Mental health care for Brazilian juvenile offenders

Nilson do Rosário Costa ¹ Paulo Roberto Fagundes da Silva ¹

> **Abstract** This paper analyzes the use of psychoactive drugs by juvenile offenders in Brazil in socio-educational facilities (USEs). It describes the guidelines of the national public policy and the quality of mental healthcare coordination by subnational public governments. This work draws on the hypothesis that USEs vertical governance is associated with the use of psychoactive medication. This is comparative study of two cases in Rio Grande do Sul and Minas Gerais. Data resulted from a sample of medical records and interviews with key informants. The paper shows that vertical governance observed in Rio Grande do Sul is directly associated with high prevalence of mental health disorder diagnosis, use of psychoactive medication and psychiatric medicalization by juvenile offenders deprived of liberty. These findings indicate that sanctions of imprisonment for illegal acts are producing a set of medicalization decisions that undermine juveniles' health rights. The national mental health policy guidelines encourage cautious decisions. Psychotherapies and rehabilitation actions are the advocated first-line interventions. The poor management of the psychopharmacological intervention favors multiple prescriptions.

> **Key words** Juvenile offenders, Mental health care, Medicalization psychoactive drugs, Governance, Socio-educational facility

¹ Escola Nacional de Saúde Pública, Fiocruz. R. Leopoldo Bulhões 1480, Manguinhos. 21041-210 Rio de Janeiro RJ Brasil. nilson@ensp.fiocruz.br

Introduction

This paper describes the public policy of mental health care of adolescents admitted to Socio-educational Facilities (USEs), with emphasis on the analysis of the prescription and use of psychoactive drugs condition. The paper drew on information provided by the research Situational diagnosis of mental health care in Brazilian socio-educational facilities¹.

In Brazil, the Statute of the Child and Adolescent (ECA) established by Law N° 8.069 of July 13, 1990² defines as children as people under twelve years of age and adolescents as those from 12 to under 18 years of age. Children and adolescents are subject to a special process of accountability when they commit an infraction, leading to compliance with socio-educational measures in facilities under State government's governance³. It should be noted that civilian adulthood does not prevent adolescents over 18 years of age from complying with socio-educational measures, and their release at age 21 is compulsory.

The socio-educational measures established in the ECA carry a gradation that must take into account adolescents' ability to comply with them, the circumstances and the severity of the offence, as follows: warning, obligation to repair the damage, perform community services, probation, semi-confinement scheme and admission to an educational institution (socio-educational facilities).

The implementation of measures aimed at adolescent offenders is regulated by Law No 12.594/20124, which establishes the National System of Socio-Educational Care (SINASE). SINASE is coordinated by the Federal Government and composed of States, Municipalities and Federal District, responsible for the development of adolescent care programs to which socio-educational measures are applied, with freedom of organization and functioning, under the terms of this Law.

In 2012, there were 20,595 adolescents in compliance with socio-educational measures of hospitalization, temporary hospitalization and semi-liberty. The State of Minas Gerais was among the States that least applied such socio-educational measures (there were 69 adolescents in restrictive freedom measures per 100,000 inhabitants in 2012). The State of Rio Grande do Sul was very close to the national rate of implementation of these measures: 92 adolescents deprived of their liberty per 100,000 inhabitants in the same year. The national rate was 100 adolescents per 100,000 inhabitants. Notwithstanding,

socio-educational facilities were overcrowded³ in both states

At the beginning of the current decade, the re-socialization conditions of adolescents deprived of their liberty were admittedly deplorable in most of the state USEs. A report from the Federal Executive Branch pointed to the need for more state investments in the structure of hospitalization establishments. It found that many physical facilities were inadequate, with serious shortages of human resources and environments conducive to the re-education of adolescents and their reintegration into society⁵. Thus, it is not surprising that the proportion of repeat offenders was 44% in 2012⁵.

It is recognized in the international literature that adolescents in situations of restricted freedom show a significant set of problems in the mental health sphere^{6,7}. Karnik et al.⁸ report that there is higher prevalence of diagnosed mental disorders in adolescents in a closed regimen than in adolescents in probation programs.

