

Implementation of a Psycho-oncology Service in a public hospital of Southeast Brazil: between politics and the COVID-19 pandemic

Implantação de um Serviço de Psico-oncologia em um Hospital Público do Sudeste do Brasil: entre a política e a pandemia de COVID-19

Daniel Paixão Pequeno¹, Karla Cristina Gaspar², Carmen Silvia Passos Lima^{1,2}, Gustavo Jacob Lourenço¹

ABSTRACT

Introduction: The implementation of a Psycho-oncology Service depends on institutional, structural, and political factors affecting the availability and quality of this service. Recent events, such as the discontinuation of the Professional Improvement Course, a funding source that supports the training of health professionals, and the ongoing COVID-19 pandemic, have had a significant negative impact on the quality of care available to cancer patients. Objectives: This experience report aims to describe the establishment of the Psycho-oncology Service within the Clinical Oncology Service of the General Hospital of our University and present the psychosocial impact generated by the termination of Professional Improvement Course and the ongoing COVID-19 pandemic on the lives of cancer patients. Material and Methods: In order to obtain the required data for this report, interviews were held with the heads of the medical and psychological teams of the Clinical Oncology Service. The Hospital Informatics Service provided data on the number of consultations held in the Clinical Oncology Service. A t-test was performed to analyze any differences in consultation numbers. Results: The Psycho-oncology Service was created in 2007, 21 years after the beginning of the Clinical Oncology Service. From 2007 to 2021, there were 22,235 psychology consultations, attending over 8,900 patients. The termination of the Professional Improvement Course funding led to a decrease of 41.9% in the number of consultations per month in our service. The COVID-19 pandemic led to a decrease of about 87.0% in the number of consultations per month in our service. Conclusion: The Professional Improvement Course closing and the COVID-19 pandemic have significantly affected the care for cancer patients and their families and caregivers treated at the aforementioned service.

Keywords: Hospital oncology service; Psycho-oncology; COVID-19.

Financial support: none to declare.

Conflicts of interest: The authors declare no conflict of interest relevant to this manuscript.

Correspondence author: Gustavo Jacob Lourenço.

E-mail: guslour@unicamp.br

Received on: February 27, 2023 | Accepted on: May 3, 2023 | Published on: June 22, 2023 DOI: https://doi.org/10.5935/2526-8732.20230411



This is an open-access article distributed under the terms of the Creative Commons Attribution License.

^{1.} University of Campinas, Laboratory of Cancer Genetics - School of Medical Sciences - Campinas - São Paulo - Brazil.

^{2.} University of Campinas, Clinical Oncology Service - Department of Anesthesiology, Oncology and Radiology - School of Medical Sciences - Campinas - São Paulo - Brazil.



RESUMO

Introdução: A implementação de um Serviço de Psico-Oncologia depende de fatores institucionais, estruturais e políticos que afetam a disponibilidade e qualidade desse serviço. Eventos recentes, como a interrupção do Curso de Aperfeiçoamento Profissional, uma fonte de financiamento que apoia a formação de profissionais de saúde, e a pandemia de COVID-19, tiveram um impacto negativo significativo na qualidade do atendimento disponível para pacientes com câncer. Objetivos: Este relato de experiência tem como objetivo descrever a criação do Serviço de Psico-Oncologia dentro do Serviço de Oncologia Clínica do Hospital de Clínicas de nossa Universidade e apresentar o impacto psicossocial gerado pelo encerramento do Curso de Aperfeiçoamento Profissional e pela pandemia de COVID-19 na vida dos pacientes com câncer. Material e Métodos: Para obter os dados necessários para este relato, foram realizadas entrevistas com os responsáveis pelas equipes médica e psicológica do Serviço de Oncologia Clínica. O Serviço de Informática Hospitalar forneceu dados sobre o número de consultas realizadas no Serviço de Oncologia Clínica. As diferenças nos números de consultas entre os períodos foram obtidas por meio do teste t. Resultados: O Serviço de Psico-Oncologia foi criado em 2007, 21 anos após o início do Serviço de Oncologia Clínica. De 2007 a 2021, foram realizadas 22.235 consultas de psicologia, atendendo mais de 8.900 pacientes. O encerramento do financiamento do Curso de Aperfeiçoamento Profissional levou a uma diminuição de 41,9% no número de consultas por mês em nosso serviço. A pandemia de COVID-19 levou a uma diminuição de aproximadamente 87,0% no número de consultas por mês em nosso serviço. Conclusão: O fechamento do Curso de Aperfeiçoamento Profissional e a pandemia de COVID-19 afetaram significativamente o atendimento a pacientes com câncer e suas famílias e cuidadores atendidos em nosso serviço.

