RISK FACTORS IN ADOLESCENTS OF PRIVATE EDUCATION INSTITUTIONS IN A CITY OF PARANÁ

Ana Maria Zeferino*
Anderson Kalinoski**
Géssica Tuani Teixeira***
Lediana Dalla Costa****
Franciele do Nascimento Santos Zonta*****

ABSTRACT

Objective: To evaluate the risk factors in adolescents enrolled between the 9th year of Elementary School and the 3rd year of High School in private institutions of a municipality of Paraná. Methods: This is a descriptive, cross-sectional, field-based research with a quantitative approach. For data collection, a questionnaire adapted from the Brazilian Youth-Version phase II instrument was used. Results: The results were comprised of responses from 119 adolescents, who reported on sexual behavior, life habits and demographic data, as well as factors related to the onset of early sexual activity. Conclusion: Sexual and social risk behaviors experienced by adolescents were observed, which are not only related to the characteristics of this period, but also to the context of vulnerabilities in which they are inserted.

Keywords: Sexual behavior. Adolescent. Sexuality. Unsafe sex. Health promotion. Adolescent behavior.

INTRODUCTION

Adolescence is the most developed period of the individual, full of possibilities, learning, experimentation and discoveries, which delimit the construction of autonomy and adult identity, which makes it seen as a period of vulnerability, especially for those adolescents which lack physical, psychic, social and moral protection(1). It is at this stage of life that the first doubts, questions, misinterpretations, desire and the first sexual intercourse arise(2,3). All these changes cause the body and mind to change, so that adolescents engage in risky social and sexual behavior, such as alcohol consumption and the practice of unprotected sex, which makes them vulnerable to sexually transmitted infections (STIs) and early pregnancy(2,3).

Several studies report that the onset of sexual practices is occurring earlier among adolescents(1,4,5,6). The onset of early sexual activity has been associated with some characteristics, such as being male, illicit drug use, smoking, alcohol consumption, history of sexual abuse, lower schooling, lower socioeconomic level, low parents' education, absence of religious practice, work, not living with parents, absence of family ties, lack of communication between parents and children and lack of information(7,8).

In view of the above, it is evident the need to identify the characteristics and factors that can interfere in healthy development. In this way, the present study aims to evaluate the risk factors of adolescents enrolled in private institutions in a municipality of Paraná.

METHODS

This is a cross-sectional, descriptive, survey of 119 adolescents enrolled in private institutions in a municipality of Paraná. The convenience sample consisted of students from the 9th year of Elementary School and 1st, 2nd and 3rd years of High School, who accepted to participate in the research, with the signing of the Informed Consent Term (TCLE).

As a research involving human subjects, the study was sent in advance to the schools to present and request authorization for the research. Subsequently, the study was sent to the Research Ethics Committee Involving Humans of the University of Paraná, which approved it under Protocol n.2.562.912-2018.
After these legal procedures, the students of the selected classes were invited in the classroom to participate in the research. The objectives of the study, confidentiality of information and voluntary participation were explained. By agreeing to participate in the project, the TCLE was distributed and requested that students under the age of 18 years-old take it to their parents or guardians for signature.

The questionnaire was applied collectively in the classroom for students over the age of 18 and for those who presented their parents’ authorization. For data collection, a questionnaire adapted from the Brazilian Youth-Phase II Version was used, composed of 71 questions with variables related to demographic data, intra-family sexual behavior, suicidal ideation and use of licit and illicit drugs. The objective of this questionnaire is to investigate risk behaviors, risk factors and protection in adolescents, also addressing bio-sociodemographic aspects. It is worth mentioning that the questionnaire originally had 77 questions and after adaptation totaled 71. This screening was necessary to remove questions related to the acquisition and use of the internet and mobile devices, in which they did not contemplate the objective of this study. The adapted questionnaire was applied by means of a pilot test to 10 individuals in a random way in order to delimit its applicability and effectiveness.