Despite the magnitude of the adolescent custodial population, national studies on the subject are surprisingly scarce. Martins and Pillon⁹ study identified a high prevalence of mental disorders diagnoses (75%) among the population of 218 adolescents deprived of their liberty hospitalized in Bahia.

Another national study found that the Brazilian socio-educational system responds to the high prevalence of mental disorders among adolescents in compliance with socio-educational measures of hospitalization, with the extensive and cumulative use of different classes of psychiatric medication¹⁰.

It is thus not fortuitous that Article 64 of Law N° 12.594/2012⁴, which establishes the SI-NASE explains that "the treatment to which the adolescent is subject must observe the provisions of Law N° 10.216/2001, which provides for the protection and rights of people with mental disorders and redirects the mental health care model" (Brazil, Presidency of the Republic, Law N° 12.594/2012).

It is important to point out that this alignment of SINASE with the psychiatric reform agenda presupposes the governmental assurance:

(1) regarding access to and quality of treatment for people with mental disorders, preferably in the out-of-hospital public mental health care network, that is, at mental health outpatient clinics, Psychosocial Care Centers, Community Centers or other settings of the health care network;

- (2) regarding the articulation of socio-educational programs with the local mental health care network, and the health network, in general, aiming at the inter-institutional building of permanent social reintegration programs for adolescents with mental disorders;
- (3) regarding prohibiting adolescents with mental disorders from being confined to special wards or spaces, where social reintegration of these adolescents is the permanent goal of the socio-educational service and health teams;
- (4) regarding the treatment of mental disorders by clinical criteria (never punitive or administrative), and treatment is decided jointly with the patient, their relatives and the multi-professional team¹¹.

People agree that Law No 10.216/2001 transformed the original objectives of the Brazilian mental health care reform into public policy, with substantial success in reducing beds in psychiatric hospitals and developing community care alternatives¹².

Since then, Brazilian mental health policy has been building on four guidelines: 1) ensuring the civil rights of people with mental disorders; 2) eliminating the asylum model; 3) protecting patients against being cared for at psychiatric hospitals; and 4) developing a diverse and community-based network to provide access for people with mental disorders¹³.

While late, because prisons and socio-educational devices were not the object of institutional deconstruction, the 2012 SINASE guidelines indicate the necessary subordination of mental health care to the proposals of the psychiatric reform.

Faced with this institutional norm, the theoretical issue that guides this paper concerns the antinomy of the mental health policy (decentralized and community-based) guidelines before the insulation of adolescent custody institutions within state governments.

In the hypothesis of this paper, USEs' vertical governance may be associated with the use of specific rules to address the health needs of adolescents in deprivation of liberty, often making decisions that are not consensual in the external world. Hence, international experience reveals that the internal rules of closed institutions usually challenge the legal and normative framework of public policies proposed for the external world¹⁴.

Thus, when the Ministry of Health places the restructuring of mental health care for adolescent offenders on the public agenda, USEs' state managers have to deal with the institutional challenge of developing a new governance of the organization of their services. Two ideal types of governance are recognized in the field of social sciences: vertical (command and control) and horizontal governance¹⁵.

Choosing the governance mechanism in public management is directly associated with transaction costs that managers are willing to shoulder in the relationship with third parties, that is, in sharing responsibilities with other public agents. If managers have the assurance that the partners will behave cooperatively or appropriately to their expectations and values, they will use horizontal governance and seek articulation with other levels of government or society for the development of the activity for which they are responsible. Otherwise, they will maintain vertical management in their own governmental body¹⁶. The guidelines of the Psychiatric Reform that normatively informs SINASE's proposition directly address the hegemonic vertical governance of the organization of mental health care of adolescents deprived of their liberty.

This verticalization reflects the level of distrust that government agents place on third parties or the costs of contractualizing which they are willing to pay to account for social responsibility.

Nevertheless, it is possible to suppose that the governments operate in constant negotiation on the optimal scale of verticalization in which they intend to operate their production or provision of mental health services in the socio-educational system. They can choose to verticalize the production or provision of services to minimize the problem of the agent, that is, the excessive power of third parties that jeopardizes the preferences or coalitions of interest around the development of socio-educational activities¹⁶.

