

Children and adolescents who are substances users in the psychiatric emergency service

Crianças e adolescentes usuários de substâncias no serviço de emergência psiquiátrica

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Keywords

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Descritores

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Abstract

Objective: To describe characteristics of children and adolescents who used the psychiatric emergency service because of disorders caused by substance use. We analyzed frequencies and care outcomes.

Methods: This cross-sectional study was carried out in a psychiatric emergency service. Care was delivered to patients 18 years of age and younger who were substance users.

Results: We performed 4,198 cares delivered at a psychiatric emergency service for children and adolescents. Of these, 1,007 were due to problems related to substance use. The prevalent age was 12 to 17 years. Most participants were white, attended elementary education, were Catholic, and used multiple substances. The majority of participants were hospitalized or discharged.

Conclusion: This study permitted characterization of psychiatric emergency services provided to children and adolescents. Critical aspects were young age, use of multiple substances, and nonadherence to treatment.

Resumo

Objetivo: Descrever as características de crianças e adolescentes que utilizaram o serviço de emergência psiquiátrica devido aos transtornos pelo uso de substâncias analisando a frequência e desfechos dos atendimentos.

Métodos: Estudo transversal realizado em serviço de emergência psiquiátrica sendo considerado o atendimento aos menores de 18 anos correspondentes ao uso de substâncias.

Resultados: Foram realizados 4.198 atendimentos de emergência psiquiátrica para crianças e adolescentes. Destes, 1.007 eram por problemas relacionados ao uso substâncias, com idade prevalente de 12 aos 17 anos, com predomínio da cor branca, cursando ensino fundamental, religião católica e policonsumo. A maioria foi internada ou recebeu alta.

Conclusão: Foi possível caracterizar os atendimentos de emergência psiquiátrica, destacando a idade precoce, o policonsumo e a não continuidade de tratamento como aspectos críticos.

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Conflicts of interest: none reported.

Introduction

A psychiatric emergency can be described as a condition in which the individual has an intensified need for immediate care because of disturbed thoughts, emotions, or behavior in order to avoid harm to mental, physical and social health.⁽¹⁾

The goal of emergency assessment is to identify risks, triggering and maintenance factors, and the presence of familial and social support, as well as to conduct a differential diagnosis.⁽²⁾

Studies on use of psychiatric emergency services by young patients have emphasized that this sector can be the first and even a unique source of health-care for this population.^(1,3,4) For this reason, such services must become well educated in substance consumption, risk behaviors, and medical and psychosocial consequences of substance use.

It is important to highlight that in case of children and adolescents, information on the use of the health system as well as continuity of mental health care in the community is essential for good health and maintenance of social and family bonds.^(4,5)

In the past few decades, the frequency of use of psychiatric emergency services by children and adolescents has increased. This increased may be due to the rise in prevalence of mental health problems in this age range, difficulty accessing community services, and stigma concerning mental health in health services.^(1,3,5,6)

The main cause of psychiatric emergency care among children and adolescents is aggressive behavior that has few specific signs (i.e., present in almost all psychiatric diagnoses).^(1,2)

On the other hand, abuse of or intoxication from substances is an important predictor of the use of psychiatric emergency services in this population.^(1,7)

For this reason, the objective of this study was to describe characteristics of adolescents who use psychiatric emergency service because of disturbance from substance use. We analyzed the frequen-

cy and care outcomes in the Hospital das Clínicas de Marília – SP from 2000 to 2011.

Methods

This cross-sectional, exploratory and descriptive study used data obtained from the Technical Information Center of the Hospital de Clínicas de Marília from 2000 to 2011. The study population was composed by patients younger than age 18 years with a diagnosis related to substance use.

We collected data on sociodemographic characteristics, diagnosis, years of care and outcome (discharge, hospital admission, referral, return to consultation in emergency unit).

Data were tabulated using a Microsoft Excel spreadsheet, and different analyses were done with the support of a statistical analyst from the Information Center. These data were organized in tables, graphics, and descriptive analyses, as well as some measures of employed dispersion.

Diagnostic criteria were based on the International Classification of Diseases, 10th Revision (ICD-10), codes: Mental and behavioral disorders due to the use of alcohol; F11 – Mental and behavioral disorders due to the use of opioids; F12 – Mental and behavioral disorders due to the use of cannabinoids; F13 – Mental and behavioral disorders due to the use of sedatives; F14 – Mental and behavioral disorders because of cocaine; F15 – Mental and behavioral disorders due to the use of other stimulants, including caffeine; and F17 – Mental and behavioral disorders due to use of tobacco; and F19 – Mental and behavioral disorders due to use of multiple drugs.

Development of this study followed national and international ethical standards for research on human subjects.

Results

From 2000 to 2011 4,198 care at psychiatric emergency service for children and adolescents were de-

livered at the Hospital de Clínicas de Marília. Of these 1,007 were due to problems related to substance use, i.e., 24% of total care to children and adolescents were for urgent or emergency mental health care.