After the data collection, the data were tabulated in an Excel spreadsheet and later submitted to statistical treatment in the Statistical Package for Social Science (SPSS) - version 21.0, with descriptive frequency analysis, chi-square test and Odds ratio, the level of significance adopted was p <0.05.

**RESULTS**

The sample consisted of 119 adolescents, about them 70 (58.8%) are female, the majority were between 15 (31.9%) and 16 (33.6%) years-old. Regarding color, the majority of the population studied was denominated as white (83.2%). In addition, 97 (81.5%) adolescents said they have some religion. In relation to the marital status, all declared themselves as unmarried. The majority (78; 65.5%) has never worked. Adolescents enrolled in the first grade (39; 32.8%) prevailed. Among the adolescents surveyed, 108 (90.8%) reported they’ve never failed and only one (0.8%) stopped studying to work.

Regarding monthly family income, the majority (n = 98; 82.4%) reported three or more minimum wages. Regarding the family relationship, 52 (43.7%) of the respondents reported talking about family problems. When questioned about the dialogue with the parents, 48 (40.3%) stated that they received criticism from parents, and 49 (41.2%) reported that intra-family fights occur; in addition, only 75 (63.0%) of them reported being able to count on their parents in cases of possible problems, and 62 (52.1%) reported that parents pay attention to what they think and feel.

Suicide dimensions indicated that 39.5% of the interviewees affirmed suicidal thoughts and that the reasons were psychological conflicts (18, 15.1%), followed by family problems (13, 10.9%), depression (8; 6.7%) and anger, sadness and fatigue (8; 6.7%). It was also observed that 40 (33.6%) adolescents already planned suicide and 29 (24.4%) tried it. When asked about the age of the suicide attempt, 22 (18.5%) reported that it occurred between 13 and 16 years, while seven (5.9%) between 8 and 12 years (Table 1).

The questions related to contact with licit and illicit drugs were also made and it was possible to show that most of the respondents reported that there are users in the family, 61 (51.3%) use licit drugs (alcohol and cigarettes), 10 (8, 4%) illicit drugs and 11 (9.2%) both. When asked about smoking cigarettes, 90 (75.6%) answered no, while 29 (24.4%) reported that they’ve already used. Regarding alcohol use, the majority of adolescents had taken alcoholic beverages (102, 85.7%), and 74 (62.2%) drank when they were between 13 and 17 years-old and 28 (23.5%) of them, when they were 12 years old or younger. In relation to the last month, 45 (37.8%) of the adolescents ingested alcoholic beverages one to five times, 39 (32.8%) at one time and 18 (15.1%) 6 or more times. About the 119 surveyed, 105 (88.2%) denied the use of illicit drugs, while 14 (11.8%) reported using another type of drug. In relation to the type of illicit drug used, 12 (85.7%) reported marijuana, one (7.1%) marijuana,
Risk factors in adolescents of private education institutions in a city of Paraná

3

Cienc Cuid Saude 2019 Jul-Sep 18(3) e45553

cocaine, ecstasy and LSD (7.1%) marijuana and ecstasy.

Regarding sexual development, it was observed that 45 (37.8%) of the 119 adolescents who participated in the study had started their sexual life, 37 (82.2%) having had their first sexual intercourse between 14 and 16 years-old and (17.8%) aged 13 years-old or younger. Regarding the age of the partner in the first sexual intercourse, 27 (60%) were between 10 and 16 years old, as for the type of boyfriend (a)

was reported by 24 (53.3%) of the respondents. It was observed that the first sexual intercourse was desired by 43 (95.5%) of the adolescents. Regarding the type of sexual partner, 21 (46.7%) had already reported having sexually related to boys, 20 (44.4%) with girls and four (8.9%) with both. Regarding the number of sexual partners, 17 (37.8%) answered only one partner. Regarding the last year, 23 (51.1%) students reported sexual intercourse with a fixed partner.

