

## Mental health and care for adolescents attending rural schools

*Saúde mental e cuidado de adolescentes que estudam em escolas rurais*

*Salud mental y atención a adolescentes que estudian en escuelas rurales*

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### ABSTRACT

**Objective:** to know the health and care requirements in the case of adolescents attending rural schools. **Method:** a qualitative, descriptive and exploratory study. The data were collected in 2023 by means of semi-structured interviews with adolescents living in the rural area and enrolled in seven participating municipal schools located in the Northwest region from southern Brazil. The statements were transcribed in full and subjected to inductive thematic analysis. All ethical precepts involving research studies with human beings were followed. **Results:** the participants were 27 adolescents with mental health requirements related to anxiety, self-inflicted injuries, suicide, mental distress due to grief, bullying and fewer leisure activities. **Final considerations:** the health and care requirements in the case of adolescents attending rural schools are related to mental health, mainly linked to episodes of anxiety, self-inflicted injuries, attempted suicide and bullying. It is noticed that these requirements can be intensified when the adolescents are grieving or undergoing family de-structuring and coexistence problems at school.

**Descriptors:** Nursing; Adolescent Health; School Health Services; Rural Areas.

### RESUMO

**Objetivo:** conhecer as demandas de saúde e cuidados de adolescentes que estudam em escolas rurais. **Método:** estudo qualitativo descritivo-exploratório. Dados foram coletados em 2023, em sete escolas municipais localizadas na região Noroeste do Sul do Brasil, por meio de entrevista semiestruturada com adolescentes da zona rural, matriculados em escolas participantes. As enunciações foram transcritas na íntegra e submetidas à análise temática indutiva. Seguidos os preceitos éticos de pesquisas com seres humanos. **Resultados:** participaram 27 adolescentes, com demandas de saúde mental relacionadas à ansiedade, lesão autoprovocada, suicídio, sofrimento mental devido ao luto, bullying e a redução das atividades de lazer. **Cosiderações finais:** as demandas de saúde e cuidados de adolescentes que estudam em escolas rurais relacionam-se à saúde mental, principalmente vinculados aos episódios de ansiedade, lesão autoprovocada, tentativa de suicídio e bullying. Observa-se que essas demandas podem estar intensificadas quando os adolescentes vivenciam o luto, a desestrutura familiar e problemas de convivência na escola. **Descritores:** Enfermagem; Saúde do Adolescente; Promoção da Saúde em Ambiente Escolar; Zona Rural.

### RESUMEN

**Objetivo:** comprender las demandas de salud y cuidado de adolescentes que estudian en escuelas rurales. **Método:** estudio cualitativo descriptivo-exploratorio. La recopilación de datos se llevó a cabo en 2023, en siete escuelas municipales ubicadas en la región noroeste del sur de Brasil, mediante entrevistas semiestructuradas con adolescentes de zonas rurales, inscriptos en las escuelas participantes. Las declaraciones se transcribieron íntegramente y se sometieron a análisis temático inductivo. Se siguieron los preceptos éticos de la investigación con seres humanos. **Resultados:** participaron 27 adolescentes, con demandas de salud mental relacionadas con ansiedad, autolesiones, suicidio, distrés mental debido al duelo, acoso escolar y reducción de actividades de ocio. **Consideraciones finales:** las demandas de salud y cuidado de los adolescentes que estudian en escuelas rurales están relacionadas con la salud mental, principalmente vinculadas a episodios de ansiedad, autolesiones, intentos de suicidio y *bullying*. Se observa que estas demandas pueden intensificarse cuando los adolescentes experimentan duelo, desintegración familiar y problemas de convivencia escolar.

**Descriptoros:** Enfermería; Salud del Adolescente; Servicios de Salud Escolar; Medio Rural.

## INTRODUCTION

The adolescence process corresponds to the complexity of the diversified experiences that are influenced by individual, sociocultural, gender, social class and geographical area characteristics. In order to delimit the adolescence period, the chronological criterion is mostly used in identifying parameters for epidemiological research and to devise public policies<sup>1</sup>. Given this, the creation of the Children's and Adolescents' Statute (*Estatuto da Criança e do Adolescente*, ECA) emerges as the legal framework in Brazil, characterizing the population aged up to 12 incomplete years old as children and those between 12 and 18 as adolescents<sup>2</sup>.