Descritores: Serviço de oncologia hospitalar; Psico-oncologia; COVID-19.

INTRODUCTION

There is a growing interest in the psychological aspects of the cancer experience, which coincides with the advance in cancer treatments and the disease stigma. With the creation of Psychiatric Research Units in the United States of America, in the 1950s; Cicely Saunders and the hospice movement in the United Kingdom, in the 1960s; the foundation of Psychosocial Oncology Groups, in the 1970s; and the creation of national and international programs and societies in several cancer centers for psychological assistance and research, in the 1980s and 1990s, the focus of psycho-oncology shifted from studying death and dying to the multiple psychosocial demands of cancer patients and their family caregivers (FCGs).

Psycho-oncologists evaluate and intervene in emotional responses at all stages of the patients' disease and focus on psychosocial factors involving morbidity and mortality of patients and FCGs. In Brazil, psychologists began working at hospitals in the 1950s, but only in 1994 professionals organized themselves to discuss, standardize, and consolidate the psycho-oncologists' performance in health institutions. As stated by the Brazilian Ministry

of Health, psychologists are indispensable in the healthcare team of an oncology center. However, there is still a lack of psycho-oncologists in cancer centers providing assistance and developing research.

To assist healthcare services and teach professionals both in terms of theory and practice, the Professional Improvement Course (PIC) was created by a decree of the State of São Paulo issued in 1979, providing funds to trainee professionals in health-related areas. (4) Nevertheless, at the end of 2018, this decree was revoked and the PIC was terminated. (4) Thus, healthcare services and patients that relied on PIC students were negatively affected, as the availability of health care has reduced. (4)

During the outbreak of the new coronavirus disease (COVID-19), patients with advanced cancer were at higher risk of severe COVID-19. (5) The diagnosis and treatment of cancer patients were also impacted, as there was a decrease in personnel availability, surgery canceling, and an overall reduction of healthcare services. (6) Besides chemotherapy, in 2020, there were reductions of almost 50% in cytopathology tests and mammograms; 35% in biopsies; and 15% in cancer



surgeries,⁽⁷⁾ a scenario similar to the institution of the present study.⁽⁸⁾ At the same institution, a task force was assembled in 2020 to assist the staff, patients, and their FCGs in screening for COVID-19 symptoms before consultations and providing information on COVID-19, scheduling and rescheduling consultations, exams and treatments, and referral to other services seeking to reduce the impact of the pandemic on the patients' care and their FCGs.⁽⁸⁾

In this report, the authors aim to describe the implementation of the Psycho-oncology Service (POS) at a University Hospital and to describe the impact of the PIC closing and the COVID-19 pandemic on the availability of this service.

MATERIAL AND METHODS

Setting

The Clinical Oncology Service (COS) at the General Hospital (GH) of the University of Campinas (UNICAMP) monthly provides over 1,500 consultations by a team composed of physicians, nurses, social workers, pharmacists, nutritionists, dentists, and psychologists; 1,000 chemotherapies; and attends about 80 new cases on a 450-m² usable area. Most of the service's patients treat cancers located in the head and neck, gastrointestinal, and genitourinary tracts.

