

# Trends

in Psychiatry and Psychotherapy

## **JOURNAL ARTICLE PRE-PROOF** **(as accepted)**

Trends

### **Addressing Mental Health Needs in Low- and Middle-Income Countries: The case of São Caetano do Sul, Brazil**

Flavia Ismael, Artur Ramos, Rafael Erik de Menezes, Regina Maura Zetone Grespan, Cibele Cristine Remondes Sequeira, Jair de Jesus Mari, João Mauricio Castaldelli-Maia

<http://doi.org/10.47626/2237-6089-2023-0674>

Original submitted Date: 16-May-2023

Accepted Date: 29-Apr-2024

This is a preliminary, unedited version of a manuscript that has been accepted for publication in Trends in Psychiatry and Psychotherapy. As a service to our readers, we are providing this early version of the manuscript. The manuscript will still undergo copyediting, typesetting, and review of the resulting proof before it is published in final form on the SciELO database ([www.scielo.br/trends](http://www.scielo.br/trends)). The final version may present slight differences in relation to the present version.

## Addressing Mental Health Needs in Low- and Middle-Income Countries: The case of São Caetano do Sul, Brazil

Flavia Ismael<sup>1,2</sup>, Artur Ramos<sup>3</sup>, Rafael Erik de Menezes<sup>1</sup>, Regina Maura Zetone Grespam<sup>1,2</sup>, Cibele Cristine Remondes Sequeira<sup>1,2</sup>; Jair de Jesus Mari<sup>4</sup>, João Mauricio Castaldelli-Maia<sup>5,6,7</sup>

1 – Section of Mental Health, Department of Health, São Caetano do Sul, SP, Brazil

2 – Municipal University of São Caetano do Sul (USCS), São Caetano do Sul, SP, Brazil

3 – Psychosocial Care Center for Substance Use Disorders Butantã (CAPS-AD Butantã), São Paulo, SP, Brazil

4 – Department of Psychiatry, Federal University of São Paulo, São Paulo, SP, Brazil

5 – Department of Neuroscience, Medical School, FMABC University Center, Santo André, SP, Brazil

6 – Department of Psychiatry, Medical School, University of São Paulo, São Paulo, SP, Brazil

7 - Instituto Perdizes (IPer), Hospital das Clínicas HCFMUSP, Faculdade de Medicina, Universidade de São Paulo, São Paulo, SP, Brazil.

Corresponding Author:

Flavia Ismael

flaviaism@yahoo.com.br,

### Abstract

São Caetano do Sul, a city in southeastern Brazil, boasts exemplary social indicators and healthcare services, with a population of 162,763 and a density of 9,736.03 inhabitants/km<sup>2</sup>. Allocating 25% of its budget to healthcare, the city's mental healthcare services adhere to the National Mental Health Policy. Structured services include a CAPS-II, CAPS-AD, outpatient teams, and teams in various locations. Initiatives since 2000 include inaugurating a CAPS-AD in 2006, a psychiatric emergency service in 2010, and a CAPS-II in 2016, relocating CAPS-AD in 2019, and establishing the Cuca

Legal Project in 2022. São Caetano do Sul has a Mental Health Risk Classification Protocol to aid clinical decision-making. Developing care lines for various groups, it offers programs like smoking prevention, school psychology, and obesity support. Collaborating with community centers, these facilities serve as teaching environments. The mental health care network focuses on five axes: Communication, Care, Prevention, Management, and Education, with specific proposed actions and competencies. Despite progress, challenges remain. Expanding access, reducing stigma, and implementing robust monitoring are crucial. São Caetano do Sul's experience offers valuable insights for similar urban settings in LMICs developing mental health programs.

Keywords: Brazil, mental health, services, LMIC, Psycho-Social.