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However, the time threshold used by the World Health Organization (WHO) defines adolescence between the ages of ten and 19 years, 11 months and 29 days old, a criterion also adopted by the Ministry of Health (*Ministério da Saúde*, MS)<sup>3</sup>. Delimitation of the adolescence period is related to chronological, physical, social and cultural criteria; this life phase is marked by a complex growth and development process. Adolescents are individuals that take part in a historical and social process; consequently, it is relevant to understand the health singularities inherent to this population group. It is worth noting that, when considering adolescents' health, it is necessary to analyze the various ways to undergo that period, as well as to rethink the health and health education practices targeted at this significant segment of society<sup>4</sup>.

The adolescent population presents specific and complex health requirements, which demand interventions focused on care integrality. Safe sex practices, mental health and consumption of alcohol and other drugs should be highlighted among the main health requirements identified in the adolescent population<sup>5</sup>. A number of studies<sup>6-8</sup> highlight the adolescents' susceptibility to developing health problems related to Chronic Non-Communicable Diseases (CNCDs), Sexually Transmitted Infections (STIs), extreme poverty, violence, drug abuse, pregnancy during adolescence and homicide, as well as to deprivation of family and community coexistence. The findings from a study conducted with adolescents in Maranhão revealed a pattern marked by harmful and excessive alcohol consumption, illicit drug use and suicide risk<sup>9</sup>.

In this perspective, it is fundamental to understand the adolescent population's health requirements to plan and implement health promotion actions, focused on each person and on their social and environmental contexts and aiming at care integrality<sup>10</sup>. However, health actions targeted at adolescents face barriers in rural areas, mainly due to limited access and to precarious infrastructure conditions (such as roads and transportation), which hinders offering good quality services<sup>11</sup>. Rural areas present particularities in their organization and functioning, and the distinction between urban and rural (once perceived as rigid) is actually a dynamic process marked by interconnections and overlaps. The urban space does not end where the rural one begins; both coexist and are interlinked at multiple scales, forming occupation and land use patterns that reflect social, economic and cultural dynamics<sup>12</sup>.

This phenomenon can be understood as a continuum in which urban and rural characteristics are intertwined and transformed, configuring hybrid territories that transcend the simplistic dichotomy between city and countryside. Such interaction gives rise to new spatial organization modalities and to emerging sociocultural practices, challenging traditional classifications and demanding an analytical approach that is sensitive to the complexity and diversity inherent to contemporary territories. From this perspective, the rural space ceases to be conceived as a mere materials production place, also taking on the role of producer of relevant socioterritorial values, meanings and practices<sup>13</sup>.

A number of authors have already discussed the emergence of the so-called "new ruralities", a rural space resignification process that incorporates multifaceted dynamics, oftentimes articulated with the urban. Such dynamics include expansion of non-agricultural activities, intensified mechanization, growth of pluri-activities, appreciation of the tertiary-level sector and strengthening of flows and networks, as well as reappraisal of biodiversity and of local cultural roots, showing the interdependence existing between the urban and rural spaces<sup>14,15</sup>. In this context, it becomes indispensable to understand the rural setting specificities to formulate and implement effective public policies, especially in the health area. This understanding should consider the cultural, social and environmental factors that exert a direct influence on the health and health promotion processes for the rural population<sup>11</sup>.

As for the adolescents living in rural areas, health promotion requires an in-depth analysis of the territorial particularities and of the local dynamics, with a view to devising care strategies that respect the specificities inherent to this population segment. To such end, the intersectoral articulation between schools and the Family Health Strategy (*Estratégia Saúde da Família*, ESF) constitutes a fundamental axis in the social care and protection network, as the school setting emerges as a privileged space to develop encompassing health actions that effectively reach the adolescent population<sup>16</sup>.