Vertical integration of mental health care may be the preferential governance option of the state level in situations of uncertainty in relation to municipal governments, strengthening the trend towards organizational closure of state custody devices. It remains to be answered whether the preferential choice of state governments favors the well-being condition of the adolescent population under their responsibility.

Methodology

This paper used combined strategies for collecting primary and secondary information to describe the pattern of mental health care in the socio-educational hospitalization facilities (USEs). The use of psychoactive drugs is a marker of the adequacy and quality of mental health care to the adolescent in restricted freedom.

The analytical category *medicalization* includes situations in which an individual or collective problem is defined in medical terms, often as disease or disorder, or strictly uses a medical intervention to treat it¹⁷. Recent publications have highlighted the pharmaceutical component of medicalization, labeling it pharmaceuticalization. The term designates the process by which social, behavioral and bodily conditions are treated or considered in need of medical treatment by doctors, patients or both¹⁸.

We used a cross-sectional study with a case study design. The case study facilitated the description of the governance pattern of the socio-educational installations in two Brazilian states, typifying the experiences investigated, as Gerring¹⁹ suggests, due to the typology of the vertical governance model of Rio Grande do Sul and the deviant model (Minas Gerais) in relation to the hegemonic national pattern.

In addition to the descriptive statistics and analysis of the differences between proportions, this paper demonstrates the odds of adolescents under mental health treatment prior to the socio-educational measure of deprivation of liberty receiving a diagnosis, being on medication, under mental health treatment during hospitalization, having undergone the isolation measure and receiving emergency medication. The paper assumes that the incidence coefficient of an event is a risk measure of a population group in any context²⁰.

Data were collected through the following strategies:

- 1) Interview with a structured instrument with the responsible for the management of USEs
- 2) Transcription of medical records information of adolescents under a restricted freedom system in the facilities to a structured form.
- 3) Open interviews with key informants: central level managers of the socio-educational system, facility managers, and psychiatric.

We informed each responsible institutional participant about the purpose of the study, the issue of confidentiality and the non-mandatory participation. Those who agreed to participate signed the Informed Consent Form (ICF). The identity of the adolescents was kept confidential and information confidentiality and privacy was assured.

The research ethics committee, Oswaldo Cruz Foundation, National School of Public Health approved the study.

The Rio Grande do Sul case study

Most of the medical records drawn in the USEs sample from Porto Alegre were male adolescents serving socio-educational measures (Table 1). The Regional Socio-Educational Care Center of Porto Alegre I (POA I), which is responsible for the admission of adolescents in the city of Porto Alegre, concentrated more than half of the records analyzed (56.5%). Among the adolescents whose information was analyzed, those who lived in Porto Alegre (62%), white (53%) and very low schooling predominated (87% did not finish elementary school).

The proportion of recidivist adolescents was also very high (55%). The percentage of adolescents who underwent mental health treatment before admission achieved two digits (19%), indicating the relevance of the issue in the custodial population, although there was no statistically significant association between recidivism and mental health treatment before admission. The main offence that resulted in deprivation of liberty in Porto Alegre was robbery followed by homicide, following the national standard³. The relevance of mental health care in Porto Alegre's USEs is revealed by the fact that 86% of the medical records reported that adolescents had undergone some treatment during the current admission (Table 1). The research considered as "mental health treatment" both the use of psychiatric medication and other care modalities, such as psychological care or participation in therapeutic workshops.

The *strictly internal* mental health treatment that is performed in the USEs themselves predominated in the Porto Alegre facilities (72.5% of the adolescents being treated). Only 25 adolescents underwent external treatment, mainly in some type of CAPS (88%) in Porto Alegre. There were no referrals in mental health in the PHC structures for any of the adolescents whose medical records were analyzed.

We should reiterate that the socio-educational system of Rio Grande Sul was chosen for the case study due to the vertical governance of mental health care in place.

Hence, qualitative interviews reported that health professionals have been working in the so-cio-educational system since the 1970s (Interview with Central Level Manager. Porto Alegre, June 2, 2015).

