DOI: http://dx.doi.org/10.22267/rus.192101.136

Universidad y Salud
ORIGINAL ARTICLE

Epidemiology of suicidal attempt in patients under 18 years of age attended at Los Angeles Children's Hospital of Pasto, Colombia

Epidemiología del intento suicida en menores de 18 años atendidos en el Hospital Infantil los Ángeles, Pasto, Colombia

Freddy Israel Pantoja-Chamorro[1]* orcid.org/0000-0002-2856-9624
Ana Ximena Rodríguez-Villota[1] orcid.org/0000-0001-7103-7386
Jhuranny Urbano-Urbano[1] orcid.org/0000-0003-2191-6168
Nancy Cabrera-Bravo[1] orcid.org/0000-0001-6985-1581

1. Los Angeles Children's Hospital. Pasto, Colombia

Received: 6 March 2018 Revised: 18 May 2018 Accepted: 11 December 2018

Pantoja-Chamorro F, Rodríguez-Villota AX, Urbano-Urbano J, Cabrera-Bravo N. Epidemiología del intento suicida en menores de 18 años atendidos en el Hospital Infantil los Ángeles, Pasto, Colombia. Univ. Salud. 2019;21(1):19-26. DOI: http://dx.doi.org/10.22267/rus.192101.136

Resumen

Introducción: El intento suicida es un problema de salud pública, las cifras aumentan a pesar de los programas preventivos, es necesario conocer su comportamiento en la población pediátrica y en la región. **Objetivo:** Caracterizar clínica y sociodemográficamente los menores de 18 años con intento suicida atendidos en el Hospital Infantil los Ángeles. **Materiales y métodos:** Estudio observacional, descriptivo de menores de 18 años con intento suicida (INSU) hospitalizados entre 2016 y 2017. **Resultados:** Se analizaron datos de 151 pacientes. Se encontró una prevalencia de 0,8 casos por mil ingresos. Falleció el 2% (3) luego de ingesta de Paraquat®. La edad promedio fue de 14,7 años, el 74% (112) fueron niñas. El 61,6% (58) de la población con intento suicida tenía un ambiente familiar disfuncional. Los problemas académicos y la depresión se presentaron con alta frecuencia. Dentro de los principales mecanismos de INSU se evidenciaron: *Cutting*, consumo de antidepresivos tricíclicos, acetaminofén y organofosforados. **Conclusiones:** La prevalencia de INSU crece aceleradamente con respecto a registros reportados en años anteriores en la misma institución; el hecho puede reflejar problemas en los programas de salud dirigidos a la promoción de la salud mental del adolescente.

Palabras clave: Intento de suicidio; prevalencia; mortalidad; pediatría. (Fuente: DeCS, Bireme).

Abstract

Introduction: Suicide Attempt is a public health problem. Despite preventive programs, figures increase, so it is necessary to know its behavior in the pediatric population and in the region. **Objective:** To characterize clinically and socio-demographically children under 18 who presented suicidal intent and were attended at Los Angeles children's hospital. **Materials and methods:** An observational descriptive study was conducted with children under 18, who presented suicidal intent and were hospitalized between 2016 and 2017. **Results:** Data from 151 patients were analyzed. A prevalence of 0.8 cases per thousand incomes was found. 2% (3) died after Paraquat® intake. The average age was 14.7, 74% (112) were girls. 61.6% (58) of the population with suicidal intent had a dysfunctional family environment. Academic problems and depression were presented with high frequency. Cutting, tricyclic antidepressants consumption, acetaminophen and organophosphorus were found among the main mechanisms of suicidal intent. **Conclusions:** The prevalence of suicidal intent grows rapidly with respect to records reported in previous years in the same institution. This fact may reflect problems in health programs aimed at promoting adolescent mental health.

Key words: Suicide, attempted; prevalence; mortality; pediatrics. (Source: DeCS, Bireme).

