

Profile of the palliative care physician in Brazil

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Abstract

Palliative care is a multidisciplinary health care model that seeks to provide comfort to patients with life-threatening or severe and terminal illness. Palliative medicine has only recently been recognized in Brazil, and it is essential that physicians working in this area develop their knowledge. Thus, to improve training models in palliative care and in medical education in Brazil, we must understand the characteristics of this professional, identifying sociodemographic profile, professional training, and work activity. This is a cross-sectional, descriptive, and exploratory study, with a quantitative approach. Data were collected from a national survey conducted by means of questionnaires applied to palliative care physicians in Brazil.

Keywords: Palliative care. Palliative medicine. Professional training.

Resumo

Perfil do médico que atua em cuidados paliativos no Brasil

Cuidado paliativo é um modelo assistencial multidisciplinar de atenção à saúde que busca proporcionar conforto a paciente com doença ameaçadora da vida ou com doença grave e terminal. A medicina paliativa é reconhecida no Brasil há pouco tempo, sendo fundamental que o médico que trabalha nessa uma área desenvolva seu conhecimento. Desse modo, é relevante para o aprimoramento dos modelos de formação na área e na educação médica no Brasil compreender as caraterísticas desse profissional, identificando perfil sociodemográfico, formação profissional e atividade de trabalho. Este estudo tem recorte transversal, descritivo e exploratório, apresentando abordagem quantitativa. Os resultados são fruto de pesquisa nacional, realizada por meio de questionários aplicados a médicos que atuam em cuidados paliativos no Brasil.

Palavras-chave: Cuidados paliativos. Medicina paliativa. Capacitação profissional.

Resumen

Perfil del médico que actúa en cuidados paliativos en Brasil

Los cuidados paliativos son una modalidad de asistencia multidisciplinaria que busca brindar comodidad al paciente con enfermedad potencialmente mortal o con enfermedad grave y terminal. Hace poco tiempo que se ofrece la medicina paliativa en Brasil, por lo que es fundamental la capacitación de los médicos que actúan en esta área. Ante lo anterior, para la mejora de los modelos de formación en el área y en la educación médica en Brasil es importante comprender las características de este profesional al identificar el perfil sociodemográfico, la formación profesional y la actividad laboral. Este estudio es transversal, descriptivo y exploratorio, con enfoque cuantitativo. Los resultados utilizan datos de una encuesta nacional, con la realización de cuestionarios aplicados a médicos que actúan en cuidados paliativos en Brasil.

Palabras clave: Cuidados paliativos. Medicina paliativa. Capacitación profesional.

Palliative care (PC) is a multidisciplinary health care model that seeks to provide comfort to patients with life-threatening illness and their families. According to the World Health Organization (WHO), PC is an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychological and spiritual ¹.

New demographic trends and an aging populational will lead to an increasing contingent of patients requiring palliative care². According to the Brazilian Institute of Geography and Statistics (IBGE), Brazil has 28 million people aged over 60, and this number is expected to double in the coming decades³.

Palliative care presented significant growth in Brazil starting from 2000s, considering that there were only two services in the 1980s, five in the 1990s, and an increase to 21 in the 2000s. By 2012, PC services saw an accelerated increase, reaching 191 services in 2019⁴. Thus, PC needs to be strongly prioritized in Brazil.

Palliative medicine (PM) was recognized in 2011 as an area of medical practice in Brazil, as per Federal Council of Medicine's (CFM) Resolution 1,973/2011⁵. Despite advancements in Palliative Care, the number of qualified physicians and health care teams remains low in relation to the growing demand, with knowledge gaps regarding the profile of palliative care physicians in Brazil. A better understanding of these professionals' profile can contribute to improve educational models in the medical field and medical training.

Research

This research sought to outline the profile of palliative care physicians in Brazil, by identifying their sociodemographic characteristics, describing their academic and professional background, and characterizing their current professional activity.

All participants digitally signed the Informed Consent Form (ICF), written in accordance with of the National Council of Health's Resolution 466/2012⁶. Research was conducted between March and May 2021.

Method

A cross-sectional, descriptive and exploratory study was conducted following the survey method, which consisted in applying questionnaires as operational instruments, presenting a quantitative approach. Survey research seeks to obtain data or information about the characteristics, actions, or opinions of a target population, by means of a research instrument, usually a questionnaire⁷.