Table 1. Distribution of adolescents in mental health care in Porto Alegre USEs.

Facility Name	Hospitalized Adolescents (A)	$A do lescents\ with\ Mental\ Health\ Care\ Record\ (B)$	B/A*100
POA I	104	81	77.9
CASE	20	18	90.0
CSE	60	59	98.3
Total	184	158	85.9

Source: Research "Situational diagnosis of mental health care in Brazilian socio-educational facilities". DCS/ENSP/Fiocruz. 2015.

As observed in the visits of the research team, outpatient services are provided in the physical space of the facilities. Another characteristic of vertical organization of mental health care within FASE is the strong presence of psychiatrists who work in the very socio-educational installation and are recruited through a medical cooperative, which is a common procedure in Rio Grande do Sul, and is widely used by municipalities. In FASE, contracts of psychiatrists through cooperatives have been around for 10 years (Interview with Central Level Manager. Porto Alegre, June 2, 2015).

Psychologists working in FASE are dedicated to the management of crimes in the sphere of resocialization. They make brief interventions towards change of life project, accountability for the crime and development of self-criticism. There are no therapies or groups. Facilities lack treatment alternatives, besides medication (Interview with Psychiatric. Porto Alegre, June 3, 2015).

The provision of services in the network of mental health and PHC of Porto Alegre for adolescents is also restricted. CAPS ADs in Porto Alegre only deal with serious cases mainly related to the use of cocaine and crack. CAPSI rarely manages FASE adolescents (Interview with Central Level Manager. Porto Alegre, June 2 2017).

Patients' profiles are selected by the different CAPS of the city, which hampers the referral of adolescents, who are usually available for treatment due to the secondary gains associated with the momentary exit of the prison environment and the possibility of a ride or flight (Interview with Psychiatric. Porto Alegre, June 2, 2015).

Currently, FASE emergency cases — usually psychotic and suicide risk — are referred to the mental health emergency unit of the Cruzeiro do Sul emergency room. If hospitalization is required, adolescents are referred to 2 private clinics (São José and Gramado) (Interview with Central Level Manager. Porto Alegre, June 2, 2015). In general,

disciplinary agitation cases are monitored within the very USEs and are evaluated by the health team, with part-time nurses and nursing technicians on a 24/7 basis, with active participation of socio-educational workers. If necessary, psychiatric medication is used. Emergency prescription occurs without a doctor. Restraint cuffs may be used at first. Another option also used is by fabric straps containment.

The vertical regime acts in the face of the conditions of high prevalence of mental disorder identified in the population guarded by the USEs. As already mentioned, 19% of adolescents had a history of mental health treatment prior to the deprivation of liberty measure. Table 2 also shows that 80% of the adolescents admitted in Porto Alegre had at least one (1) mental health diagnosis in the medical records. The review of medical records also showed that 37% of the adolescents received two (2) psychiatric diagnoses.

The most frequent psychiatric diagnosis was conduct disorder, received by 73 adolescents (40%). The second most frequent diagnosis was that of disorders resulting from the use of psychoactive substances (27%). The third was that of adjustment disorders (21%). There is no doubt that there is the diffuse and innocuous understanding that adaptation disorders are usually due to the institutionalization itself with loss of freedom. In general, the diagnosis of conduct disorder is attributed to young people who have difficulty with social rules (Interview with Psychiatric, Porto Alegre, June 3, 2015).

Research on medication use shows that 151 (82%) adolescents received some type of psychiatric medication during their admission in Porto Alegre, of which 113 (61.4%) used medication on the day their medical records were examined (Table 2).

The research in Porto Alegre points to convergent patterns in the [high] prevalence of the prescription of psychoactive drugs of facilities

surveyed. In the CSE (male facility), only one adolescent out of 60 in compliance with deprivation of liberty had not used psychoactive medication during hospitalization. The same pattern occurs in the female establishment, where only two (2) adolescents of the 20 people admitted had not used medication (10%). In POA I, the proportion of adolescents using psychoactive drugs was somewhat less dramatic, although it reached 71% of the medical records reviewed.