***Corresponding author at:**
Freddy Israel Pantoja Chamorro
e-mail: eduhila@hinfantil.org

Introduction

Suicide is a global problem that affects all spheres of our society. According to the World Health Organization (WHO), one person die due to suicide every 40 seconds and nearly 800,000 people commit suicide annually worldwide[1]. The numbers of suicide and suicide attempts in the Colombian adolescent and children populations have increased significantly, becoming the second cause of death in the age group of 20-30 years old. The suicidal attempt rate reported by the Information Integral System, SISPRO (Colombia) has increased from 0,9 per 100,000 people in 2009 to 2,05 per 100,000 people in 2015[2,3]. Previous estimates indicate that suicidal victims could reach 1,5 million worldwide in 2020, while suicidal attempts could increase 10 to 20 times[4].

Most studies indicate that cases of suicidal attempts in infant population are increasing to critical levels, which are becoming a tragic public health problem and having devastating emotional, social and economic effects on families, friends and communities[2]. Therefore, it is remarkable to see how suicidal cases in Nariño Department Hospitals continue to affect our children population despite that prevention and public health measures have been established. The surge of these cases represents an appropriate parameter to assess the effectiveness of such programs, thus highlighting the necessity to document this finding[5].

Infants do not understand the irreversible nature of death until the age of 8 years and suicide attempts or consummate suicides are rare in children younger than 12 years old[6]. Children make impulsive decisions that are closely linked their family context, interaction with the environment, and socio-environmental, genetic and other typical factors of childhood. Thus, those decisions are a consequence of the formative development of higher brain function and immaturity of brain connections. On the other hand, the decision-making process in older adolescents is different due to psychiatric and affective disorders and abuse of addictive substances that are more frequent in this population[6]. The suicidal ideation that is more frequent in children is not necessarily associated with psychiatric and affective disorders[6,7].

This study is aimed (i) to characterize the population of patients that were younger that 18 years old and admitted to the Los Angeles Children's Hospital because of suicidal attempt, (ii) to know how vulnerable the Nariño Department is to this threat (discriminating population based on the geographic areas established in the Participatory Plan of Department Development[8]), and (iii) to analyze the suicidal behavior during the March 2016 – December 2017 time period. This knowledge is important to assess the current situation of youth suicide in both our region and this particular health institution, which is a Colombian accredited hospital for pediatric care.

Materials and methods

Type of study

An observational and descriptive study was conducted with patients between the ages of one month to 18 years, admitted to the Los Angeles Children's Hospital (Pasto, Colombia) between 2016 to 2017, and diagnosed with suicide attempt (SA) as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)[9]. Patient's data was collected from the epidemiological surveillance sheet of suicidal attempt and the systematized medical records of the Los Angeles Hospital. We filtered the information by sociodemographic and clinical variables such as age, gender, origin, social security regimen, ethnicity, education level, functionality of intrafamilial relationships (according to the report of the psychological assessment found in the clinical history), academic problems, child abuse, history of sexual abuse, familial history of suicide attempt or suicide, mechanism of suicide attempt, admission to intensive care unit, and death. The collecting information method from the systematized clinical histories was a survey with 37 closed-option questions, which was validated by conducting a pilot test that registered and analyzed the first 20 cases.

Inclusion and exclusion criteria

Selection biases were controlled by establishing the following inclusion criteria: under 18 years of age, male and female patients who were diagnosed with SA. In contrast, our exclusion criteria were: patients who did not have all data provided and incomplete information in the clinical history. The information biases were controlled by (i) performing an exhaustive search of clinical histories by each researcher; (ii) standardizing the definitions of variables; (iii) creating an organized process for revision of medical records without omitting valuable

information; and (iv) establishing codes for data in order to improve their subsequent analysis.

Analysis of the information

Excel® and SPSS® version 21 statistical software were used for for data collection, processing and analysis.

Ethical considerations

This project was approved by the ethics committee of the Los Angeles Children's Hospital of Pasto (Colombia) on September 29, 2017. This study was classified as "risk free" in accordance with Article 11 of Resolution 8430 of 1993. Information management followed the confidentiality rules established by the hospital in order to guarantee the use of data for scientific purposes without the disclosure of patients' personal data.