## 1. Introduction

The municipality of São Caetano do Sul is located in the southeastern region of Brazil, specifically in the greater ABC region of São Paulo.<sup>1</sup> It has a territorial area of 15,331 km<sup>2</sup>, with an estimated population of 162,763 people and a population density of 9,736.03 inhabitants/km<sup>2</sup>. São Caetano do Sul has the best social indicators in the entire country, and is considered an exemplary city in various aspects of the so-called HDI (Human Development Index) of the UN,<sup>2</sup> ranking 1st on the list of Brazilian municipalities by HDI 0.862. The high quality of healthcare services is a distinguishing factor in the city of São Caetano. To maintain this benchmark status, the municipality allocates approximately 25% of its budget to healthcare,<sup>3</sup> well above the minimum percentage required by the Federal Constitution, which is 15%.

Regarding mental healthcare services, the municipality is included in the Regional Plan of the Psychosocial Care Network (RAPS) of the Greater ABC region, RRAS 1,<sup>4</sup> and has a structured network of mental healthcare services. Among the services offered and that make up the network are a CAPS II; an extended CAPS AD II (there is an internal division of patients with CAPS and ambulatory profiles); two outpatient mental health teams (one type 2 and one type 3) for children at the Child and Adolescent Health Unit (USCA). In addition, there are mental health teams in the following locations: Family Health Support Centers (NASF),<sup>5</sup> - a service linked to primary care that identifies demands and provides support in the local territory; Integrated Centers for the Elderly (CISE),<sup>6</sup>; Neonatal Screening and Sensory Stimulation Center (CTNEN); Comprehensive Women's Health Center (CAISM);

Center for Prevention and Care of Infectious Diseases (CEPADI); Municipal Hospital Complex; and Municipal Psychiatric Emergency Service. The actions of the mental healthcare teams are anchored in the National Mental Health Policy, supported by Law 10.216/01,<sup>7</sup> which seeks to consolidate an open and community-based mental healthcare model. This means ensuring the free circulation of people with mental disorders through services, territory, and the city, and offering care based on the resources that the community provides.

## 2. Timeline

Prior to 2000, there was a mental health outpatient clinic with four psychiatrists offering individual psychological treatment without entry or discharge criteria, resulting in long waiting times. In February 2006, a CAPS AD was inaugurated. In October 2010, a psychiatric emergency service was opened at Albert Sabin Hospital. In May 2016, a CAPS II was inaugurated. In September 2019, the CAPS AD was relocated to its own facility. In August 2020, the ambulatory mental health teams at USCA were qualified. In August 2022, the Cuca Legal Project,<sup>8</sup> was established.

## 3. Community Involvement

The participation of the general public in the development of public policies for mental health is ensured through the implementation of Municipal Councils, such as the Municipal Council for Children and Adolescents (CMDCA),<sup>9, 10</sup> Municipal Health Council (CMS),<sup>11</sup> Municipal Drug Policy Council (COMAD),<sup>12</sup> Municipal Council for the Elderly (CMI),<sup>13</sup> and Municipal Council for People with Disabilities (COMPED),<sup>14</sup>. The city also holds municipal conferences on health and mental health, which include representation from various social segments, to assess the health situation and propose guidelines for the development of health policy at the municipal, state, and federal levels. Additionally, the services regularly hold assemblies with the users of the health facilities to deliberate on everyday decisions related to patient care.

#### 4. Mental Health Risk Classification Protocol

Mental health issues are chronic conditions that require continuous care within the healthcare system, at different levels of complexity and with the goal of providing comprehensive attention. Over time, these conditions can worsen and require specific and immediate interventions, calling for other points of attention beyond those already involved in continuous monitoring. Therefore, the municipality of São Caetano do Sul has established a Mental Health Risk Classification Protocol, which serves as a tool to support clinical decision-making in regulating access to points of attention within the RAPS (Psychosocial Care Network) for acute cases. It is a clinical risk management process that aims to establish priorities for the care of mental health users who access the healthcare system and to define the most appropriate care resource for each case. As such, it aims to identify the most severe cases, allowing for a quicker and safer response according to the potential risk, health complications, or level of suffering. In addition to defining risk, the Protocol also serves as a support for healthcare teams to assess the most suitable care resource for each case, seeking to improve referrals and patient follow-up within the healthcare network.