Table 2 shows the simultaneous use of multiple psychoactive drugs by 38% of the adolescents at the time of the study, confirming the evidence obtained by the national research already commented¹⁰. Table 2 also shows that 21.3% of adolescents in deprivation of liberty were being medicated with three or more psychotropic drugs concomitantly.

The high level of pharmaceuticalization calls into question the context of the activities of socio-educational workers who mention work overload in insufficient numbers and in an unhealthy environment, without pedagogical activities and in a continuous overcrowding situation. Overall, rates of psychiatric diagnoses and drug prescriptions have increased sharply in recent years, partly due to greater acceptance of mental disorders and increased access to care, but also due to the proliferation of diagnoses and over-treatment²¹.

In any case, there may an expectation from part of the internal team that the adolescent be medicated and even sedated (Interview with Central Level Manager. Porto Alegre, June 2, 2015).

In this context, the prescription of emergency medication both orally and intramuscularly (in the medical jargon "If necessary" or "SOS") allows the team to use psychiatric medication without the presence of the doctor. The survey found that 71 medical records (39%) had a record of this prescription mode. The most common justifications in the Porto Alegre facilities were insomnia (38 out of 71) and agitation (24 out of 71).

The Minas Gerais Case Study

The medical records surveyed in Belo Horizonte, as was the case of Porto Alegre, belonged predominantly to male adolescents – 173 (80%) out of a total of 215. Belo Horizonte dwellers medical records totaled 135 (63%) and 33 (19%) were whites. Adolescents reportedly black were predominant and 90% of adolescents did not complete elementary school. In relation to offences ensuing admission at the institution, the most frequent cause was robbery (60%), followed by homicide (11%). Recidivists totaled 17.7% of the sample.

Medical records' information show that 88 (40.9%) of the adolescents had undergone some mental health treatment during the current hospitalization (Table 3). The use of psychiatric medication and other mental health care modes (mainly visits by a psychologist) were deemed mental health treatment. Fifty-seven adolescents (26.5%) performed some type of non-drug treatment. The provision of mental health care varied

Table 2. Characteristics of mental health care in the socioeducative facilities of Porto Alegre in 2014 (N = 184).

Descriptors	Frequency Percentage and	
Descriptors	rrequency	Confidence Interval
No diagnosis	37	20 (14; 26)
1 diagnosis	68	37 (30; 44)
2 diagnoses	68	37 (30; 44)
3 diagnoses	11	6 (3; 9)
Used medication in current hospitalization	151	82 (76; 88)
Did not use medication in current hospitalization	33	18 (12; 24)
Using one medication at the time of collection in the medical record	113	61 (54; 68)
Using two medications at the time of collection in the medical record	69	38 (31; 45)
Using three or more medications at the time of collection in the medical record	43	21 (15; 27)

Source: Research "Situational diagnosis of mental health care in Brazilian socio-educational facilities". DCS/ENSP/Fiocruz. 2015.

significantly among the facilities studied. In the Horto unit, the proportion is 23.4% of patients, but reached 64% of the adolescents in the São Jerônimo women's facility, where 20% of female adolescents had a history of mental health treatments.

External services were the most used for the treatment of adolescents (59%). Only 24% of those who requested them were exclusively treated only within the scope of the USEs. A residual portion of 15% of adolescents received care both internally and externally.

Family health facilities are the most important reference for external care (33% of adolescents received care in these municipal structures). Qualitative interviews indicated that mental health care in family health units, at the time of the research, was still being consolidated.

Work direction had already been aiming at linking mental health care to the provision of the Unified Health System a few years earlier. One measure to step up this guideline was the gradual transfer of psychiatrists from the USEs' teams to the Municipal Health Secretariat (Interview with Central Level Manager. Belo Horizonte, August 10, 2015).

The residual CAPS participation in the attendance is noteworthy: only seven adolescents attended a CAPS AD (Minas Gerais Drug Addiction Center – CMT) and five in the only children and youth CAPS (CERSAMI) in the city. In total, 16 adolescents were attended in a private facility (linked to public service) specialized in the care of issues related to the use of alcohol and other drugs (Center for Care and Protection to Young Drug Users - CAPUT).