Results

Sociodemographic variables

A total of 151 medical records of children under 18 years of age with suicide attempt admitted at Los Angeles Children's Hospital during March, 2016 to December, 2107 were reviewed. 12 patients were excluded from the study: 8 cases because they were not diagnosed as SA and 4 due to incomplete records. March 2016 was considered as the mandatory completion of the epidemiological record of suicide, while data from previous months were not taken into account.

A prevalence of 0.8 suicide attempt cases per 1,000 hospital admissions was found. The highest SA peaks occurred during the months of June, August and November, whereas the lowest frequencies were observed in January and December.

The percentage of male children who expressed suicidal attempt was 25.8%, in contrast to the 74.2% (112) recorded in female children. The average age of suicidal attempt was 14.7 years with a standard deviation of 1.9 years. Regarding the place of residence, 82.2% (125) of the cases came from metropolitan areas, with the majority of them (89.4%) living in the capital of the Department of Nariño (Pasto). The majority of the minors with SA were assigned to the General System of the Social Security in Health. Whereas the largest number of cases belonged to the subsidized regimen (120; 79.5%), a lower percentage were part of the contributory regimen (20.5%). With respect to the education level, 76.2% of the patients attended secondary school and 13.2% of the children did not attend any school (Table 1).

Table 1. Sociodemographic characteristics

Variable		Frequency	%
Gender	Male	39	25.8
	Female	112	74.2
Ethnic group	Afro-descendant	4	2.6
	Indigenous	6	4
	Caucasian	0	0
	Mestizo	141	93.4
Place of residence 1	Rural	26	17.2
	Metropolitan	125	82.8
Region of residence 2	Center	135	89.4
	North	7	4.6
	Pacific	5	3.3
	Putumayo	4	3.6
Social security	Contributory	31	20.5
	Subsidized	120	79.5
Education level	None	20	13.2
	Primary	11	7.3
	Secondary	115	76.2
	Technical studies	5	3.3
Age*		14.7 (1.9)	

*Quantitative variables: Average, Standard Deviation
**Source: Participatory Plan for Departmental Development[8]

Social variables

61.6% (58) of the patients with SA had a dysfunctional family environment. According to the definition previously established by the psychology group of the Los Angeles Children's Hospital, which, in turn, is based on the APGAR[10] (Adaptation, Participation, Growth Affection and Resources) instrument, 9.9% of minors reported having suffered child abuse by parents or other family member. 5.3% of participants had a history of sexual abuse.

The psychological assessment showed that 12.6% of the adolescents went through difficult boyfriend/girlfriend relationships. Other affecting aspects were: bullying (4%); academic problems (41.1%); use of psychoactive substances (PAS; 22.5%); family history of suicide (6%); and a large number of depression cases (46%). 36.4% of the participating adolescents had a history of suicidal attempt (at least one attempt) (Table 2).

Table 2. Social variables

Characteristic		Frequency	%
Family relationship	Functional	58	38.4
	Dysfunctional	93	61.6
Child abuse	No	136	90.1
	Yes	15	9.9
History of sexual abuse	No	143	94.7
	Yes	8	5.3
Boyfriend/girlfriend relationship problems	No	132	87.4
	Yes	19	12.6
Bullying	No	145	96
	Yes	6	4
Family history of suicidal attempt or completed suicide	No	142	94
	Yes	9	6
Academic problemas	No	89	58.9
	Yes	62	41.1
Previous suicidal attempt	No	96	63.6
	Yes	55	36.4
Depression	No	80	53
	Yes	71	47
Bipolar disorder	No	147	97.4
	Yes	4	2.6
Schizophrenia	No	149	98.7
	Yes	2	1.3
Use of psychoactive substances	No	117	77.5
	Yes	34	22.5

Clinical characteristics

The average length of hospital stay was 4.1 days, with an average cost of $3,016,000 (Colombian pesos) per patient. 7.9% (12) of the children were admitted to the intensive care unit, of which five had renal lesions and 3 displayed liver damage. 42.4% (64) of the patients received psychiatric assessment prior to home discharge. Finally, three patients died due to Paraquat® poisoning (Table 3).