Study design and analysis

A semi-structured in-person interview was conducted by a trained psycho-oncology researcher of the COS with the heads of the COS and POS. The interview encompassed the general thoughts on the POS throughout the years, and topics such as: implementation of the POS; psycho-oncology expansion on the hospital; the PIC experience; impact of the PIC termination; and the impact of the COVID-19 pandemic on the clinical practice.

The head of the COS contacted the Hospital Informatics Service and requested any data available on the POS. The retrieved information consisted of raw data on the number of consultations per month since the implementation of the POS and the number of patients attended. Then, it was intended to investigate the impact of the PIC termination and the COVID-19 pandemic on patients' mental health care.

For statistical analysis, a descriptive analysis of the psycho-oncology consultations was performed. Simple univariate statistical analysis was performed with percentages and means of psycho-oncology consultations during the full period (July 2007 to December 2021), and the four analyzed periods (with PIC trainees, without PIC trainees, and the first and second waves of the COVID-19 pandemic). A t-test was used to compare means, and statistical significance was determined as *p*-values <0.05 for all tests. The SPSS 21.0 software was utilized to perform all statistical analyses.

RESULTS

Implementation of the POS

The COS began providing medical assistance at GH in 1986. However, a position for a psychooncologist was only created in 2007. At that time, the multidisciplinary team was responsible for approximately 800 consultations, 600 chemotherapy treatments, and 50 new cases per month at the COS. Due to the growing demand for psychological care, the team's increasing awareness of patients' and FCGs' distress facing cancer, and the pursuit of excellence in providing biopsychosocial care to all patients and their FCGs, the psycho-oncologist position was created.

The need to train professionals in the area also justified the inclusion of PIC trainees in the service. Initially, psychologists only attended patients at the outpatient clinic. However, the importance of psychosocial support in other hospital departments that serve oncology patients led to the rapid expansion of psychology services within the hospital. With support from the COS, the head psychologist contacted the head of the oncology infirmary and the radiotherapy services to assess the possibility of including psycho-oncologists in their teams.

From 2007 to 2016, group therapy for FCGs was provided at the outpatient clinic. In addition, the Graduate Program in Oncology at our school offered a discipline on psycho-oncology and guidance for research projects in the field.

Psycho-oncology screening

A psychological screening protocol separated into four domains (sociodemographic characteristics, cancer-related information, psychosocial information, and emotional demands) was developed by the head psychologist, and patients and their FCGs are offered psychological support throughout their treatment at the outpatient clinic. In the event of a patient's death, bereavement support is provided to all FCGs for as long as necessary.

During the psychological screening process, the psychologist uses the screening protocol and collects data on sociodemographic characteristics such as age, marital status, household members, quality of relationships between family members, educational background, profession and employment status, religion, use of drugs, alcohol, tobacco, and medications.

Cancer-related information includes questions regarding patients' knowledge of the diagnosis, comprehension of cancer treatment, the emotional impact of the cancer diagnosis, and history of cancer among family members.

Additionally, psychosocial information includes leisure activities, traumatic experiences in childhood or adulthood apart from the cancer diagnosis,



depression diagnosis, admission to a psychiatric hospital, and suicide ideation or attempt. The emotional demands of the patient and their FCGs are also assessed during screening.

Once a week, the FCGs were approached at the waiting room of the outpatient clinic and were invited to participate in the group therapy carried out by the psychologist and the trainees, which existed from 2007 to 2016, and was interrupted during a flu crisis following recommendations of local health authorities to avoid agglomeration in small spaces (e.g., psycho-oncology room).

Patients can be referred to the POS by any healthcare professional, from diagnosis to follow-up. Furthermore, the psychologist can refer patients to the psychiatric team due to demands such as smoking cessation, mostly for head and neck cancer patients.

PIC TRAINEES

From July 2007 to February 2019, 31 trainees were integrated into the psychological team. They were responsible for assisting patients at the oncology outpatient clinic, radiotherapy ward, and infirmaries under the supervision of the head psychologist of the POS. As part of their training, the trainees attended theoretical classes in the Brazilian Unified Health System and public policies on health, having 393 hours of theoretical lessons and 1,536 hours of practical activities, totaling 1,929 hours at the end of the course. The minimum number of trainees was one in 2007, 2008, and 2009; the maximum was four in 2015 and 2016. During this period, five trainees conducted academic research at the Graduate Program in Oncology at our University.