At the time of the research, the CAPUT was being disconnected from the SUS and, therefore, from the service to adolescents. Qualitative interviews indicated that the decision was controversial among managers and displeased adolescents. The CAPUT was the main reference for problems

associated with the use of psychoactive substances. Finally, seven adolescents had records of care in a psychiatric hospital (Psychological Center for Adolescence and Childhood – CEPAI), which provides emergency and outpatient services for people aged up to 18 years.

In the USEs studied, the situations that generate the mental health treatment initiative are associated with the acute conditions produced by anguish caused by the prison environment, which leads, in some cases, to even attempted suicide by hanging (especially with the use of bed sheets). A protocol of referral to CEPAI (psychiatric emergency) is applied in these cases, where the adolescent can be medicated, returning to the facility. This type of situation ensues a subsequent demand to the mental health network.

In other cases, the adolescent is monitored in the mental health network and commits an offence. In this case, he is automatically remanded to the location where he was receiving care. If adolescents were from the inland of the State, treatment could be performed at the CEPAI (state psychiatric facility with emergency and ambulatory services).

Another reason for care is the complaint of insomnia. Insomnia conditions lead to the use of medication. As a strategy to reduce the use of medication, an insomnia group (conversation wheel) was created at the São Jerônimo facility, which tries to unlink the insomnia issue from the use of psychotropic drugs. Notwithstanding, when mental suffering is more related to caution, there are attempts to manage it within the facility, but internal psychological care has low availability because professionals are very concerned with judicial matters.

Even another type of motivation for referral to psychiatric care stems from agitated or aggressive behavior, which interferes with the routine of the establishment (Interview with Psychiatric. Belo Horizonte, August, 11, 2015).

Table 3. Distribution of adolescents under mental health treatment in the USEs of Belo Horizonte in 2015.

Facility	Total Hospitalized Adolescents (A)	Total under mental health treatment (B)	B/A*100
Horto	64	15	23.4
Santa Clara	70	27	38.6
CEAD	39	19	48.8
São Jerônimo	42	27	64.3
Total	215	88	41

Source: Research "Situational diagnosis of mental health care in Brazilian socio-educational facilities". DCS/ENSP/Fiocruz. 2015.

It is when somehow the facility affirms its safety device nature and thus resorts to psychiatric services.

In February 2015, the Municipality of Belo Horizonte was empowered to receive the incentive for Comprehensive Health Care for Adolescent Offenders. As already mentioned, the Municipal Operational Plan for Comprehensive Health Care to adolescents offenders mainly aims at targeting the treatment of adolescents to the SUS Health Care Network. With regard to mental health, it is hoped to discontinue the circuit Socio-educational Facilities — CEPAI, which shows an intervention focused on urgency and hospitalization (Interview with Central Level Manager. Belo Horizonte, August 10, 2015).

The issues of agenda coordination and operational hurdles to external service delivery were highlighted in the interviews. Most USEs' directors emphasized the lack of readiness of family health scheduling (only the Santa Clara facility did not raise the issue). Another critical operational limitation to external care is associated with unavailable transportation to transfer adolescents in the city, with loss of scheduled visits. The operational limitation is aggravated by shortage of staff to accompany young people on commutes.

Table 4 shows that the proportion of adolescents in deprivation of liberty with a psychiatric diagnosis in Belo Horizonte is relatively low. Especially, the situations of adolescents with information of two or more diagnosis in the medical records are residual (5% of the cases).

The health teams choose not to formalize the diagnoses in Belo Horizonte. In case discussions, the diagnostic hypotheses of adolescents are mentioned, but not recorded in medical records. One of the possible causes is a caution regarding the stigmatizing way in which the legal system addresses the issue and that ends up further damaging the identity of the adolescents. This prevalence may indicate the care of the mental health team in avoiding the effect of diagnostic labeling on the future of the adolescent (Interview with Central Level Manager. Belo Horizonte, August 10, 2015.

The influence of psychoanalysis on the education of professionals possibly contributes to the caution of the mental health team. Psychoanalysis has a more structural rather than a phenomenological view of diagnosis and, therefore, the classic diagnostic categories of psychiatry lose their meaning²².