Methods of suicide attempt (SA)

The most common methods to attempt suicide were: cutting (53 cases; 35.1%); hanging (10 cases; 6.6%); ingestion of organophosphates (10 cases; 6.6%). Other methods included: vehicular impact; jumping from height; ingestion of sodium hypochlorite, wax, glue or alcohol (34 cases; 22%); and use of medications such as contraceptives, methocarbamol, omeprazole, antibiotics, antihypertensives as well as naturopathic medicines (53; 35%). Also common was the ingestion of tricyclic antidepressants (10 cases; 6.6%), acetaminophen (10 cases; 6.6%) and Paraquat® (4 cases; 2.6%), the latter causing the death of 3 children (2%) (Table 4).

Table 3. Clinical characteristics

Characteristic		Frequency	%
Admission to intensive care unit	No	139	92.1
	Yes	12	7.9
Renal lession	No	146	96.7
	Yes	5	3.3
Liver lession	No	148	98
	Yes	3	2
Psychiatric assessment	No	87	57.6
	Yes	64	42.4
Deaths	No	148	98
	Yes	3	2
Hospital stay length*			4.1 (4.8)

*Quantitative variables: Average, Standard Deviation

Table 4. Methods and ingested substances used to attempt suicide

Characteristic		Frequency	%
Antidepressants	No	138	91.4
	Yes	13	8.6
Antipsychotics	No	149	98.7
	Yes	2	1.3
Acetaminophen	No	141	93.4
	Yes	10	6.6
Other medicines	No	98	64.9
	Yes	53	35.1
Organophosphates	No	141	93.4
	Yes	10	6.6
Carbamates	No	149	98.7
	Yes	2	1.3
Paraquat®	No	147	97.4
	Yes	4	2.6
Warfarin	No	150	99.3
	Yes	1	0.7
Hanging	No	141	93.4
	Yes	10	6.6
Cutting	No	98	64.9
	Yes	53	35.1
Other methods	No	117	77.5
	Yes	34	22.5

Discussion

According to reports from 2017 by the National Institute of Health, there has been a progressing increase in both suicidal attempt and completed suicide rates in Colombia. Nariño ranks fifth among the departments with the highest suicide attempt rates in the country[4].

This study had the main objective to analyze an escalating public health problem that affects the children population from Nariño. The number of cases of suicidal attempt treated at the Los Angeles Children's Hospital in Pasto has recently increased. In fact, Eraso *et al.*[11] reported 50 cases in 2007, while Jiménez *et al.*[5] reported 100 cases in 6 years and Guerrero[12] registered 97 patients in 5 years. This situation is worrisome since 151 cases were reported in the last 21 months. In addition to these growing figures, it is important to highlight that the data from variables such as female gender, average age, family dysfunction and depression are similarly concerning. Although there is little evidence about cutting and hanging in those reports, hanging has been described in Mexican studies as the main method to attempt suicide in individuals who are younger than 20 years of age[13,14].

With respect to suicidal attempt, it was found that women were mostly affected, accounting for 74.2% of the total cases. This figure coincides with reports by the American Academy of Pediatrics and studies by Sanchez-Loyo conducted in Mexico[15], who observed that the prevalence of suicidal attempt in the adolescent population was much higher in women (6.37%) compared to that in men (2.14%). This difference corroborates that the methods of suicidal attempt used by men are more lethal. We observed that the average age of suicidal attempt of children/adolescents treated at Los Angeles Children's Hospital was 14.7 years and that 82.8% of them came from metropolitan areas. These results are in agreement with those obtained in a study carried out in the city of Manizales by a group from the National University (Colombia)[7]. We also identified that the children population affiliated to the subsidized regimen showed a higher frequency of suicidal attempt (79.5%). This is an interesting value since it comes from a variable that has not been approached in previous studies.