All cares were delivered for children and adolescents aged three to 17 years. The patients' profile, according to information reported by caregivers, is described in table 1.

Table 1. Distribution of cares according to sociodemographic profile of users

Characteristics	n(%)	Characteristics	n(%)
Gender		Education level*	
Male	731(72.6)	Primary education	823(81.7)
Female	275(27.3)	Secondary education	121(12)
Age range		Higher education	3(0.3)
3 to 5 years	6(0.6)	None	51(5.1)
6 to 8 years	5(0.5)	None reported	9(0.9)
9 to 11 years	3(0.3)	Religion	
12 to 14 years	126(12.5)	Catholic	751(74.6)
15 to 17 years	867(86.1)	Protestant	186(18.5)
Race/ethnicity		Spiritist	14(1.4)
White	730(72.5)	Atheist	04(0.4)
Pardo	208(20.6)	Other	05(0.5)
Black	66(6.5)	None	15(1.5)
Asian	2(0.2)	Not informed	32(3.2)
Not informed	1(0.1)		

*Reflecting the school period that the patient was attending at the time of care.
Source: Technical Information Center of the Hospital de Clínicas de Marília, Marília-SP, 2012.

Distribution of care according to diagnoses is presented in table 2.

Table 2. Care delivered to patients younger 18 years old based on ICD-0 related to substance use

CID	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
F10	18	14	20	33	18	25	12	8	11	5	5	11	180
F11	0	0	1	0	0	0	0	0	0	0	1	0	2
F12	4	4	9	4	6	2	7	8	2	5	0	13	64
F13	2	1	1	0	0	0	0	1	0	1	0	1	7
F14	24	12	21	10	7	9	10	8	11	16	21	31	180
F15	0	1	0	0	0	0	0	0	0	0	0	0	1
F17	0	0	0	0	0	0	0	0	0	0	1	0	1
F18	1	1	0	1	1	0	1	0	1	0	0	0	6
F19	31	42	68	42	32	28	39	75	55	48	37	69	566
Total	81	75	120	90	64	64	69	100	80	74	65	125	1,007

Source: Technical Information Center of the Hospital de Clínicas de Marília, Marília-SP, 2012.

The mean number of care was 84 per year. Distribution of outcomes is presented in table 3.

Table 3. Distribution of care outcomes according to the diagnosis

CID	Hospital Admission n(%)	Outcome			No information n(%)	Total
		Referral n(%)	Return n(%)	Discharge n(%)		
F10	31(7.30)	12(6.7)	5(2.8)	131(73.0)	1(0.5)	180
F12	14(22.0)	5(7.8)	2(3.1)	42(65.6)	1(1.6)	64
F11/13 F15/17/18	7(41.2)	2(11.7)	1(5.9)	6(35.3)	1(5.9)	17
F14	64(35.5)	12(6.6)	9(5.0)	90(50.0)	5(2.7)	180
F19	196(34.6)	36(6.3)	23(4.6)	306(54)	5(0.9)	566
Subtotal	312(31.0)	67	40	575	13	1,007

Source: Technical Information Center of the Hospital de Clínicas de Marília, Marília-SP, 2012.

Discussion

Because this study was a quantitative and used secondary data, it has some limitations. First, we could not affirm the accuracy of the record that forms the basis of the data obtained by the Technical Information Center. Second, care in overdose cases was not counted in the data collected because such cases are considered clinical emergencies due to intoxication (i.e., in the database used for the study because use of psychoactive substances was not specifically delineated).

It is important to highlight, however, that results of our study provide extremely important information that can be applied to health policies and practices related to substance use, which is a current public health priority. The study provides an overview of the urgency of this problem in adolescents, pointing to the demand it places on psychiatric emergency services. This study shows the most prevalent diagnoses as well as the age range most affected.

Considering the central role of nursing in the mental health and psychiatric sectors, the results will enable a critical reflection of nurses' responsibility in providing preventive services, the degree of nursing care needed for this population, and, above all, nurses' responsibility in relation to outcomes after care.

Care to patients younger than 18 years age because of substance use correspond to 24% of all psychiatric emergency care provided to children and adolescents at the emergency unit where this study was conducted. This total is impressive considering

the phase of life of these patients, who are subject to influences due to biological, cognitive, emotional and social changes that will affect their habits in adulthood.^(1,4)

Most of the adolescents and young people who were substance users had histories of multiple psychosocial conditions, such as difficulty learning, family conflicts, and social problems. In addition, the use of substances in this age range is sometimes associated with some psychiatric comorbidities, such as depression and anxiety disorders, which along with drug abuse, are considered important risk factors for suicide among young individuals.⁽⁸⁻¹⁰⁾

In the 12-year period analyzed, the years with a large number of cares were 2011, 2002, 2007 and 2003 with 125, 120, 100 and 90 cares, respectively (Table 2). This increase in the number of cares can be related to several aspects, such as increase in the number of dependents in general, improved access to health care, inefficiency of community health services, or even greater attention given to drugs by public policies.