The health team's parsimony produces an impact that deserves careful reflection because,

among the 88 adolsecents who underwent mental health treatment, 54 had no records of diagnosis in the electronic medical records of the Municipal Health Secretariat or in the medical records of the socio-educative units surveyed. In addition, four adolescents that had diagnostic records in the medical records were not under mental health care.

It is important to consider that, among the four indicators of health monitoring and evaluation defined for the Municipal Plan for Adolescent Care, two involve the production of diagnoses – percentage of diagnosis of mental disorder under follow-up in the Psychosocial Care Network and percentage of adolescents diagnosed for alcohol and other drugs abuse and/or addiction.

Among the 14 adolescents diagnosed with schizophrenia, 12 underwent mental health treatment during hospitalization and all received indication of medication use. At the time of the research, eight (8) were actually taking medication and six (6) underwent some form of non-drug treatment.

Table 4 reports that 35.9% of adolescents used psychoactive medication at some point in the current hospitalization, while 22.8% were using it at the time of the research team's visit. The description of the information by socio-educative facility points to a slightly different pattern in the use of medication. Two facilities (Santa Clara and CEAD) reported a proportion of use in little more than 1/3 (36%) of the adolescents. In the female facility of São Jerônimo, 45% of female users received psychiatric medication during hospitalization. Prevalence at the Horto facilities in Belo Horizonte, with 26.6% of adolescents with medication use during hospitalization.

The qualitative interview indicates that the explanation for the low medication use in the Horto CSE is that its deprivation of liberty regime is soft because it allows exits and many external activities. It is also a more recent facility already planned within a less restrictive philosophy of interaction of adolescents with the external social environment. There is also a greater propensity for external referrals, seeking a less medication-prone approach (Interview with Socioeducative Facility. Belo Horizonte, August 11, 2015).

In relation to the São Jerônimo facility, the use of medication above the average observed in the USEs in Belo Horizonte can be related to both the severity features of the institutional regime of the facility – as well as to the few exits

Table 4. Characteristics of mental health care in the socioeducative facilities of Belo Horizonte (N = 215).

Descriptors	Frequency	Percentage and Confidence Interval
No diagnosis	177	82 (77; 87)
1 diagnosis	27	13 (9; 17)
2 diagnoses	7	3,5 (1; 5)
3 diagnoses	4	2 (0; 4)
Used medication in current hospitalization	77	36 (29; 43)
Did not use medication in current hospitalization	166	77 (70; 84)
Using one medication at the time of collection in the medical record	25	12 (8; 16)
Using three or more medications at the time of collection in the medical record	24	11,5 (7; 15)

Source: Research "Situational diagnosis of mental health care in Brazilian socio-educational facilities". DCS/ENSP/Fiocruz. 2015.

and external interactions – and the presence of the psychiatrist attending within the scope of own facility.

Table 4 confirms the minimalist pattern of medication found in USEs in the city. We can observe that cumulative medication reaches a residual proportion of adolescents (12%) who used medication at the time of the research.

The restraint protocol due to aggressiveness and agitation includes the use of handcuffs and referral to the psychiatric emergency as a last resort. CEPAD alone acts with an individual cell within the restraint strategy. The São Jerônimo facility has three individual rooms, but is not using them in restraint strategies. Socio-educational agents and duty coordinator most often administer the restraint procedure (this is a preliminary procedure in the sphere of safety). Under prevailing rules, teenagers cannot sleep/ stay handcuffed in accommodations. Therefore, if the crisis is not resolved, they will be referred to a psychiatric emergency. During handcuff restraint, the teenager is in a more isolated environment (at the Horto facility, in the visitors' room).

Isolation procedures are standardized and are evaluated by a disciplinary committee. The most common are restrictions on activities such as sports activities, television and exits. Vocational and school activities cannot be suspended.