#### 5. Care Dimensions

The Care Dimension is characterized by technical standardizations that explain information related to the organization of health actions offered by the system. It describes the patient's itinerary routines, including information regarding the actions and activities of promotion, prevention, treatment, and rehabilitation to be developed by a multidisciplinary team in each healthcare service. It enables communication between teams, services, and users in a Health Care Network, focusing on action standardization and organizing a care continuum.

Regarding mental health care lines, the municipality of São Caetano do Sul is developing the care lines for self-inflicted violence, the LGBTQI+ population, and depression. The obesity care line has been in place in the municipality since 2020.

## 6. Available Programs

The network of mental health care services revolves around strategies adopted to achieve its objectives in preventing and treating the municipality's population with quality. Some programs offered by the services that make up the mental health network of São Caetano do Sul are highlighted in Table 1.

Table 1. Programs offered by the services that make up the mental health network of São Caetano do Sul

<b>Program Name</b>	<b>Description</b>
Smoking Prevention and Treatment Program, <sup>15-17</sup>	Implementation of support groups and pharmacological intervention, with the help of a multidisciplinary team, to provide means to quit smoking. The service that was previously provided at the CAPS AD (Psychosocial Care Center) has been expanded, and now six Basic Health Units (UBSs) conduct support groups, thus expanding access, <sup>22-29</sup> .
Cuca Legal Program	School Psychology - Institutional supervision work that offers support to the school technical staff in managing and preventing child and adolescent mental health in school units.
Health in Schools Program, <sup>18</sup>	A program that aims to contribute to the full development of public school students in basic education, through the coordination between Primary Care health professionals and education professionals.
Child Violence Prevention Program	Multidisciplinary care for children and adolescents who are victims of violence/sexual abuse residing in São Caetano do Sul, in the age range from zero to 17 years and 11 months and their families, aiming to prevent emotional, psychological and psychiatric complications that affect the development of this specific population.
"Juntas somos mais fortes" Program	Women in Vulnerable Situations - Constitution of an outpatient team in the perspective of expanding the offer of specialized mental health care to meet the demand for care for a public of women in situations of psychological suffering due to physical, sexual and/or psychological violence.
"Incluarte" Program	Solidarity Economy - Constitutes an alternative way to organize social relations according to principles that value the human being, work, justice,

<b>Program Name</b>	<b>Description</b>
	solidarity, and sustainability. This program is directed towards patients of CAPS II and AD in São Caetano do Sul.
"Daily Health Group" Program	Groups that offer support and nutritional, sports and psychological guidance, aiming to improve the quality of life of the city's population that is in an obesity situation.
"Family Support and Guidance" Program	Supporting, strengthening, and equipping families to fulfill their parental duties together with the State and society, in terms of protection and care provided to children and adolescents at each stage of development.

## 7. Centers for Health Promotion

Health Promotion, according to the Ottawa Letter,<sup>19</sup> encompasses five areas of action: the development and implementation of healthy public policies, the creation of healthy environments, community empowerment, the development of individual and collective skills, and the reorientation of health services.

Following this logic and understanding health in a broad sense, mental health teams collaborate with community centers for socializing, sports, leisure, and culture offered by the municipality of São Caetano do Sul (Table 2).

Table 2. Community centers for socializing, sports, leisure, and culture offered by the municipality of São Caetano do Sul.

<b>Facility Name</b>	<b>Description</b>
Integrated Centers for Health and Education for the Elderly (CISEs)	Through joint actions in the areas of health, education, leisure, social issues, and citizenship, the CISEs are responsible for the care of the elderly population in the municipality that leads the country in terms of longevity, according to the "Atlas of Human Development in Brazil." <sup>20</sup>
São Caetano do Sul Arts Foundation	An institution of education and research in the arts that offers technical and free courses in the areas of visual arts, dance, music, and theater. It provides its students with experiences of artistic creation and dissemination aimed at collective practice, through cultural action in its headquarters and in various locations within and outside the city.