Psycho-oncology consultations

The psychological team held 22,235 psychology consultations from July 2007 to December 2021, attending over 8,900 patients (Table 1). From July 2007 to February 2019 (140 months), the psychological team held 20,058 consultations with the assistance of trainees, averaging 143.3 consultations per month (standard deviation [SD]: ± 56.4 consultations). However, after the termination of the PIC funding, the head psychologist of the POS conducted 915 consultations, averaging 83.2 consultations per month (SD: ± 26.1 consultations) from March 2019 to January 2020 (11 months) (Table 2). This represents a significant decrease of 41.9% in consultations per month due to the termination of the PIC funding (p<0.0001) (Table 2).

Impact of the COVID-19 pandemic

During the first months of the COVID-19 pandemic in Brazil, the head psychologist only attended emergencies at the outpatient clinic and did not take on new cases. From June 2020 until the end of the first wave of COVID-19 (November 2020), consultations were normalized, but the frequency was lower than usual (Table 1).

When comparing the mean numbers of consultations during the first wave of COVID-19 (February to November 2020) (10 months) (mean consultations: 19.0, SD: ± 22.1) with the period with (mean consultations: 143.3, SD: ± 56.4) and without (mean consultations: 83.2, SD: ± 26.1) the trainees' assistance, there was a reduction of about 87.0% (p<0.0001) and 77.0% (p<0.0001) in consultations, respectively (Table 2).

Table 1. Psychology consultations from 2007 to 2021 held by the psychological team of the Clinical Oncology Service at the General Hospital of our University.

	Years														
Months	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
January		92	56	42	63	228	221	177	38	35	76	0	3	98	63
February		74	122	104	182	195	111	147	125	114	162	77	93	74	75
March		96	132	161	161	222	146	100	176	103	135	170	123	26	75
April		108	153	197	64	225	182	94	168	159	114	125	91	0	79
May		91	138	226	223	113	146	185	201	180	158	145	97	2	105
June		113	140	214	169	150	74	152	207	224	116	169	21	4	56
July	1	122	96	220	215	167	156	128	101	134	140	173	57	11	113
August	50	126	136	215	176	239	221	69	234	174	148	203	95	9	87
September	72	123	161	238	239	206	87	162	217	217	95	166	88	13	97
October	88	120	133	178	205	222	109	140	219	192	124	197	85	34	83
November	62	133	136	274	217	74	152	64	178	168	110	140	84	17	91
December	42	104	110	221	183	143	129	100	138	155	95	114	76	63	85
Total	315	1,302	1,513	2,290	2,097	2,184	1,734	1,518	2,002	1,855	1,473	1,679	913	351	1,009

July 2007 to February 2019: consultations with trainees' assistance. March 2019 to February 2020: consultations without trainees' assistance. March 2020 to December 2021: consultations during the COVID-19 pandemic period.



Table 2. Psychology consultations during the periods with and without trainees from the Professional Improvement Course, and the first and second waves of the COVID-19 pandemic.

Group	Period	Months	Consultations	Mean ± SD	<i>p</i> -value		
PIC	July 2007 to Feb. 2019	140	20,058	143.3 ± 56.4 <0.0001			
No PIC	Mar. 2019 to Jan. 2020	11	915	83.2 ± 26.1	<u>\0.0001</u>		
PIC	July 2007 to Feb. 2019	140	20,058	143.3 ± 56.4	<0.0001		
1 st wave	Feb. 2020 to Nov. 2020	10	190	19.0 ± 22.1			
No PIC	Mar. 2019 to Jan. 2020	11	915	83.2 ± 26.1	<0.0001		
1 st wave	Feb. 2020 to Nov. 2020	10	190	19.0 ± 22.1	<0.0001		
2 nd wave	Dec. 2020 to Dec. 2020	13	1,072	82.5 ± 16.7	<0.0001		
1 st wave	Feb. 2020 to Nov. 2020	10	190	19.0 ± 22.1			
2 nd wave	Dec. 2020 to Dec. 2020	13	1,072	82.5 ± 16.7	0.02		
No PIC	Mar. 2019 to Jan. 2020	11	915	83.2 ± 26.1	0.93		