Table 5 confirms the strong association between the vertical governance regime and the intensive mental health care standard of diagnostic production and use of psychoactive medication. The cross-product ratio shows that adolescents deprived of their liberty in Porto Alegre were significantly more likely to have received diagnosis, psychoactive medication and mental health care and to be submitted to emergency psychiatric

medication than adolescents in the same condition in Belo Horizonte. Regarding the use of psychoactive drugs, the probability was eightfold the observed in Belo Horizonte. With regard to emergency medication use situation, Porto Alegre was 19 times more likely than Belo Horizonte.

Discussion

The concept of governance applied to the development of this paper captured the Brazilian governments' experiences in which cooperation and mediation of municipal power favored clinical choices of less emphasis on the prescription of drugs in mental health care to adolescents deprived of their liberty.

The national guidelines, in line with academic studies and clinical guidelines, in situations of deprivation of liberty, propose cautious conduct regarding medication. Psychotherapies and rehabilitation actions should be used as first-line interventions. Pharmacological management should be used when these interventions are insufficient⁸.

From a normative perspective, studies show that use of medication should include a permanent assessment of risks and benefits. Poor management of psychopharmacological intervention can lead to situations where adolescents are submitted to multiple prescriptions without a clear understanding of their interactions and possible adverse effects²¹.

Regarding psychiatric diagnoses, studies show a confluence regarding the prevalence of mental disorders in populations of adolescent offenders in situations of deprivation of liberty. It is still possible to consider the possibility of increased

Table 5. Impact of the governance regime on mental health care in USEs in Porto Alegre compared to the condition in Belo Horizonte.

Mental health care condition	Odds ratio and confidence interval	
Having a diagnosis*	18,5 (11,2; 30,6)	
Using medication at the time of survey	8,2 (5,1; 13,1)	
Having received mental health treatment during hospitalization*	8,8 (5,3; 14,4)	
Use of antipsychotics*	3,7 (2,3; 6,0)	
Having been submitted to emergency medication*	18,7 (8,3; 41,9)	

^{* 0.05} significance level of difference between governance regimes.

Source: Research "Situational diagnosis of mental health care in Brazilian socio-educational facilities". DCS/ENSP/Fiocruz. 2015.

symptoms before the situation of imprisonment. It should be emphasized that a prevalent diagnosis in Porto Alegre – that of *conduct disorders* – is a redundant definition of the very reasons that lead to the institutionalization of adolescents²³.

The situations of highly medicated adolescents, as observed in the model of vertical attention, hamper the detection of disorders. One cannot rule out the existence of serious undiagnosed mental disorders, which is not uncommon in clinical practice with adolescents. It is possible that more severe conditions are masked by substance addiction or by oppositional behavior that is more easily identifiable than other mental disorders²⁴.

Similarly, prescription of medication below what would be advisable may affect the well-being of adolescents. In many cases, proper medication is a crucial relief resource. Prescription medications for acute conditions (e.g. psychotic symptoms or suicide risk) are not only acceptable but an ethical imperative²⁵.

This paper further argues that the option for horizontal governance is a non-trivial institutional challenge for municipalities and states due to the prescriptive nature of national policy in the field of mental health care. Ensuring civil rights of people with mental disorders is a crucial guideline¹³.

The text demonstrates that mental health care in the vertical environment of the socio-educational system of the State of Rio Grande do Sul is associated with the high prevalence of diagnosis and use of psychoactive medication. This high prevalence seems to indicate that sanctions of deprivation of liberty for infractions may favor, in the vertical environment, medicalization and pharmaceuticalization decisions that affect the rights of adolescents in the field of mental health²³.

Vertical governance structures that have limited provision of care within national policy guidelines should shift mental health care from inpatients to other devices. It is necessary to discuss where care should be performed, especially before acute mental health intercurrences during hospitalizations in the socio-educational system. Although the PNAISARI guidelines for articulation between federative bodies are very recent, the actions of matriciation between municipal health and the socio-educational system are a strategic procedure for the reform of mental health care in Brazilian custodial institutions that seems extremely promising. The case study on horizontal cooperation, as observed in Minas Gerais, offers encouraging evidence toward a sectorial reform within the feasible and ethically appropriate federative pact.

Collaborators

NR Costa and PRF Silva contributed to the design, research, development and paper review.

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