In order to structure and qualify integrated actions between the health area and the schools, the Health at School Program (*Programa Saúde na Escola*, PSE) was implemented by means of Decree No. 6,286, dated December 5<sup>th</sup>, 2007. This public policy aims at promoting health in the school setting, contributing to strengthening the link between health and education and stimulating the adolescents' leading role towards their autonomy and self-care<sup>17</sup>.

Considering that adolescence is a phase marked by deep physical, emotional and social transformations, it becomes essential to recognize the specificities inherent to this life cycle stage, as well as to identify the health requirements that emerge in this context. Such understanding is fundamental to support the planning of actions that promote a healthy and comprehensive development in this population group<sup>5</sup>. Given this scenario, the following research question arises: "Which are the health and care requirements in the case of adolescents attending rural schools?"

Therefore, the objective of the current study was to know the health and care requirements in the case of adolescents attending rural schools.

## METHOD

This is a descriptive and exploratory study with a qualitative approach, reported according to the guidelines set forth in the Consolidated Criteria for Reporting Qualitative Research (COREQ). Qualitative research seeks to understand reality from the subjects' perceptions, meanings and experiences, considering the complexity of social phenomena and the subjectivity permeating them. This approach establishes a dialectical relationship between theoretical frameworks and empirical reality, prioritizing how the social interactions and relationships experienced by the participants are interpreted<sup>18,19</sup>.

The descriptive design allowed portraying and characterizing the population researched in detail, providing aids to analyze the particularities and factors associated with the phenomenon under study<sup>18</sup>. In turn, the exploratory approach proved to be appropriate for dealing with a theme that is still scarcely addressed in the literature, enabling to deepen knowledge about the object researched and to understand the phenomenon in its specific context<sup>19</sup>.

The study *locus* encompassed seven municipal Elementary level schools located in the rural area of a municipality from the Northwest region of the state of Rio Grande do Sul. In order to conduct the study, an initial contact was made with the Municipal Education Secretariat, followed by an online meeting with the schools' management teams, with the objective of presenting the research purposes and methodology.

The adolescent population in that municipality is 3,131 individuals. Three of the seven participating schools were included in the PSE. As for their operation, five schools were open in a comprehensive shift modality, two offered classes in the morning (from 5<sup>th</sup> to 9<sup>th</sup> grade) and afternoon (from pre-school to 4<sup>th</sup> grade) and the other two also followed a comprehensive shift modality (from pre-school to 5<sup>th</sup> grade).

The adolescents included in the research were those aged between 10 and 18 years old, with verbal communication ability, living in the rural area and regularly enrolled in one of the participating schools. In all, 140 adolescents met the inclusion criteria. The participants were selected by means of the voluntary sampling technique. The final number of participants that was defined respected the theoretical saturation criterion, interrupting collection when each new interview ceased to provide relevant contributions to deepening understanding of the phenomenon researched<sup>18,19</sup>. Thus, the final research *corpus* was comprised by 27 adolescents.

Data collection took place between April and October 2023 by means of semi-structured interviews conducted based on a previously prepared script with characterization questions and 40 open questions related to the study theme. The interviews were previously scheduled, took place in a private school setting and lasted a mean of 45 minutes. The adolescents' statements were audio-recorded, transcribed in full into *Microsoft Word*® and identified with alphanumeric codes (A1 A2, A3... A27), ensuring the participants' anonymity.

The findings were subjected to inductive thematic analysis, which is based on identifying, coding and interpreting the patterns that emerge from the empirical material<sup>20</sup>. The analytical process followed six stages: (1) Familiarization with the data – by reading and re-reading the transcriptions; (2) Creation of initial codes – by assigning meanings to relevant excerpts from the corpus; (3) Search for topics – by visually and conceptually organizing the codes; (4) Review of the topics – with an internal consistency analysis and distinction among them<sup>20</sup>; (5) Definition and naming of the topics – with the objective of capturing the essence of each thematic unit<sup>20</sup>; and (6) Writing the report – by preparing the final analysis and selecting representative excerpts from the participants' testimonies.