Facility Name	Description
Municipal School of New Technologies (EMNOVA)	The school, with its course offerings, fosters access to technology knowledge as a strategy for qualifying educational processes, professional development, solving family demands, and digital inclusion. <sup>21</sup>
Clubs	São Caetano do Sul has 14 municipalized clubs that offer sports activities in various modalities for the child, youth, and elderly population of the city.

## 8. Health Education

Mental health facilities also serve as teaching environments, and as such, they have a structured program and contracted services to allow residents to work alongside their supervisors throughout their training. These facilities receive medical interns, psychiatry residents, and interns from psychology, occupational therapy, and nursing programs.

## 9. Mental Health Human Resources

The administrative team of the municipal Mental Health program includes two coordinators, three technical coordinators, three administrative coordinators, and three nursing technical supervisors. The technical team comprises 34 psychiatrists, 34 psychologists, four occupational therapists, one psycho-pedagogue, seven nurses, three nursing technicians, one nursing assistant, one nursing attendant, eight social workers, two pharmacists, two pharmacy assistants, four workshop facilitators, six janitors, and four security guards.

## 10. Axes of Interventions

The actions proposed to achieve the goals of the mental health care network in the municipality are divided into five axes: Communication, Care, Prevention, Management and Guidelines<sup>3</sup> and Permanent Education (Table 3).



Table 3. Mental Health Axes in São Caetano do Sul

<b>Proposed Actions</b>	<b>Competence</b>
<b>Communication Axis</b>	
Conduct awareness campaigns for the population about prevention and symptoms of mental health problems through social media and printed materials.	Communications Section of the Health Department / Mental Health Section of the Health Department
Establish a frequency for publishing posts on City Hall social media with content aimed at providing clarification on prevention and symptoms.	Communications Section of the Health Department / Mental Health Section of the Health Department
Produce graphic materials for health units such as posters and leaflets with content focused on prevention and symptoms.	Communications Section of the Health Department / Mental Health Section of the Health Department
City Hall Mental Health Week.	Communications Section of the Health Department / Mental Health Section of the Health Department
Keep information updated on City Hall portals.	Communications Section of the Health Department / Mental Health Section of the Health Department
<b>Assistance Axis</b>	
Registration of 100% of CAPS users in the strategic health program of the primary care family health (AB).	Specialized Services / AB
Increased active search for patients.	Specialized Services / AB
Expansion of the multidisciplinary care offer.	Health Department, especially the Mental Health Section
Strengthening the socio-assistance network aimed at socio-family monitoring and inclusion of children,	Department of Assistance and Social Integration

<b>Proposed Actions</b>	<b>Competence</b>
adolescents, and young people who use alcohol and other drugs in social reintegration programs.	
Encouraging the creation and participation in vocational training courses, leisure, cultural, and sports activities.	Department of Health, Education, Assistance and Social Integration, and Culture
Strengthening the solidarity economy in the social inclusion and work of alcohol and other drug users.	Specialized Services
<b>Preventive Axis</b>	
Provide continuous drug prevention programs for children and adolescents in the education system.	Department of Health, Education, Safety, and City Counsel of Drugs
Identify and discuss cases of children and/or adolescents with learning, emotional, behavioral problems, and their family dynamics in a network.	Connected Territory
Strengthen the discussion of issues related to human development, social vulnerability, and topics related to drug use as a transversal and interdisciplinary theme within the school curriculum.	Department of Health, and Education
<b>Management and Guidelines Axis</b>	
Annually conduct educational contests on the theme of alcohol and other drugs in the education system.	Department of Health, Education, and City Counsel of Drugs
Develop an intersectoral action plan to incorporate leisure, cultural, and sports activities in areas of greater vulnerability, aiming to prevent the use of psychoactive substances and mental health issues.	Health Department, especially the Mental Health Section
Strengthen the Municipal Mental Health Program.	Health Department