Table 1. Issues related to suicide among adolescents. Francisco Beltrão, 2018.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide thought (n=119)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>47</td>
<td>39.5</td>
</tr>
<tr>
<td>No</td>
<td>72</td>
<td>60.5</td>
</tr>
<tr>
<td>What led you to think about suicide (n=119)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological conflicts</td>
<td>18</td>
<td>15.1</td>
</tr>
<tr>
<td>Family problems</td>
<td>13</td>
<td>10.9</td>
</tr>
<tr>
<td>Depression</td>
<td>8</td>
<td>6.7</td>
</tr>
<tr>
<td>Anger, sadness and tiredness</td>
<td>8</td>
<td>6.7</td>
</tr>
<tr>
<td>It is not applicable</td>
<td>72</td>
<td>60.6</td>
</tr>
<tr>
<td>Have you ever planned how you’d kill yourself? (n=119)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40</td>
<td>33.6</td>
</tr>
<tr>
<td>No</td>
<td>79</td>
<td>66.4</td>
</tr>
<tr>
<td>Suicide attempt (n=119)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
<td>24.4</td>
</tr>
<tr>
<td>No</td>
<td>90</td>
<td>75.6</td>
</tr>
<tr>
<td>Age of the first suicide attempt (n=119)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 a 12 years-old</td>
<td>7</td>
<td>5.9</td>
</tr>
<tr>
<td>13 a 16 years-old</td>
<td>22</td>
<td>18.5</td>
</tr>
<tr>
<td>It is not applicable</td>
<td>90</td>
<td>75.6</td>
</tr>
</tbody>
</table>

The use of contraceptive methods to avoid pregnancy was reported by 41 (91.1%) adolescents. Regarding the method used, 41 (91.1%) reported using a condom, 16 (35.6%) contraceptive pill, five (11.1%) coitus interruptus and two (4.4%) table/calendar. The use of condoms at the first intercourse was reported by 35 (77.8%) students. When asked about the last sexual intercourse, the majority (25; 55.6%) reported having happened less than a month ago. The use of condoms in this relation was reported by 34 (75.5%). Regarding the frequency of condom use in the relationships, 24 (53.3%) adolescents reported using it a few times.

When questioned about the knowledge of contraceptive methods to prevent pregnancy, 117 (98.3%) adolescents reported knowing some contraceptive method.

Among the adolescents who reported knowing a contraceptive method, 113 (96.6%) described the condom, 100 (85.5%) the contraceptive pill, 69 (58.9%) the morning after pill, 52 (IUD), 51 (43.6%) injectable contraceptives, 40 (34.2%) other methods and 16 (13.7%) had interrupted intercourse.

Regarding reasons for not using condoms, 15 (12.6%) reported not having a condom, seven (5.9%) because they do not like to use it, three (2.5%) because they were under the influence of alcohol, three (2.5%) were using contraceptives, three (2.5%) because they trusted on the partner, two (1.7%) because they thought the condom hurts/bothers them and two (1.7%) because they did not remember to put it.

Regarding the obtaining of information about sex, 70 (58.8%) reported seeking information on the Internet, 65 (54.6%) with friends, 55 (46.2%)
at school, 55 (46.2%), (14.3%) on television, 15 (12.6%) in newspapers, magazines or books, five (4.2%) with religious leaders and one (0.8%) on radio.

It was possible to observe a statistically significant relationship between suicidal planning and gender (Table 5). Suicidal thoughts are associated with the female gender, that is, girls have 2.3 times more suicidal thoughts than boys (OR = (2.3) CI = (1.1-2.1) p = 0.002).

There was also a significant association between being male and early sexual life (<15 years). Men are 2.8 times more likely to initiate sexual life early compared to women (OR = (2.8) CI = (1.3-2.4) p = 0.000).

It was observed that lack of conversation between parents and adolescents is a risk factor for early sex. Teenagers who said they did not talk to their parents were 1.69 times more likely to have intercourse early.

The consumption of alcoholic beverages was also associated with the practice of sexual intercourse. Adolescents who drink alcohol were 1.9 times more likely to have early sexual intercourse (p = 0.001).

It was found that those individuals who had sexual intercourse were 3.7 times more likely to have several partners than a fixed partner (OR = 3.7 CI = 2.9 - 3.1 p = 0.005) (Table 2).