The study respected the ethical precepts established in National Health Council Resolution No. 466/2012 and in Resolution No. 14,874/2024. The research was subjected to a Research Ethics Committee.

## RESULTS

A total of 27 adolescents from rural schools and aged between 10 and 14 years old took part in this research. Of them, 15 were male and 12 were female. In relation to self-declared race/skin color, eight adolescents did not know, three preferred not to answer, and six self-declared as white-skinned, one as black-skinned and nine as brown-skinned.

As for school year, it is noted that nine students were attending 6<sup>th</sup> grade from Elementary School. Regarding the number of people living in the same house, it varied from one to six, with three as the most frequent. When asked about who lived with them, fathers, mothers and siblings were the most frequently reported. As for the family members in charge of caring for the adolescents, mothers and fathers stood out.

The following category emerged from the analysis of the interviews: “Mental health requirements in the case of adolescents attending rural schools”, described below.

### **Mental health requirements in the case of adolescents attending rural schools**

*Mental health requirements related to anxiety, self-inflicted injuries, suicide and mental distress due to grief were evidenced after analyzing the adolescents' statements. In relation to anxiety, it is identified that the adolescents have difficulties understanding and naming their feelings; they also reveal experiences linked to this theme, described by the emotional and physical manifestations associated with this condition.*

*I get crying crisis sometimes... (A1, 10 years old)*

*I'm somewhat anxious, but I don't know what I'm anxious about, because I never noticed any anxiety in me, but my grandmother always says: “you're quite anxious” (A2, 10 years old)*

*Anxiety is kinda problems that you just can't control yourself, it makes you quite sad. I don't know really, I don't understand much. (A3, 11 years old)*

*I've felt anxious before, I've felt somewhat sad, I didn't want to do anything, I only wanted to stay put in my room, I didn't want to talk to anyone, nobody I didn't want to could even come close to me, I used to cry all night long, all day long, in the bathroom, any time. (A5, 14 years old)*

*I've felt anxious before when I didn't know how to do something and didn't do it. (A7, 11 years old)*

*Anxiety, if you don't know how to deal with it, it takes you to an extreme point that you just can't deal with yourself. It controls you and then it's not you any more in your body, when it controls you it does you much harm, depending on anxiety, depression, you can lose your life because of it [...] I've felt like that for some time now [...] what made me a little anxious was that I lost my paternal grandfather. As we were really close, that traumatized me a little [...] The relationship with my dad, the fact that my mom wasn't much at home and other things also fed my anxiety, they did no good to me. (A22, 14 years old)*

*Feeling anxious about something that's gonna happen or that you're gonna do. Yes, I've already felt anxious about some test, I was nervous. (A23, 14 years old)*

*Anxiety, kinda the person feels anxious, thinks about problems too much, that's what I think. Yes, I've felt like that before, I was even biting my nails just a few minutes ago. Anything bad happens to me and I'm already stressed out, when they yell at me, when I can't go to this or that place I wanted to go so much. (A24, 14 years old)*

The findings highlight the complexity inherent to experiencing anxiety during adolescence, evidencing the interconnection between emotional, social and individual factors that contribute for this condition to emerge and intensify.

In addition, based on the adolescents' testimonies, self-inflicted injuries mainly emerge as a response to psychological distress, frequently triggered by feelings of anxiety, stress and unworthiness. Self-harm acts as a resource to face mental distress, where physical pain is useful to interrupt recurrent painful thoughts.