<b>Proposed Actions</b>	<b>Competence</b>
Annually update and publicize the list of services provided by the municipality's RAPS (Network of Psychosocial Attention Services).	Mental Health Section of the Department of Health
<b>Continued Education Axis</b>	
Ensure a space for sharing and monthly meetings to exchange experiences among professionals in the intersectoral service network.	Mental Health Section of the Department of Health
Ensure that the decentralization of services occurs according to the demand's needs.	Mental Health Section of the Department of Health
Create flows and procedures for the joint action of health, social assistance, and education services and workers, to be validated and agreed upon by workers, managers, and service users.	Mental Health Section of the Department of Health
Encourage the participation of representatives from civil society through broad dissemination of the Councils and educational campaigns on popular participation.	Mental Health Section of the Department of Health
Ensure the training of councilors (representatives of government and civil society) through participation in congresses, courses, lectures, forums, etc.	Mental Health Section of the Department of Health
Ensure that any legislation project related to the theme is submitted for consideration to the Legislative Chamber.	Mental Health Section of the Department of Health
Ensure the ongoing training of specialized health teams and primary care.	Health Department, especially the Mental Health Section
Mobilize and ensure the participation of staff in courses, seminars, lectures, etc., related to the subject.	Health Department, especially the Mental Health Section

<b>Proposed Actions</b>	<b>Competence</b>
Promote educational activities with the staff.	Health Department, especially the Mental Health Section

## 11. Overview of Consultations

During the period from January 1st to December 8th, 2023, the Psychosocial Support Center "Dr. Ruy Penteadó" - CAPS II provided a total of 35,670 consultations across various specialties within the technical team. These specialties encompassed psychiatry, psychology, occupational therapy, social work, nursing, and workshop facilitators, with specific consultations as follows: psychiatry (7,980 consultations), psychology (13,026 consultations), occupational therapy (2,588 consultations), social work (2,878 consultations), nursing (6,653 consultations), and workshop facilitators (2,545 consultations).

Similarly, during the same period, the Psychosocial Support Center for Alcohol and Drugs "Zoraide Maria Rampasso" - CAPS AD conducted a total of 14,927 consultations within its specialized areas. The breakdown of consultations within CAPS AD included psychiatry (1,858 consultations), psychology (3,223 consultations), occupational therapy (1,189 consultations), social work (2,057 consultations), nursing (3,737 consultations), pharmacy (1,037 consultations), and workshop facilitators (1,826 consultations).

Furthermore, the mental health team at the Child and Adolescent Health Unit - USCA provided a total of 18,575 consultations during the same period. These consultations encompassed child psychiatry (1,725 consultations), psychology (13,183 consultations), social work (1,789 consultations), and psycho-pedagogy (1,878 consultations).

In aggregate, the three facilities collectively administered 69,172 consultations. Notably, this figure does not account for consultations conducted by mental health teams within hospital psychology and psychiatry departments, CEPADI, CTNEN, CISE, and CAISM. Additionally, it excludes activities carried out by school psychology teams.

## 12. Discussion

The comprehensive overview of São Caetano do Sul's mental healthcare system provided in this manuscript underscores the municipality's commitment to ensuring the well-being of its residents. Through strategic planning, community involvement, and a multidisciplinary approach, São Caetano do Sul has developed a robust network of mental health services that prioritize accessibility, quality of care, and continuous improvement.

When comparing São Caetano do Sul's mental healthcare system with those of other municipalities or regions, several key strengths emerge. One notable strength is the municipality's high level of integration within the broader healthcare infrastructure. Unlike some regions where mental health services may operate in isolation or with limited coordination, São Caetano do Sul has successfully aligned its mental health services with national and regional healthcare policies. This integration allows for seamless collaboration between different healthcare facilities and professionals, facilitating holistic care for individuals with mental health conditions.

Furthermore, São Caetano do Sul's emphasis on community involvement sets it apart from many other municipalities. By establishing Municipal Councils and regularly engaging service users in decision-making processes, São Caetano do Sul demonstrates a commitment to participatory governance and stakeholder engagement. In contrast, some regions may lack robust mechanisms for community input, leading to a disconnect between mental health policies and the needs of the population.