Family dysfunction, academic difficulties, previous history of SA, depression, and relationship problems were the most frequent factors. This situation demonstrates that the social environment plays an important role in generating and triggering the suicidal event. Thus, it is important to carry out research focused on to establish how psychosocial variables affect this public health problem as well as how they influence the psychological status of adolescents. To reach a clear understanding of these effects is important because depression could become an intermediate variable in this complex context, where multiple triggering factors can be considered[16-20].

A theoretical model is proposed in which the family structure operates as a fundamental axis in the development of thoughts and behaviors in the adolescent, and this is obviously influenced by external factors which facilitate the development of suicidal thoughts and behaviors. During their childhood until the age of five, human beings have the vulnerability of being "shaped" through learning processes and contributions from their family environments. This is a process that generates certain psychological skills and abilities that strengthen them to better face life's adversities[21].

Adolescence represents a difficult stage in life, when acknowledgment and acceptance of oneself requires the presence and support of reliable paternal figures so that factors such as alcoholism and drug addiction will not affect the normal trajectory during this phase of life. It is understood that if this fundamental axis known as "family" is dysfunctional because of various critical situations, the adolescent will be more vulnerable to engage in inappropriate behaviors such as suicide attempts[18,19,22]. In addition, it should be a priority to work using a preventive approach in settings such as home and school, focusing on the three key spheres ("the individual, the social and the family") that are key for human development to prevent depression in children and adolescents[3,23].

On the other hand, the easy acquisition of toxic substances at home and consumer markets generates a potential risk for the pediatric population and this is why it is necessary to have a strict control by public health authorities. Likewise, it is important to mention that the observed mechanisms of suicide attempts include a variety of methods that have not been found in previous studies and are highly lethal (poisoning, different types of medications, antibiotics, vehicular impact, and jumping from height). In

contrast, Castaño *et al*.[7] have reported poisoning as the principal suicide mechanism.

It was found that cutting is the second most frequent mechanism in this study population, which is different from other reviewed bibliographies that reported it as less frequent. Likewise, an increase was observed in the frequency of cases of hanging, which in other studies was reported in lower numbers[11]. Although this article is focused on suicide attempt, the lethality of the methods by women is a variable to consider because 3 in 4 patients that ingested Paraquat® died, and these 3 were women. This worrisome situation demonstrates the high lethality of this substance combined with its easy accessibility in the market.

According to the initial psychological assessment, 42.4% of the patients required psychiatric treatment, while the rest were remitted to ambulatory care. It is fundamental that a competent multidisciplinary team provides timely follow up and intervention to patients with a history of a first suicidal attempt because they have an 18 times higher probability to attempt suicide during the following year. It has also been demonstrated that previous suicidal attempts and severe self-injurious behaviors are important risk factors that affect the suicidal behavior[24-27]. 7.9% of the patients required admission to the Pediatric Intensive Care Unit, which is remarkable since the magnitude of the event generates a longer hospital stay, higher costs, high comorbidity, missed days from school, and missed days from work for the parents and legal guardians[2-4].

Conclusions

The average hospitalization cost due to SA was calculated at $3,016,000 Colombian pesos per adolescent patient. This feature wan not analyzed in previous studies used as references, but its economic quantification becomes relevant since this cost could be transferred to prevention programs.

Even though the study shows descriptive data, it is important to highlight the high frequencies of characteristics that may demonstrate a link between social/family environments with suicidal attempt. Therefore, the designs of future studies should be focused on clarifying these factors and assessing the need for timely work in public health programs that include the strengthening of the family structure and the early identification of the suicidal risk in settings such as home, school and health care centers.

It is worrisome that the frequency of these suicide events is increasing in the child population, which reflects and reveals the weaknesses of the public health programs. These significant flaws of the health system are causing the loss of lives and loss of healthy years of life. Also, this problem is weakening human, physical, and economic resources because they are mostly focused on intervention instead of being aimed at prevention and education programs. Similarly, authorities from Latin American countries are concerned about the use of toxic, highly lethal, and easily available pesticides. Thus, it is necessary to examine environmental and health care policies that restrict toxic chemicals such as Paraquat® since it is highly dangerous and lethal when ingested even at amounts as small as one ounce.