*Sure, I did it (self-harm) once, two days ago. I took a knife and cut myself really close to the vein, in the arm here, you can see the mark! (A3, 11 years old)*

*They (people that harm themselves) must be suffering, or going through something. Yes, I've already felt like doing that, but never did it. (A15, 11 years old)*

*As I've already felt anxious, I've already cut myself. You have to undergo pain for you to forget that, then you hurt yourself. Because you know that if you hurt yourself you're gonna feel pain and stop thinking about that, when you cut yourself, you hurt yourself it's because you want to escape from the problem. [...] I wanted to disappear when I cut myself! (A22, 14 years old)*

*I think that if I'm gonna cut myself for any reason it'd be for feeling unworthy, for thinking “God, I just can't take it anymore because I don't deserve this, because I don't have that” [...] I've already thought about hurting myself, kinda beating my head, something like that, but cutting myself never crossed my mind. (A24, 14 years old)*

*Hurting myself, biting my fingers. It happens (self-harm) because you feel a little depressive, nervous, stressed out. I've already hurt myself, I started biting my fingertips. (A25, 11 years old)*

The participating adolescents' statements reveal that self-harm is a reflection of complex emotional issues such as anxiety, depression and negative self-perceptions, arising as an attempt to cope with emotional pain and oftentimes substituting psychological anguish for tangible physical pain, which seems to offer temporary relief.

When asked about suicide, the adolescents reported self-destructive thoughts in which they express their wish to flee from suffering and a deep helplessness sensation, both in the family and social contexts.

*I know what it is, I've been through it before! And when a person wants to kill themselves, they always isolate, don't like to talk much. I feel like that sometimes [...] in the summer I jumped (into the swimming pool) once*

*without my hand to the nose [...] I can swim, but I wanted to die. And I took a knife some other time and looked at it (knife), but then I also didn't have the courage. (A3, 11 years old).*

*Mom and dad were quarreling a lot once and we were in the car that night. Dad was drunk and mom was driving. Then they started quarreling heavily and I felt like finishing that, putting an end to it, because it was horrible. [...] I felt really bad, I only wanted that to end, I only wanted to die. I was afraid that something might happen, and my sisters were with me, then we hugged each other, started crying and told them to cool off and not to quarrel. [...] (A5, 14 years old)*

*Death wishes? Only once. I think that because of anxiety, I thought that nobody liked me, that I lost someone because of me and that they abandoned me because they blamed me. I lost several things for which I was blamed. I blamed myself pretty much. (A22, 14 years old)*

The adolescents reveal the emotional distress marked by topics related to isolation, anguish, negative self-image and contextual pressures derived from both the family and social contexts.

Among the aspects related to mental distress in the adolescents, the testimonies provided by some participants address the depth and complexity inherent to the grieving process in this population group, revealing the impact exerted by losing a loved one on emotional development and on the construction of coping mechanisms.

*My dad is dead. I felt sad when he died, it's a bad thing even now (starts crying), I miss him! (A7, 11 years old)*

*My dad died four months ago... [...] (A11, 14 years old)*

*I was close to him (paternal grandfather), his death was awful, I felt sad. He died before COVID. I tried to overcome that by forgetting, but it still makes me a little sad. (A12, 12 years old)*

*I went to a psychology last year because of my grandmother and great-grandmother dying. It was really awful, we were really close! (A15, 11 years old)*

*[...] My brother died when I was three, our relationship was really strong and I always remember him even now, I miss him. My dad also died two years ago, he was ill, went to the hospital the next day and died. It was my birthday soon after that [...] I'm afraid of dying, after the deaths in the house. (A16, 12 years old)*

*I felt bad and sad when my grandfather died, some six years ago. I tried to gradually forget to overcome it. [...] (A18, 12 years old)*

*My dad died in January and my grandmother in October. It's gonna be a year since she died, I cried a lot when she passed away [...] I haven't quite overcome it yet. I almost fainted when my dad passed away [...] I didn't go to school for nearly a month when they died. It's sad to lose a relative! (A21, 13 years old)*

The testimonies highlight that grief in adolescence is a multifaceted experience, with deep repercussions in these individuals' emotional development. Prolonged pain experiences and the emergence of new fears (such as of other imminent losses) reflect the complexity of elaborating adaptive coping mechanisms in the face of death.