Group: PIC: consultations with trainees from the Professional Improvement Course (PIC) assistance. No PIC: consultations without trainees from the PIC assistance. 1st wave: consultations during the first wave of COVID-19. 2nd wave: consultations during the second wave of COVID-19. Months: number of months. Consultations: number of consultations. Mean: average of consultations. SD: standard deviation.

In the 13 months of the second wave of COVID-19 (December 2020 to December 2021), the mean number of psychological consultations increased by over 100.0% compared to the first wave (82.5 vs. 19.0, p<0.0001), and was comparable to the prepandemic period without trainees (82.5 vs. 83.2, p=0.93) (Table 2).

Based on the interview with the head of the POS, who gathered information from the psychological screening protocol (emotional demands domain), the psychological demands of patients and their FCGs during the pandemic were, firstly, related to the disease, the treatment, and their physical and psychological outcomes; and, secondly, to aspects of the pandemic (e.g., fear of contracting the disease).

In addition, according to the data collected on the interview, the major reason for missing appointments and treatment at the institution was not having a person to accompany the patients to the hospital. Due to their poor financial status and considering that schools and daycares were temporarily closed, family members or friends could not leave their children alone at home, preventing the FCGs to accompany patients or provide them with transportation to the facility.

DISCUSSION

This exploratory study shows that the POS at our institution has been operational for the last 14 years. The service team has one head psychologist and, from 2007 to 2019, trainees joined the staff.

The aforementioned service has the three pillars of a specialty in oncology, namely: assistance, research, and education activities as part of the patient care in oncology services, empirical research, and training programs.⁽¹⁾

PIC was created to qualify nonmedical, recently graduated professionals in public health in the state of São Paulo, comprising areas such as psychology, nursing, social work, and physical therapy. In addition to assisting patients, trainees attended theoretical classes in public health. After a decree issued in 2018, the fund of scholarships for trainees was reallocated for different educational programs in the country. With this decree, the PIC was terminated in the state of São Paulo, affecting all programs that had PIC trainees, including the service of the present study. The termination of the PIC funding led to a decrease of 41.9% in the number of consultations per month in our service. In the state of São Paulo, affecting all programs that had PIC trainees, including the service of the present study. The termination of the PIC funding led to a decrease of 41.9% in the number of consultations per month in our service.

Furthermore, the COVID-19 pandemic considerably affected the availability of psychological assistance for cancer patients. For this population, the pandemic has affected their quality of life regarding concerns about COVID-19, particularly social isolation and the availability of healthcare services. Similar to our results, fear of COVID-19 infection, lack of familiar support and financial difficulties were common psychosocial demands in cancer patients during the COVID-19 pandemic.

During the pandemic, mental disorders, such as anxiety, depression, post-traumatic stress disorder, and the fear of cancer recurrence or progression in cancer patients, reached alarming levels,⁽¹¹⁾ and the lack of psychological care in this period had the potential to worsen the psychosocial cancer experience for patients and their FCGs. The COVID-19 pandemic led to a decrease of about 87.0% in the number of consultations per month in our service.

Therefore, our results point to a clear negative impact of the PIC termination and the COVID-19 pandemic on the availability of psychological care to cancer patients at the COS. This impact resulted in patients and their FCGs not being offered psychological assessment in vital areas



of the hospital. Further investigation into sociodemographic data, cancer experience, and psychological information could provide a deeper insight into the characterization of the population at this COS, the prevalence of mental disorders, and the emotional impact of the pandemic.