After experiencing a suicidal attempt, the patient should receive timely and effective evaluations, interventions, and follow-ups from a psychological/psychiatric staff because it has been shown that having a first suicidal attempt increases the risk of suicidal recurrence.

The scope of this research permits one to analyze some of the characteristics of the pediatric population that were only admitted into Los Angeles Children's Hospital. Thus, the exclusion of patients from different health care institutions of the city of Pasto can be considered as one of its limitations. Yet, Los Angeles is the main reference institution in pediatric care for the departments of Nariño and Putumayo.

Acknowledgements
Thanks to Los Angeles Children's Hospital of Pasto, Colombia.

Conflict of interests
None declared by the authors

References

1. Organización Mundial de la Salud. Suicidio. Ginebra: OMS; 2018. Disponible en: http://www.who.int/es/news-room/fact- sheets/detail/suicide
2. De la Hoz F, Martínez Duran M, Pacheco García OE, Alejandro Alfonso C, Blandón Rodríguez AM. Protocolo de Vigilancia en Salud Pública: Intento de Suicidio. Bogotá: Inst Nac Salud; 2014
3. Mosquera L. Conducta suicida en la infancia: Una revisión crítica. Rev Psicol Clínica con Niños y Adolesc [Internet]. 2016;3(1):9–18. Available from:

https://dialnet.unirioja.es/servlet/articulo?codigo=5288635&info=resumen&idioma=SPA
4. Ministerio de Salud y la Protección Social. Boletín de salud mental, conducta suicida. Bogotá: MinSalud;2017. Available from: https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/PP/ENT/boletin-conducta- suicida.pdf
5. Jiménez-Quenguan M, Hidalgo-Bravo J, Camargo Santacruz C, Dulce Rosero PB. El intento de suicidio en la población pediátrica, una alarmante realidad. Rev Ciencias la Salud. 2014;12(1):59–92.
6. Macana N. Comportamiento del suicidio en Colombia, 2011. Forensis [Internet]. 2012;13(1):243–66. Available from: http://fpv.org.co/images/repositorioftp/capitulo1y7.p df
7. Alzate L, Bentacur MB, Castaño J, Cañon S. Factor de riesgo suicida según dos cuestionarios y factores asociados en estudiantes de la Universidad Nacional de Colombia sede Manizales. Divers.: Perspect. Psico. 2012;11(2):193–205.
8. Gobernación de Nariño. Plan Participativo del Desarrollo Departamental. Nariño: Gobernación de Nariño; 2016. Disponible en: http://xn--nario-rta.gov.co/inicio/files/PlanDesarrollo/Plan_De_Desarrollo_Nario_corazn_Del_Mundo.pdf
9. Asociación Americana de Psiquiatría (APA). Actualización del DSM-5® septiembre 2016. Man diagnóstico y estadístico Trastor Ment [Internet]. 2016;15–21. Available from: http://psychiatryonline.org/pb-assets/dsm/update/Spanish_DSM5Update2016.pdf
10. Suarez Cuba MÄAEM. Apgar Familiar: Una Herramienta Para Detectar Disfunción Familiar. Rev Médica La Paz. 2014;20(1):53–7.
11. Osejo J, Camayo D, Patiño P. Caracterización de los pacientes con intento de suicidio atendidos en un hospital pediátrico. Univ. Salud [Internet]. 2008;1(10):18–31. Available from: http://revistas.udenar.edu.co/index.php/usalud/article/view/220
12. Guerrero-Martínez LF. Descripción del intento de suicidio como constructo de violencia en la población pediátrica femenina. Rev. Fac. Nac. Salud Pública [Internet]. 2016;34(3):306-315 Available from: http://www.scielo.org.co/pdf/rfnsp/v34n3/0120- 386X-rfnsp-34-03-00306.pdf
13. Sánchez-Cervantes FS, Serrano-González RE, Márquez-Caraveo ME. Suicidios en menores de 20 años. México 1998-2011. Salud Ment. 2015;38(5):379–89.
14. Shain B. Suicide and Suicide Attempts in Adolescents. Pediatrics. 2016;138(1): e20161420.
15. Sánchez-Loyo LM, Morfín-López T, García de Alba García JE, Quintanilla-Montoya R, Hernández-Millán R, et al. Suicide Attempts in Mexican Teenagers: a Cultural Consensus Theory Perspective. Acta Investig psicológica [Internet]. 2014;4(1):1446–58. Available from: http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S2007-48322014000100010&lng=en&nrm=iso&tlng=en
16. Siabato-Macías EF, Forero-Mendoza IX, Salamanca- Camargo Y. Asociación entre depresión e ideación suicida en un grupo de adolescentes colombianos. Pensamiento Psicológico [Internet]. 2017;15(1):51–61. doi:10.11144/Javerianacali.PPSI15-1.ADIS.
17. Pérez-Olmos I, Rodríguez-Sandoval E, Dussán-Buitrago MM, Ayala-Aguilera JP. Caracterización Psiquiátrica y Social del Intento Suicida Atendido en una Clínica Infantil, 2003-2005. Rev salud pública [Internet]. 2007;9(2):230–40. Disponible en: http://www.scielo.org.co/pdf/rsap/v9n2/v9n2a07.pdf
18. Bittencourt ALP, França LG, Goldim JR. Adolescência vulnerável: fatores biopsicossociais relacionados ao uso de drogas. Rev Bioética [Internet]. 2015;23(2):311–9. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1983-80422015000200311&lng=pt&tlng=pt
19. Castell-Florit Serrate P. Editorial. Rev Cuba Med Gen Integr. 2017;24(1):281–95.
20. Rodway C, Tham SG, Ibrahim S, Turnbull P, Windfuhr K, Shaw J, et al. Suicide in children and young people in England: a consecutive case series. Lancet Psychiatry [Internet]. 2016;3(7):751–9. Available from: http://dx.doi.org/10.1016/S2215-0366(16)30094-3
21. Caballo VE, Simón MÁ. Manual de psicología clínica infantil y del adolescente: trastornos generales - transtornos específicos. Madrid: Editorial Piramide; 2002.
22. Medina-Pérez ÓA, Díaz-Téllez ÁS, Rozo-David AJ. Characterization of suicide in Antioquia, Colombia adolescents. 2000-2010. Rev Fac Med [Internet]. 2015;63(3):431–8. Available from: https://www.scopus.com/inward/record.uri?eid=2- s2.0-84940658542&partnerID=40&md5=7b7e7fd6d94ae3b6639663255e65ebfa
23. Chávez-Hernández AM, Correa-Romero FE, Klein- Caballero AL, Macías-García LF, Cardoso-Espindola KV, Acosta-Rojas IB. Sintomatología Depresiva, Ideación suicida y Auto-concepto en una muestra de infantes mexicanos. Av en Psicol Latinoam [Internet]. 2017;35(3):501. Available from: https://revistas.urosario.edu.co/index.php/apl/article/view/4733
24. McKean AJS, Pabbati CP, Geske JR, Bostwick JM. Rethinking Lethality in Youth Suicide Attempts: First Suicide Attempt Outcomes in Youth Ages 10 to 24. J Am Acad Child Adolesc Psychiatry [Internet]. 2018;57(10):786–91. Available from: https://doi.org/10.1016/j.jaac.2018.04.021
25. Pugliese SV. Indicadores De Riesgo De Conducta Suicida En Una Muestra De Adolescentes Suicidal Behavior Risk Indicators in a Sample of Adolescents. Subj y ProceSoS Cogn. 2015;19:228–45.
26. Russi AE, Brown MA. Suicide Attempt as a Risk Factor for Completed Suicide: Even More Lethal Than We Knew. Am J Psychiatry. 2016;165(2):255–69.
27. Olfson M, Wall M, Wang S, Crystal S, Bridge JA, Liu S-M, et al. Suicide After Deliberate Self-Harm in Adolescents and Young Adults. Pediatrics [Internet]. 2018;141(4):e20173517. Available from: http://pediatrics.aappublications.org/lookup/doi/10.1542/peds.2017-3517