Table 2. Relevance of suicidal thoughts and age of first sexual intercourse, according to the sex of adolescents, use of alcoholic beverage, according to the variable having sexual intercourse and prevalence of sexual partners, according to the age of first sexual intercourse. Francisco Beltrão, 2018.

<table>
<thead>
<tr>
<th>GENDER</th>
<th>SUICIDAL THOUGHT</th>
<th>FIRST SEXUAL INTERCOURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Female</td>
<td>33rd</td>
<td>37</td>
</tr>
<tr>
<td>Male</td>
<td>14</td>
<td>35</td>
</tr>
</tbody>
</table>

USE OF ALCOHOLIC BEVERAGE

<table>
<thead>
<tr>
<th>SEX</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had sexual intercourse</td>
<td>42nd</td>
<td>9</td>
</tr>
<tr>
<td>1st. SEXUAL INTERCOURSE</td>
<td>FIXED PARTNER</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>&gt; 15 years-old</td>
<td>3</td>
<td>22</td>
</tr>
</tbody>
</table>

DISCUSSION

Adolescence is a phase marked by several biopsychosocial changes, the risk factors of this phase can considerably compromise the development of the individual, as well as their quality of life, it is worth noting that understanding this reality can contribute to the improvement of strategies for prevention and promotion of health for this population group. The following shows the protective and risk behavior evidenced in this research.

The religious practice observed in this study has been considered a factor associated with the postponement of early sexual life in adolescence due to the propagation of norms, behaviors and values of what is acceptable and correct, such as the reprobation of the sexual practice before marriage, leading to the adolescent to postpone first intercourse and to have multiple sexual partners (10). In regard to work, most adolescents said they do not work. The financial dependence of parents is seen by some authors as a protective factor for healthy sexual behavior. Several studies show that early introduction at work is considered a risk factor for early sexual initiation, as it leads to financial and psychological independence, promoting individual autonomy and maturity, which leads adolescents to take early adult behaviors (11, 12).

When dealing with the family relationship, it is possible to emphasize the importance that the parents exert on the decisions of the adolescents, since when there is a dialogue between parents and children regarding sexuality, a positive influence occurs in the decisions regarding the beginning of the sexual life. However, there is a misconception about sexuality, since the vast majority of fathers understand sexuality directly related to pregnancy and STIs, performing
reprehensible, controlling and threatening discourses, causing a feeling of fear and insecurity about sexual life\textsuperscript{(13)}. The absence of dialogue between parents and their children was observed in the present study, a fact that was presented as a factor associated with precocious sex.

Among the risk behaviors of the adolescents analyzed, suicidal behavior is highlighted. According to the adolescents, what led them to these suicidal behaviors were the psychological conflicts. A study that evaluated the prevalence of suicidal thoughts and behavior in high school students indicated lower rates, in which 13.9\% of those involved reported suicidal ideation, 10.6\% even planned and 5.6\% attempted suicide. This behavior often happens in response to internal and family conflicts, depression, and anxiety, arising from the physical, psychic and social changes that make up this phase. These changes result in doubts and, constantly, in anguish, and may lead teenagers to find, at times, that there is nothing else to be done, and that the only way out is to end their life and develop suicidal behavior\textsuperscript{(14,15,16)}.

The family relationship may be involved in suicidal behavior since less than half of the respondents reported talking to their families about problems, based on another study, that adolescents who talk little are not well understood and receive low attention from their parents, who have twice as many chances of planning suicide than adolescents who have a better bond with parents\textsuperscript{(16)}.

The majority of adolescents who presented suicidal thoughts were female. In a study carried out in Pelotas (RS), with adolescents between 15 and 18 years old, it was verified that suicidal ideation was more frequent in females, with 1.64 times more chances of developing it\textsuperscript{(17)}; this is due to the higher incidence of depressive disorders in females. What explains this variable is the fact that the female sex presents a higher prevalence of suicidal thoughts, planning and attempt, but does not execute it, whereas the male sex plans less, but commits it more\textsuperscript{(18)}.