The statements also unveil situations undergone at school that impair socialization, especially bullying episodes that are related to physical, verbal and psychological aggressions. Based on the testimonies, it can be identified that the bullying episodes not only take place in the school setting but also in family contexts.

*[...] We quarreled, he beat me in the leg once and it got purple. They used to call me "skinny" at school. (A2, 10 years old)*

*My dad's always bullying me, because he tells me that I'm fat and I don't like that. Whether I'm fat or slim, it's none of his business; it's me, not him! A girl also used to bully me physically, she always beat me. Two boys too, I hate them! (A3, 11 years old)*

*It's a horrible thing, I've already been through it, already done it and already experienced it. Horrible, I don't wish it to anyone, it was at school. Because as I'm in puberty, zits and things like that are appearing and my peer started talking ill of me, that I'm ugly, that I'm black, that my hair is horrible, and all that made me feel really bad. (A5, 14 years old)*

*And my peer tells me "Fred that wets the bed". (A10, 10 years old)*

*I think bullying is about lacking personality, because they don't understand that a person owns his/her body. I hate racism! I see things, even here (at school) and on the streets. (A11, 14 years old)*

*It's that they (peers) generally quarrel with me (crying tone of voice), in the Physical Education class, because I'm usually the goalkeeper, and if I don't stop the ball and it's a goal they quarrel with me. The girls call me names too much, dumb; I do my best, only that it's nothing for them. (A14, 11 years old)*

*I've already been a bullying victim, it was really awful. It was due to the shape of my body, because I used to have pretty long hair, and then I had to cut it because people said that I looked like Rapunzel, and I felt really*

*bad. I used to cry a lot hiding from my mom, but the day I couldn't hold any more, I went to her and told her. I've seen it before, people started criticizing my friend's hair, started calling her Tarzan. (A15, 11 years old)*

*A girl from school talked about my hair, I didn't make a fuss about it because I knew it didn't make sense, that I'd lose even more [...] there was a girl here at school that they called "whale" and I think that's wrong, and even if my friends speak about that I'm not in favor of that, I can even lose a friend, but I don't approve of that! (A16, 12 years old)*

*[...] They used to beat me in class when the teacher went out, they kept provoking me, nicknaming me. They also stole stuff from me, they took my things [...] I feel sad, angry, but I do nothing, I just look the other way, but if I don't respond, they go on. I feel terrible day after day. They sometimes start insulting me, speaking about my life, about my mom... [...] (A19, 11 years old)*

*I've already been a bullying victim because of my appearance at school... [...] (A24, 14 years old)*

*It only took for other people to tell me "four eyes" for me to feel a little bad, but whatever! I don't even listen to them, I look the other way. (A25, 11 years old)*

*She just made me put them down (pants) and called the others to see... (A26, 11 years old)*

The statements provide a detailed view of how adolescents face bullying, exemplified by various types of aggressions, from physical to psychological. The emotional impact is significant, with repercussions in feelings of sadness, anger and low self-esteem; however, some participants manage to deal with the aggressions in a more positive way.

## DISCUSSION

The thematic analysis of the adolescents' statements evidences the complexity inherent to the phenomenon affecting their mental health, with anxiety, grief and bullying standing out. Intertwined in a rural context oftentimes marked by structural weaknesses and limited access to specialized services, these factors exert a direct impact on the youth's emotional, social and identity development. Such life experiences do not only reveal individual vulnerabilities; they also point to a social and institutional relationships network that contributes to shaping (or to unshaping) mental health during adolescence.

For the adolescents participating in this research, factors such as significant losses, academic pressure and family/social conflicts stand out as anxiety triggers. International data also show the magnitude of the issue: a study conducted in Mexico revealed that almost half of the adolescents reported frequent feelings of sadness and anxiety, in addition to negative thoughts<sup>2</sup>. In this age group, anxiety is closely linked to academic performance. Situations such as anticipation before a new test, difficulties assimilating contents or fear of failing intensify inability and frustration perceptions, contributing to psychological distress symptoms and expanding the impact exerted by anxiety in the school setting<sup>22</sup>.