Population

The study population consisted of palliative medicine physicians in Brazil, with or without a proven degree in the field. According to 2019 data from the National Academy of Palliative Care (ANCP), the 191 palliative care services found in Brazil have an average of 2.6 physicians per service, totaling an estimated 496 physicians ⁴.

Sample

The sample consisted of palliative care physicians with or without a proven practice area in palliative medicine. We chose to include PC physicians without a proven practice area due to the considerable number of physicians who work in PC without a specific degree.

About 350 PC physicians were invited to participate in the study, invited through a convenience sample with all PM physicians who agreed to participate.

Invitation

A research invitation was sent by email or via social networks (WhatsApp, Telegram and Instagram), individually to the participant or through pre-existing specific PC groups. Several palliative care physicians helped to publicize the research in a group of PC social networks throughout Brazil.

Data collection instrument

Data were collected by means of electronic questionnaires made available using the Google Forms platform. Consisting of 36 questions, the questionnaire was divided into thematic blocks:

"sociodemographic information," "professional information," and "opinion on palliative medicine education in Brazil."

Statistical analysis

This research presents descriptive results for all the questionnaire questions, describing categorial variables by absolute (n) and relative (%) frequencies.

Results and discussion

A total of 171 physicians answered the questionnaire, eight were excluded due to incompleteness, totaling 163 responses (46.57% of the initial estimated sample). Of these, 123 participants (75.5%) reported a proven practice in PM, by degree from the Brazilian Medical Association (AMB) or residency in PM from the National Council of Medical Residency (CNRM), concluded or in progress.

Forty participants (24.5%) lacked a degree in PM, despite working in the field, which shows that a considerable number of PC physicians in Brazil have no proven degree in the field. Thus, the great patient demand and the recent recognition of the area result in a palliative medicine still practiced by specialists from other medical areas.

Our results are distributed in two modalities: general population (physicians with and without a PM degree) and physicians with proven PM degree or in progress. The most relevant findings will be discusses in the following items.

Sociodemographic characteristics of the surveyed physicians

Table 1 summarizes the most relevant sociodemographic characteristics of the study sample. The study included 117 women (71.8%) and 46 men (28.2%). Among the former, 82 participants had a proven PM degree, against 41 among the men. As for age, 67 (41.1%) participants were between 30 to 39 years old, 60 (36.8%) participants between 40 to 49 years old, and 20 (12.3%) participants between 50 and 59 years old. Most were married (76.7%).

Table 1. Characterization of physicians regarding sociodemographic aspects, by degree in palliative medicine and general medicine

Degree in the field of practice							
	Υ	es	No		General		
Study variables	N	%	N	%	N	%	
Age group							
20 to 29 years	7	5.7	2	5.0	9	5.5	
30 to 39 years	51	41.5	16	40.0	67	41.1	
40 to 49 years	49	39.8	11	27.5	60	36.8	
50 to 59 years	13	10.6	7	17.5	20	12.3	
60 years or older	3	2.4	4	10.0	7	4.3	
Total	123	100.0	40	100.0	163	100.0	
Gender							
Female	82	66.7	35	87.5	117	71.8	
Male	41	33.3	5	12.5	46	28.2	
Total	123	100.0	40	100.0	163	100.0	

continues...

Table 1. Continuation

	Degree in the field of practice						
	Yes		1	No	General		
Study variables	N	%	N	%	N	%	
Marital status							
Single	19	15.4	8	20.0	27	16.6	
Married/Stable union	97	78.9	28	70.0	125	76.7	
Divorced	7	5.7	3	7.5	10	6.1	
Widowed	0	0.0	1	2.5	1	0.6	
Total	123	100.0	40	100.0	163	100.0	
In which region of Brazil were you be	orn?						
North	3	2.4	0	0.0	3	1.8	
Northeast	26	21.2	3	7.5	29	17.8	
Southeast	72	58.5	29	72.5	101	62.0	
South	13	10.6	8	20.0	21	12.9	
Midwest	9	7.3	0	0.0	9	5.5	
Total	123	100.0	40	100.0	163	100.0	
In which region of Brazil do you curr	ently work	professionally?					
North	3	2.4	1	2.5	4	2.5	
Northeast	18	14.6	3	7.5	21	12.9	
Southeast	72	58.5	27	67.5	99	60.7	
South	14	11.4	8	20.0	22	13.5	
Midwest	16	13.0	1	2.5	17	10.4	
Total	123	100.0	40	100.0	163	100.0	
What is your personal monthly incom	me?						
Less than 5,000 reais	3	2.4	3	7.5	6	3.7	
Between 5,001 and 10,000 reais	9	7.3	0	0.0	9	5.5	
Between 10,001 and 15,000 reais	28	22.8	7	17.5	35	21.5	
Between 15,001 and 20,000 reais	39	31.7	10	25.0	49	30.1	
Between 20,001 and 30,000 reais	25	20.3	14	35.0	39	23.9	
More than 30,000 reais	19	15.5	6	15.0	25	15.3	
Total	123	100.0	40	100.0	163	100.0	