A study carried out in the United Kingdom described the increase in psychiatric care in emergency units and reported that drug abuse was the second main demand, followed by suicide attempts.⁽¹¹⁾ Some authors^(2,12,13) report that consumption of substances has increased in recent years and that in the case of alcohol, emergency units have seen even more patients in the age range of our study with problems related to high consumptions of substances (overdose, alcoholic intoxication, wounds).

In this perspective, emergency services play a fundamental role in the early detection of problems related to drug abuse among adolescents. For this reason, it is necessary to develop effective protocols for this service, including behaviors to adopt, flow to reference and against a reference and special attention to psychosocial factors linked to this demand.^(5,12)

The prevalent ages seen in this study agree with results of other studies on substance use among adolescents.^(4,9,14) Among participants of our study, the age with the most care was delivered at 16

years (617 cares), followed by 15 years (134) and 17 years (116).

It is important to highlight that use of illicit drugs occurs with higher prevalence at ages 13 and 14 years among girls and at age 15 years among boys.^(9,14) Reasons for substance use among adolescents are to obtain pleasure, to align attitudes and values with those of their peers, and to decrease the worries of daily life; in addition, many of these young people have a history of maltreatment and negligence during childhood or have parents who were alcohol or drug dependents.^(8,10,15) It is important to highlight that having parents who use substances is described by some authors as a factor associated with higher frequency of use of emergency services by children.⁽¹⁵⁾

According to our results, prevalent cares were among adolescents aged 12 to 17 years old, corresponding to an education level between 1st and 2nd degrees (Table 1). However, it is important to highlight possible consequences of substance use in school performance among adolescents in this age range. Several studies have found a relationship between substance use and a gap in education or dropping out of school.^(9,11,16,17)

Among participants in our study, 74.6% were Catholic and 18.5% were Protestants. It is important to mention that in Brazil, identification of a specific religion does not necessarily mean that the person regularly practices the religion.

Some studies question the effectiveness of religion as a protective factor.^(18,19) Our findings corroborate that conjecture; although most participants reported belonging to a religion, they were still substance users.

We emphasize that ethical and social norms encountered in different daily contexts are identified in some "spirituality" traditions that can make moral repression concerning deleterious life choices.^(18,19)

According to table 2, diagnoses with a high prevalence over the 12-year period were F19 - Mental and behavioral disorders due to multiple drugs use; F10 diagnoses - Mental and behavioral disorders due to the use of alcohol; F14 - Mental and behavioral

disorders because of cocaine and F12 - Mental and behavioral disorders due to the use of cannabinoids.

Some authors report that combination drug used more often involved alcohol; however, such combinations, as well as consumption patterns, can vary according to geographic region. The main drugs used in combination are cannabis, cocaine and tobacco.^(9,14)

Crack is the drug most used by men and women because it is the cheapest and easiest to combine, mainly with cannabis and tobacco. Cannabis is a favorite for combining with other substances because of it is inexpensive, easy to acquire, and can be used in several forms.⁽¹⁴⁾

In general, substance abusers use these combinations to increase the psychoactive experience or so that the second substance used counterbalances the negative effects of the first drug.^(9,14,18) Therefore, we believe that adolescents can be seeking combinations of drugs in order to improve their effect or expand the particular forms of consumption.

Another relevant result of the present study is the number of emergency cares due to secondary use of alcohol, followed by the use of cocaine. Alcohol is a licit drug, is easy to access, and is used both by adults and adolescents with social acceptance. This finding suggests that strategies need to be implemented to reduce supply and demand because of current alcohol and drugs policies need measures to guarantee such strategies consolidation.

Concerning outcomes, we observed that most patients were discharged from or admitted to the hospital (i.e., a small percentage is referred to others services). This result shows that the emergency health service may not serve as the entrance to the psychosocial care network, mainly because of chronic disorders that require follow-up for specialized service or primary care with psychiatric safeguard.

Some studies have been emphasizing that psychiatric emergency service has the role of providing access to the mental health system;^(1,4) however, many patients are not referred to psychiatric care and thus do not receive treatment. This has led to

an increase in chronicity and severity of disorders and their consequences.

Conclusion

This study enabled use to characterize children and adolescents who used a psychiatric emergency service because of substance use. Our population was composed mainly of adolescents age 12 to 17 years old diagnosed as users of multiple substances. In relation to care frequency, cares were higher in 2011, totaling 125. We also identified different outcomes for those cares delivered. The reduced number of referrals suggests the difficulties in providing continued care for these patients.

Collaborations

Martins MMM contributed to the conception of the Project, analysis and interpretation of data, drafting the manuscript, critical review of intellectual content and approval of final version to be published. Souza J contributed to the guidance/conception of the Project, analysis and interpretation of data, critical review of intellectual content and approval of final version to be published. Silva AA contributed with data collection and approval of final version to be published.

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