Also in this sense, a research study developed with adolescents living in urban and rural areas from Mexico evidenced that 47.8% of the interviewees felt sad, nervous, anxious and stressed out or had negative thoughts<sup>23</sup>. In this context, it is possible to notice the vulnerability of the adolescent population in terms of developing psychological disorders. At the global level, the WHO estimates that approximately 14% of all adolescents face difficulties related to their mental health<sup>24</sup>.

An international study conducted in India points to higher depression rates among adolescents from rural areas (39.3%), whereas anxiety is slightly more frequent in urban areas (50.6%). However, the incidence of stress (frequently associated with contextual and family factors) is higher among rural adolescents, which suggests a significant influence of socioeconomic level, of rigidity in family norms and of scarce psychosocial support in these territories. In addition to that, stress was more frequently reported by rural adolescents (16.6%) than by their urban counterparts (14.6%). Such differences can be attributed to factors such as monthly family income, parenting practices, academic pressure and self-esteem level, which emerge as significant mental health determinants<sup>24,25</sup>.

In this study, self-harm was identified as a strategy to cope with emotional distress, especially in situations marked by psychological overload. In the literature, this behavior is interpreted as a mechanism for regulating negative emotions that is frequently related to the presence of depressive symptoms, to difficulties relating to others and to inadequate parental emotional control. It is important to note that, far from being an isolated phenomenon, self-harm can indicate an increased risk of suicidal behaviors, working as a clinical marker of emotional severity. A study evidences that the prevailing motivation for self-harm is to regulate negative emotions, where this behavior represents a mechanism to deal with feelings of sadness and anxiety. Risk factors such as female gender, depressive symptoms, anxiety, stress and difficulties in interpersonal relationships increase the chances for these behaviors<sup>26</sup>.

In this sense, the current study reveals that rural adolescents also show greater vulnerability to the severe self-harm forms, including firearm use, which can be related to the higher availability of these instruments and to lower institutional surveillance in these towns. Data from a research study conducted with Gaucho adolescents reveal a significant correlation between self-harm and suicidal ideation: 85% of those that indulged in self-harm stated suicidal thoughts; 40% wished to die; and 70% made suicide attempts. These findings reinforce the urgency of devising public policies that ensure continued care for the mental health of young individuals living in remote areas<sup>27-28</sup>. Such percentages suggest an intrinsic relationship between self-harm and the emergence of subsequent suicidal behaviors, indicating that, in addition to being a way to externalize deep psychological distress, self-inflicted injuries can work as an early indicator of progression toward suicide attempts.

It is noted that the adolescents included in this study mentioned suicidal thoughts in which they reveal their wish to flee from suffering and a helplessness sensation, manifested in the family and social contexts.

Suicide among adolescents is a multi-factor phenomenon, and integrated actions are required to face it. Between 2000 and 2015, more than 11,000 deaths due to self-inflicted injuries were recorded in Brazil among young individuals aged from 10 to 19 years old, with higher incidence in those between the ages of 15 and 19. These data evidence the need for preventive interventions that can foresee distress signs<sup>29,30</sup>.

The analysis of the adolescents' statements also emphasizes bullying episodes, frequently experienced at school. Manifested as taunts, exclusion and derogatory nicknames, symbolic violence exerts negative effects on self-esteem, motivation and belonging perceptions. A Brazilian study detected a significant correlation between victimization due to bullying and suicidal ideation among adolescents attending Elementary and High School. In addition to that, a number of research studies indicate that bullying is a risk factor for the development of depressive symptoms and for lower academic performance<sup>31</sup>.

In the bullying context and as fundamental spaces for children's and adolescents' development and socialization, schools assume a central role in shaping individuals in their cognitive, social, emotional and moral aspects. However, it is also in this environment that negative practices are oftentimes perpetuated, such as nicknaming, taunts, preconceptions, racism and disrespect in general. These behaviors are commonly associated with bullying at school<sup>32,33</sup>.