Another area of comparative analysis lies in the implementation of innovative practices and protocols. São Caetano do Sul's adoption of the Mental Health Risk Classification Protocol represents a significant advancement in the management of acute mental health cases within the healthcare system. While similar protocols may exist in other regions, São Caetano do Sul's proactive approach to risk assessment and intervention sets a benchmark for evidence-based practices in mental healthcare delivery.

Additionally, São Caetano do Sul's focus on health promotion and disease prevention aligns with global recommendations for comprehensive mental health care. Compared to regions that primarily emphasize reactive treatment approaches, São Caetano do Sul's investment in preventive measures and health education reflects a forward-

thinking strategy aimed at addressing the root causes of mental illness and promoting overall well-being.

In conclusion, São Caetano do Sul's mental healthcare system stands out for its integration, community involvement, innovative practices, and emphasis on prevention. While there may be variations in mental healthcare delivery across different regions, São Caetano do Sul serves as a model for effective and inclusive mental health service provision. Moving forward, continued efforts to evaluate, adapt, and share best practices will be essential for advancing mental health agendas globally and ensuring that all individuals have access to the care and support they need.

### 13. Future Directions

While São Caetano do Sul's mental health network has made significant progress in recent years, there are still some limitations that need to be addressed to ensure that mental health services are accessible and effective for all residents.

One limitation is the availability of mental health services outside the central region of the city. While the mental health network comprises a CAPS II, an extended CAPS AD II, outpatient mental health teams, and mental health teams in various locations, it is important to ensure that all residents have access to mental health services, regardless of their location in the city. One potential solution could be to increase the number of mental health teams in remote areas and to strengthen partnerships with community centers and other local organizations to improve access to mental health services.

Another limitation is the need to address the stigma surrounding mental health issues in the city. Despite the efforts of the mental health network to raise awareness and promote mental health initiatives, stigma and discrimination remain significant barriers to mental health care in São Caetano do Sul. Future initiatives should focus on promoting education and awareness campaigns to reduce stigma and discrimination related to mental health issues.

Finally, the mental health network of São Caetano do Sul could benefit from a more robust system for monitoring and evaluating the quality and effectiveness of mental health services. While the municipality has established a Mental Health Risk Classification Protocol to support clinical decision-making for acute cases, there is a

need for a more comprehensive monitoring and evaluation system to ensure that mental health services are meeting the needs of residents and achieving the desired outcomes. Such a system could help identify areas for improvement and ensure that mental health services are continually evolving to meet the changing needs of the community.

#### 14. Conclusion

While São Caetano do Sul's mental health network has made impressive strides in recent years, there are still some limitations that need to be addressed. By expanding access to mental health services, reducing stigma and discrimination, and implementing a robust system for monitoring and evaluation, São Caetano do Sul can continue to improve its mental health network and provide high-quality, accessible mental health care to all residents.

#### References

1. Brazilian Institute of Geography and Statistics. IBGE; 2021.
2. United Nations Development Programme. Human Development Index (HDI); 2022.
3. Municipal City Hall of São Caetano do Sul. Law 6.078; 2022.
4. Municipal Health Department - Municipal City Hall of São Caetano do Sul. Plano Municipal de Saúde (Municipal Health Plan) 2022-2025; 2022.
5. BRASIL. Ministry of Health. Diretrizes do NASF: Núcleo de Apoio a Saúde da Família. Cadernos de Atenção Básica, n.27; 2010.
6. Municipal City Hall of São Caetano do Sul. Centros Da Terceira Idade – CISES; 2023.
7. BRASIL. Law 10.216; 2021.
8. Estanislau, G. M. et al. The 'Cool Mind' Program. School Mental Health: Global Challenges and Opportunities 21; 2015.