As for alcohol consumption, most refer to consuming alcoholic beverages. Alcohol is being consumed increasingly early by young people, especially those who have a better socioeconomic class, because they have greater purchasing conditions. Alcohol is considered a licit drug that brings unwanted side effects, reduces the threshold of risk perception and protection, leaving these adolescents exposed and stimulated to use other drugs\textsuperscript{(19)}. In this research it was possible to observe that the consumption of alcoholic beverages is associated with the practice of sexual intercourse (p = 0.003), that is, it is a risk factor for early sex.

Adolescents who have experienced the use of licit drugs by the family have a 48\% more chance of experiencing and consuming these substances. Family conflicts are highlighted when related to the use of these substances\textsuperscript{(20)}.

Regarding sexual initiation, data from this study show that 62.2\% of adolescents have not initiated sexual life. This may be related to factors considered protective, such as the better social conditions\textsuperscript{(3)}, the high level of schooling of the parents\textsuperscript{(7)}, the fact that they do not work\textsuperscript{(11,16)}, living with parents\textsuperscript{(3)} and to practice a religion\textsuperscript{(12)}.

However, among adolescents who affirmed sexual initiation, it was observed that it occurred between 14 and 16 years old for 82.2\% of them. This corroborates another study in which 67\% of private school students reported that their first sexual intercourse did not occur, while 33\% reported having started their sexual life at the age of 16 (12\%) and 14 (9\%)\textsuperscript{(3)}.

The early beginning of the first sexual intercourse was also observed in other studies, which indicate that this behavior is related to the phase of adolescence, the discoveries that involve this moment and the search for new experiences, in addition to all the changes, both physical and psychological. The search for information is occurring in social networks and in the media, which are flawed and erroneous and treat this matter naturally. Also emphasizing that at this stage adolescents take great pleasure in being autonomous and believe that this practice leaves them so. Lack of guidance to these individuals makes them susceptible to developing risky sexual behavior\textsuperscript{(1,17)}.

Regarding the sexual practice analyzed between the sexes, it was observed that being male is a risk factor for precocious sex. Likewise, the first sexual intercourse occurred with less than 15 years-old, indicating that male adolescents present 2.8 times more chance of
initiating sexual intercourse before, when compared to female sex. Another study reported that male sex increased three times the odds of adolescents getting early sexual activity. Such a situation may be related to the fact that boys are encouraged by society to initiate their sexual life earlier, thus reinforcing their masculinity, unlike girls, since girls are encouraged to delay their first sexual intercourse as much as possible. Because of this, boys tend to initiate sexual life before girls\(^4,\,17,\,20\).

Data from the present study showed that adolescents who had their first sexual intercourse were 3.7 times more likely to have several partners than a single fixed partner. Among adolescents with active sex life, most of them stated using some contraceptive method, especially the condom the contraceptive pill.

These data are similar to those of another study that observed that 89\% of the respondents used condoms and 45\% had a contraceptive pill\(^13\). The use of these methods may be related to the fact that they are better known as preventive of pregnancy and transmission of STI by adolescents and their access is made easier \(^13\). Despite the high prevalence of condom use found in this study, the use of this method was not consistently performed by 53.3\% of adolescents, who reported using it only a few times, as reported by another study \(^5\).

The adolescents also stated that they did not use condoms because they did not have it at the moment, because they do not like to use, because they were under the influence of alcohol, because their partner used contraception, because they trusted on their partner because the condom hurt and/or disturbed and for not having remembered to put. These reasons were also found in another study, and the reasons for non-use of condoms may still be related to the fact that adolescents do not consider the risks to which they may be exposed during unprotected intercourse\(^18,\,20,\,21,\,22\).

In the first intercourse most adolescents reported having used condoms; a similar percentage can also be seen in condom use in the last relation. This attitude is reconciled as a protective factor, since studies show that adolescents who use condoms at the first sexual intercourse are the same ones who tend to maintain condom use during subsequent sexual intercourse \(^1\). However, it is worth noting that usually the apparent decrease in the use of methods becomes worrisome, because it is believed that this happens because the partners, over time, trust on each other, and because when they are in a stable relationship they do not need to worry with STIs anymore, disregarding this risk\(^18,\,20,\,21\).

