor in private (just the two of them) and openly express his/her health problems.

When adolescent goes to the doctor's:
- If he/she talks to the doctor in private: one point (privacy is clear).
- If he/she does not talk to the doctor in private: zero points.

5. Reliability: when the adolescent trusts his/her doctor and can talk about his/her health problems.
- If he/she can talk to the doctor about any subject: one point (reliability is clear).
- If he/she cannot do it: zero points.

6. Confidentiality: when interviews between adolescents and the doctor will not be discussed with their parents without their permission, except in case of danger to their life or another person's life (private or privileged nature of the information).
- If adolescent is afraid that the doctor may share the conversation with his/her parents: zero points (there is clearly no confidentiality).
- If adolescent is not afraid of this: one point.

7. Adolescent's visit to the doctor's office:
- If adolescent is assisted quickly: one point.
- If adolescent has to stay in the waiting room for too long: zero points.

8. If adolescent agrees with being appointed a visit with the doctor even though he/she is not sick: one point.
- If he/she does not agree: zero points.

9. Level of satisfaction with the care received.
- If adolescent feels satisfied: two points.
- If adolescent feels moderately satisfied: one point.
- If adolescent feels unsatisfied: zero points.

10. Information provided by the doctor in the office about the importance of adolescence care to prevent alcohol consumption.
- If adolescent has not been given information: zero points.
- If adolescent has been given information: one point.

11. About health care staff. If adolescent thinks he/she should be assisted by:
    – The family doctor: four points.
    – The pediatrician: three points.
    – The psychologist: two points.
    – The psychiatrist: one point.

12. If adolescent wants the health care he/she has received so far to be improved: one point.
    – If he/she doesn't: zero points.

Care quality
Very good: if the score is 19-25 points.
Good: if the score is 12-18 points.
Fair: if the score is 6-11 points.
Poor: if the score is 0-5 points.

Annex 6.
Operationalization of care quality based on senior health staff judgment.

The higher the item value, the better the care quality criterion.
1. – If the family doctor's roles are clear in relation to the care provided to early adolescents who use alcohol or who are vulnerable to this behavior: one point.
– If their roles are not clear: zero points.
– If three or more roles are mentioned: three points.
– If two roles are mentioned: two points.
– If one role is mentioned: one point.
– If no roles are mentioned: zero points.

2. – If the pediatrician's roles are clear in relation to the care provided to early adolescents who use alcohol or who are vulnerable to this behavior: one point.
– If their roles are not clear: zero points.
– If three roles are mentioned: three points.
– If two roles are mentioned: two points.
– If one role is mentioned: one point.
– If no roles are mentioned: zero points.

3. – If there is documentation within the health sector that can provide knowledge on alcohol consumption patterns in early adolescence: one point.
– If there is no documentation: zero points.
– If three types of documentation are mentioned: three points.
– If two types of documentation are mentioned: two points.
– If one type of documentation is mentioned: one point.
– If no documentation is mentioned: zero points.

4. – If current health services for adolescents match the actual needs and expectations of this age group: one point.
– If they don't: zero points.

5. – If senior health staff member mentions three actions that have been carried out in the area to allow for the implementation of the National Program for Comprehensive Care of Adolescent Health in relation to risky behaviors during adolescence: three points.
– If two actions are listed: two points.
– If one action is listed: one point.
– If no actions are listed: zero points.

6. Planning of an adolescent-tailored visit in primary health care:
– If senior health staff member thinks it's very necessary: two points.
– If he/she thinks it's necessary: one point.
– If he/she thinks it's not necessary: zero points.

7. Most suitable time for adolescent visits (if they were implemented):
– From 5:00 p.m. to 9:00 p.m.: three points.
– From 1:00 p.m. to 5:00 p.m.: two points.
– From 8:00 a.m. to 12:00 a.m.: one point.

8. – If senior health staff member describes three or more requirements that an adolescent visit in primary health care should meet: three points.
– If two requirements are described: two points.
– If one requirement is described: one point.
– If no requirements are described: zero points.

9. – If senior health staff member thinks coordination with schools is important to ensure proper adolescent care: one point.
– If the answer is No: zero points.

10. – If senior health staff member believes that research on adolescence will decrease morbidity and will guarantee healthy adults: one point.
– If the answer is No: zero points.

11. – If senior health staff member believes it is necessary to develop a methodology within primary health care for the provision of care to early adolescents who use alcohol or who are vulnerable to this behavior as a general guidance for professionals in training, family doctors and pediatricians: one point.
– If he/she doesn't: zero points.

Care quality
Very good: if the score is 21-27 points.
Good: if the score is 14-20 points.
Fair: if the score is 7-13 points.
Poor: if the score is 0-6 points.

Annex 7.
Operationalization of care quality based on education staff judgment.