The participants included in this study reported a range of emotional repercussions arising from bullying experiences, with low self-esteem and feelings of sadness, anger and embarrassment standing out. The literature supports these findings, identifying bullying as a vulnerability factor for the development of persistent sadness, demotivation, lower academic performance, family conflicts and reduced social support perception<sup>39</sup>. In addition, a number of studies indicate a significant correlation between experiencing bullying in adolescence and the onset of depressive symptoms, evidencing the impact of this phenomenon on psychological well-being and on socioemotional development<sup>34-36</sup>.

As training and relational spaces, schools play a crucial role as prevention agents against such risk behaviors in adolescents, transforming their comprehensive development. By providing a welcoming and guidance environment, schools can strengthen self-esteem and work towards strategies to deal with problems, promoting emotional resilience in the students<sup>32-34</sup>. Schools gain a strategic role as prevention agents, especially by means of intersectoral programs among which PSE stands out, considering that this Program articulates actions between the health and education areas and promotes spaces for listening, welcoming and mental health promotion, fundamental to deal with the risk factors and to strengthen the care networks. Consequently, health education actions in the school setting can be considered as strategies to promote adolescents' health<sup>17</sup>.

Grief emerges as another core experience in the adolescents' statements. When experienced without adequate emotional support, losing loved ones impairs psychological balance and can trigger feelings of hopelessness and isolation. The literature points out that grieving adolescents tend to present lower academic performance, reduced professional hopes and greater difficulties establishing healthy affective bonds<sup>35-37</sup>. Open pain expressions and the possibility of sharing distress (in safe contexts) are fundamental aspects for the grieving process and to enhance resilience. In addition to that, lesser attachment to peers is observed, which suggests reductions in social support and in healthy social interactions, crucial factors for the adolescents' emotional and academic development<sup>36,37</sup>.

Consequently, the findings detected in this study reassert adolescence as a phase marked by intense transformations, where emotional and social experiences are determinant factors for each person's subjective construction. In rural contexts (characterized by structural inequalities and scarce specialized services), it becomes even more necessary to develop strategies that promote comprehensive care, valuing the local territory, culture

and relationships. Strengthening the intersectoral network, investing in continuous public policies and qualified listening are possible paths forward to mitigate the effects of psychological distress and promote the adolescents' mental health in its integrality.

### Study limitations

The challenges faced to collect the data were associated with the commute time to each school, which was around 50 minutes, as well as to the terrible conditions of the rural roads and to the abundant rainfall affecting Rio Grande do Sul, which extended the data production period.

### FINAL CONSIDERATIONS

The findings detected in this study evidence that the health requirements in the case of adolescents attending rural schools are strongly anchored in mental health, with manifestations of anxiety, self-harm, suicide attempts and bullying experiences standing out. Alarming by themselves, these indicators become even more critical when associated with grief experiences, broken family ties and difficulties in school relationships.

Adolescence is a particularly sensitive period marked by intense biopsychosocial development processes. In this context, the adolescents' difficulty to adequately understand, name and express their emotions (added to the absence of adaptive coping strategies) favors the onset of psychological distress symptoms. This is further worsened in rural communities, with scarce specialized services and less visibility of the adolescents' requirements, as well as due to the strong social stigma around mental health issues.

Activities that foster intergenerational dialog, welcoming listening and appreciation for each adolescent's life path are suggested. It is believed that an intersectoral, continuous and culturally sensitive approach contributes significantly to promoting adolescents' health. It is also recommended to strengthen the bonds between adolescents, families and schools based on encouraging family participation, by means of activities that contribute to socialization and dialogicity. In addition, it is suggested that health policies interact with society regarding the importance of adolescents' mental health and the available strategies to assist and care for this population segment. Finally, this study points out the need to discuss adolescents' mental health in a cross-sectional way during their health consultations and in health education practices at school.

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#### Use of artificial intelligence tools

Authors declare that no artificial intelligence tools were used in the composition of the manuscript "*Mental health and care for adolescents attending rural schools*".