Despite the dissemination of information about the methods performed by the media, school, health services and in the family, the adolescents do not know them satisfactorily. Not knowing about the advantages and disadvantages, the mode of use and the means of access makes it difficult to choose an appropriate method\(^18\).

It is worth mentioning that in this phase of intense changes, the adolescent appropriates the possibility of coming and going, with decision making and coping. Every form of adequate knowledge is considered a protective factor, since several adolescents do not understand the magnitude of this moment and the process of maturation experienced at this stage\(^23\). In this sense, the importance of the link between school, family and health services is emphasized in order to establish support strategies and guidance in this context.

**CONCLUSION**

The present study identified a high prevalence of social and sexual risk behaviors among adolescents involved in the research, such as early onset of first sexual intercourse, inconsistent use of contraceptive methods, use of alcohol, other drugs, and high index of suicidal thinking, which can lead to damage to physical and mental health. Adolescent risk behavior and vulnerability are considered public health problems, as there are few health-care programs aimed at them, making them susceptible to developing risky behavior.

In view of this, new actions of prevention and health promotion, aimed at this population group, are necessary in order to improve their risk behavior in relation to sexual life. In the same way, new studies are acceptable to better evaluate the behavior of adolescents enrolled in this type of institution and, therefore, to compare them with those belonging to public schools.
FATORES DE RISCO EM ADOLESCENTES DE INSTITUIÇÕES DE ENSINO PRIVADAS DE UM MUNICÍPIO DO PARANÁ

RESUMO

Objetivo: Avaliar os fatores de risco em adolescentes matriculados entre o 9º ano do Ensino Fundamental até o 3º ano do Ensino Médio de instituições privadas de um município do Paraná. Métodos: Trata-se de uma pesquisa de campo, descriptiva, transversal, com abordagem quantitativa. Para coleta de dados foi utilizado um questionário adaptado do instrumento Juventude Brasileira - Versão fase II. Resultados: Os resultados foram constituídos por respostas de 119 adolescentes que relataram sobre o comportamento sexual, hábitos de vida e dados demográficos, bem como os fatores relacionados ao início da atividade sexual precoce. Conclusão: Observaram-se comportamentos sexuais e sociais de risco vivenciados pelos adolescentes, os quais não estão associados somente às características próprias desse período, como também ao contexto de vulnerabilidades em que estão inseridos.


FACTORES DE RIESGO EN ADOLESCENTES DE INSTITUCIONES DE ENSEÑANZA PRIVADAS DE UN MUNICIPIO DE PARANÁ-BRASIL

RESUMEN

Objetivo: Evaluar los factores de riesgo en adolescentes inscriptos entre el 9º año de la Enseñanza Primaria hasta el 3° año de la Enseñanza Secundaria de instituciones privadas de un municipio de Paraná-Brazil. Métodos: se trata de una investigación de campo, descriptiva, transversal, con abordaje cuantitativo. Para la recolección de datos fue utilizado un cuestionario adaptado del instrumento Juventud Brasileña - Versión fase II. Resultados: los resultados fueron constituidos por respuestas de 119 adolescentes, que relataron sobre el comportamiento sexual, hábitos de vida y datos demográficos, así como los factores relacionados al comienzo de la actividad sexual precoz. Conclusión: se observaron comportamientos sexuales y sociales de riesgo vividos por los adolescentes que no están solamente asociados a las características propias de este periodo, sino también al contexto de vulnerabilidades que están insertados.


REFERENCES

16. Clauammann GS, Pinto AA, Silva DAS, Pelegrini A. Prevalência de

Cienc Cuid Saúde 2019 Jul-Sep 18(3) e45853
8

Zeferino AM, Kalinoski A, Teixeira GT, Costa LD, Zonta FNS


Submitted: 13/12/2018
Accepted: 24/05/2019