The higher the item value, the better the care quality criterion.

Aspects related to care itself

1. – If education staff member states that measures aimed at preventing alcohol consumption in early adolescence are taken within the teaching staff: one point.
   – If the answer is No: zero points.

2. – If the previous answer is Yes, and education staff member states that:
   – The measures are systematically planned: two points.
   – The measures are not systematically planned: one point.

3. – If education staff member states that, within the school facility, there are guidelines for differentiated care of adolescents aged 10-14: one point.
   – If the answer is No: zero points.

4. – If education staff member thinks there is enough coordination between health sectors and schools to ensure proper care for adolescents who use alcohol: one point.
   – If the answer is No: zero points.

5. – If education staff member believes the implementation of adolescent-tailored visit would be useful: one point.
   – If he/she doesn't: zero points.

6. – Most suitable time for adolescent visits (if they were implemented):
   – From 5:00 p.m. to 9:00 p.m.: three points.
   – From 1:00 p.m. to 5:00 p.m.: two points.
   – From 8:00 a.m. to 12:00 a.m.: one point.

Care quality

Very good: if the score is 7-9 points.
Good: if the score is 5-6 points.
Fair: if the score is 3-4 points.
Poor: if the score is 1-2 points.

Motivation-related aspects

– If education staff member very often assists them with pleasure: three points.
– If he/she often assists them with pleasure: two points.
– If he/she not often assists them with pleasure: one point.

– If he/she very often assists them with patience: three points.
– If he/she often assists them with patience: two points.
– If he/she not often assists them with patience: one point.

– If he/she very often feels committed to their assistance: three points.
– If he/she often feels committed to their assistance: two points.
– If he/she not often feels committed to their assistance: one point.
– If he/she very often shows them affection: three points.
– If he/she often shows them affection: two points.
– If he/she not often shows them affection: one point.

Education staff member is considered motivated if the score is 7-12.
Education staff member is considered unmotivated if the score is 1-6.

Training-related aspects
1. – If education staff member reports having received information about alcohol consumption in early adolescence: one point.
– If the answer is No: zero points.

Sources of information: television, radio, press, health care staff or others (if the answer to previous question was Yes).

– If education staff member mentions one or two sources: one point.
– If three or four sources are mentioned: two points.
– If five or more sources are mentioned: three points.

2. – If education staff member believes that more information about alcohol consumption in early adolescence should be provided during professional training: one point.
– If he/she believes it is not necessary: zero points.

3. – If education staff member thinks there are teachers with enough knowledge about this issue within his/her school facility: one point.
– If the answer is No: zero points.

4. – If education staff member thinks there are teachers with enough knowledge about this issue within the district: one point.
– If he/she doesn't: zero points.

Education staff member is considered well-trained if the score is 4-7.
Education staff member is considered untrained if the score is 0-3.

Annex 8.
Operationalization of care quality based on family judgment.

The higher the item value, the better the care quality criterion.
1. – If parent/guardian knows where to go when his/her teenage child has any health problems: one point.
– If he/she does not know: zero points.

If the answer is Yes and parent/guardian thinks the most appropriate place to go is:
– The family doctor's office: four points.
– The policlinic: three points.
– The children's hospital: two points.
– The psychology or psychiatry office: one point.

2. – If parent/guardian states adolescent-tailored visits should be implemented: one point.
– If he/she thinks they should not be implemented: zero points.

3. – If the answer is Yes and the suggested time is:
– From 5:00 p.m. to 9:00 p.m.: three points.
– From 1:00 p.m. to 5:00 p.m.: two points.
– From 8:00 a.m. to 12:00 a.m.: one point.

4. – If parent/guardian accompanying his/her teenage child to a visit thinks that actions related to the prevention of alcohol consumption are addressed: one point.
– If the answer is No: zero points.

5. If, when accompanying the adolescent to a visit, parent/guardian feels:
– Satisfied: three points.
– Moderately satisfied: two points.
– Unsatisfied: one point.

6. – If parent/guardian thinks adolescence health care services in the family doctor's office and at the policlinic should be improved: one point.
– If the answer is No: zero points.

7. Most appropriate specialty for the care of adolescents.
– If parent/guardian answers Comprehensive General Medicine (family doctor): four points.
– If the answer is Pediatrics: three points.
– If the answer is Psychology: two points.
– If the answer is Psychiatry: one point.

8. – If parent/guardian states that the family doctor has told him/her about educational measures to prevent alcohol consumption: one point.
– If the answer is No: zero points.

9. – If parent/guardian states that the pediatrician has told him/her about educational measures to prevent alcohol consumption: one point.
– If the answer is No: zero points.

Care quality
Very good: if the score is 16-20 points.
Good: if the score is 11-15 points.
Fair: if the score is 6-10 points.
Poor: if the score is 1-5 points.