9. BRASIL. Estatuto da Criança e do Adolescente (Child and Adolescent Statute). Federal Law 8.069/90; 1990.
10. Municipal City Hall of São Caetano do Sul. Decree 11.424; 2019.
11. BRASIL. Law 8.080; 1990.
12. Municipal City Hall of São Caetano do Sul. Municipal Law 4.154; 2003.
13. Municipal City Hall of São Caetano do Sul. Municipal Law 4.179; 2003.
14. Municipal City Hall of São Caetano do Sul. Municipal Law 4.096; 2002.
15. Lima, D. R., Guimaraes-Pereira, B. B. S., Mannes, Z. L., Carvalho, C. F. C., Loreto, A. R., Davanso, L. C., et al. The effect of a real-world intervention for smoking cessation in Adults with and without comorbid psychiatric and substance use disorders: A one-year follow-up study. *Psychiatry Research*. 2022.
16. Guimarães-Pereira, B. B. S., da Silva, A. S. M., Lima, D. R., Carvalho, C. F. C., Loreto, A. R., Galvão, L. P., et al. Sex differences in smoking cessation: A Retrospective Cohort Study in a Psychosocial Care Unit in Brazil. *Trends in psychiatry and psychotherapy*. 2021.
17. Lima, D. R., Carvalho, C. F. C., Guimarães-Pereira, B. B. S., Loreto, A. R., Frallonardo, F. P., Ismael, F., et al. Abstinence and retention outcomes in a smoking cessation program among individuals with co-morbid substance use and mental disorders. *Journal of Psychiatric Research*. 2020,125,121–128.
18. Ministry of Civil Affairs - BRASIL. Decree 6.286; 2007.
19. Health Organization, W. Ottawa charter for health promotion; 1986.
20. New Atlas of Human Development in Brazil. UNDP (United Nations Development Programme); 2000.
21. Escola de Novas Tecnologias (@emnovasc). Instagram <https://www.instagram.com/emnovasc/>; 2021



22. Health Organization, W. mhGAP: Mental Health Gap Action Programme: Scaling Up Care for Mental, Neurological and Substance Use Disorders. World Health Organization; 2008.
23. Lima, D. R., Davanso, L. C., Carvalho, C. F. C., Guimaraes-Pereira, B. B. S., Loreto, A. R., Frallonardo, F. P., et al. Is self-reported 7-day point prevalence abstinence an useful measure for smoking cessation effectiveness among individuals with mental disorders? *International Review of Psychiatry*. 2023,35(5-6),468–474.
24. Frallonardo, F. P., Lima, D. R., Carvalho, C. F. C., Loreto, A. R., Guimarães-Pereira, B. B. S., Ismael, F., et al. Effect of BMI on Prolonged Abstinence after Smoking Cessation Treatment: A Retrospective Cohort Study. *Current Drug Research Reviews*. 2021,13(3), 236–245.
25. Chaim, C. H., Siu, E. R., Carvalho, C. F. C., Frallonardo, F. P., Ismael, F., Andrade, A. G., et al. Experimentation with tobacco during adolescence as a factor influencing treatment of smoking in adulthood. A retrospective cohort. *São Paulo Medical Journal*. 2019,137(3),234–240.
26. Castaldelli-Maia, J. M., Loreto, A. R., Guimarães-Pereira, B. B. S., Carvalho, C. F. C., Gil, F., Frallonardo et al. Smoking cessation treatment outcomes among people with and without mental and substance use disorders: An observational real-world study. *European Psychiatry*. 2018,52,22–28.
27. Loreto, A. R., Carvalho, C. F. C., Frallonardo, F. P., Ismael, F., Andrade, A. G., & Castaldelli-Maia, J. M. Smoking Cessation Treatment for Patients With Mental Disorders Using CBT and Combined Pharmacotherapy. *Journal of Dual Diagnosis*. 2017,13(4),238–246.

28. Castaldelli-Maia, J. M., Loreto, A. R., Carvalho, C. F., Frallonardo, F. P., & de Andrade, A. G. Retention predictors of a smoking treatment provided by a public psychosocial unit in Brazil. *International Review of Psychiatry*. 2014,26(4),515–523.
29. Castaldelli-Maia, J. M., Carvalho, C. F., Armentano, F., Frallonardo, F. P., Alves, T. C., Andrade, A. G., et al. Outcome predictors of smoking cessation treatment provided by an addiction care unit between 2007 and 2010. *Revista Brasileira de Psiquiatria*, 2013,35(4),338–346.