CONCLUSION

The implementation of the POS at our institution has proved to be an essential addition to the healthcare team, both in terms of the number of consultations and in providing professional psychological assistance to patients. Through the efforts of the head psychologist, the service continues expanding its assistance within the hospital, from the outpatient clinic to the radiotherapy ward and infirmaries, in addition to developing academic research with the Graduate Program in Oncology.

The availability of oncology services in Brazil is marked by inequalities in the public service, and political measures, such as closing the PIC, associated with the pandemic, widened this gap for people to treat cancer and receive emotional support due to the impacts of the disease. The reallocation of funds for specialization degrees valid for all Brazilian territories is understandable, but every measure that involves stagnating or losing funds ultimately affects the public service and results in more inequalities for patients and healthcare professionals.

The study data only indicate the number of consultations, which does not consider the subjective care provided by the POS. Moreover, impacts on the quality of life of healthcare professionals regarding the political measures and the COVID-19 pandemic must still be evaluated.

ACKNOWLEDGMENTS

We would like to thank Camila Paixão Pequeno for reviewing this manuscript for the English language.

AUTHORS' CONTRIBUTIONS

DPP	Collection and assembly of data,
	Conception and design, Data analysis
	and interpretation, Manuscript writing,
	Provision of study materials or patient

- KCG Conception and design, Data analysis and interpretation, Final approval of manuscript
- CSPL Collection and assembly of data, Data analysis and interpretation, Final approval of manuscript, Provision of study materials or patient
- GJL Conception and design, Final approval of manuscript, Manuscript writing

Conflict of interest

The authors would like to declare no conflict of interest.

REFERENCES

- 1. Holland JC. Psycho-oncology: overview, obstacles and opportunities. Psychooncology. 2018 May;27(5):1364-76.
- 2. Carvalho MM. Psycho-oncology: history, characteristics and challenges. Psicologia USP. 2022;13(1):151-166.
- 3. Decat CS, Araujo TC, Stiles J. Distress levels in patients undergoing chemotherapy in Brazil. Psychooncology. 2011;20(10):1130-3.
- 4. Molck BV, Santos LA. Relato de experiência em Aprimoramento Profissional: mudanças na saúde mental de Assis rumo ao Paradigma Psicossocial. Rev Psicol UNESP. 2019;18:67-87.
- 5. Dai M, Liu D, Liu M, Zhou F, Li G, Chen Z, et al. Patients with cancer appear more vulnerable to SARS-CoV-2: a multicenter study during the COVID-19 outbreak. Cancer Discov. 2020;10(6):783-91.
- Riera R, Bagattini Â, Pacheco RL, Pachito DV, Roitberg F, Ilbawi A. Delays and disruptions in cancer health care due to COVID-19 pandemic: systematic review. JCO Glob Oncol. 2021;7:311-23.
- 7. Ribeiro CM, Correa FM, Migowski A. Short-term effects of the COVID-19 pandemic on cancer screening, diagnosis and treatment procedures in Brazil: a descriptive study, 2019-2020. Epidemiol Serv Saude. 2022 Mar;31(1):e2021405.
- 8. Pequeno DP, Souza GCF, Lima CSP, Lourenço GJ. Reflections on the COVID-19 pandemic: experiences of a Brazilian Cancer Center. J Soc Work End Life Palliat Care. 2022;18(1):12-16.
- Zeiser FA, Donida B, Costa CA, Ramos GO, Scherer N, Barcellos NT, et al. First and second COVID-19 waves in Brazil: a cross-sectional study of patients' characteristics related to hospitalization and in-hospital mortality. Lancet Reg Health Am. 2022;6:100107.
- Verma R, Kilgour HM, Haase KR. The psychosocial impact of COVID-19 on older adults with cancer: a rapid review. Curr Oncol. 2022 Feb;29(2):589-601.
- 11. Zhang L, Liu X, Tong F, Zhou R, Peng W, Yang H, et al. The prevalence of psychological disorders among cancer patients during the COVID-19 pandemic: a meta-analysis. Psychooncology. 2022;31(11):1972-87.