Database: 163 physicians - yes (123 cases) and no (40 cases)

These findings corroborate the study *Medical Demography in Brazil 2020*, which revealed the feminization and juvenescence of medicine in the country. In 1970, women represented 15.8% of physicians, which increased to 46.6% in 2020. Currently, the average age of active physicians in Brazil is 45 years, with a standard deviation equal to 15, showing the predominance of a younger

medicine as a result of the growth in the number of undergraduate programs 8.

As for region of origin, 101 participants were born in the Southeast (62%), 29 in the Northeast (17.8%), 21 in the South (12.9%), nine in the Midwest (5.5%), and three in the North (1.8%). Currently, 99 physicians reported working in the Southeast (60.7%), 21 in the Northeast (12.9%),

22 in the South (13.5%), 17 in the Midwest (10.4%), and four in the North (2.5%).

These findings point out the unequal distribution of PC physicians across the country, since most participants work in the Southeast region, and corroborate the latest ANCP survey, which reported that among the 191 PC services in Brazil, 55% (101 services) are in the Southeast region, predominantly located in the capitals, emphasizing that increasing their outreach is a major challenge for the country's public policies 4.

A total of 65% of the physicians work in state capitals, 25.2% work in nonmetropolitan areas of the state, and 3.1% work in municipalities of metropolitan areas. Some participants work both in the capital and in nonmetropolitan areas of the state (2.5%), and 4.3% work in the capital and in municipalities of metropolitan regions.

As for the main city where physicians work, 123 participants (75.5%) work in cities with more than 500,000 inhabitants, 35 work in cities with 100,000 to 500,000 inhabitants, four work in cities with 50,000 to 100,000 inhabitants, and one works in a city with 10,000 to 50,000 inhabitants.

Regarding income, six participants reported having a personal monthly income lower than 5,000 reais; nine between 5,001 and 10,000 reais, 35 between 10,001 and 15,000 reais;

49 between 15,001 and 20,000 reais; 39 between 20,001 and 30,000 reais. Only 25 participants reported an income higher than 30,000 reais.

Such distribution is similar to Brazil's overall medical income, revealing that 51.6% of the participants earn between 10,000 and 20,000 reais per month. A nationwide study with 2,400 physicians showed that 16.5% of physicians earn less than 11,000 reais; 19.7% earn between 11,000 and 16,000 reais; 16.3% earn between 16,000 and 21,000 reais; 12% earn between 21, and 27,000 reais; and 17.2% earn more than 27,000 reais⁸. According to the last ANCP survey, PC physicians earn a median value of 94.37 reais per hour worked 9.

Academic education and professional background of the surveyed physicians

Table 2 described te results concerning the participants' academic education and professional background. A total of 14 physicians completed medical school between 1978 and 1990; 31 between 1991 and 2000; 36 between 2001 and 2005; 39 between 2006 and 2010; 29 between 2011 and 2015; and 13 physicians between 2016 and 2018. Eighty-eight participants (54%) graduated from a public medical school and 75 (46%) graduated from a private university.

Table 2. Characterization of physicians according to academic and professional profile, by degree in palliative medicine and general medicine

Degree in the field of practice									
	Yes No		No	General					
Study variables	N	%	N	%	n	%			
Year of medical school completion	Year of medical school completion								
From 1978 to 1990	8	6.5	6	15.4	14	8.6			
From 1991 to 2000	21	17.1	10	25.6	31	19.1			
From 2001 to 2005	33	26.8	3	7.7	36	22.2			
From 2006 to 2010	30	24.4	9	23.1	39	24.1			
From 2011 to 2015	22	17.9	7	17.9	29	17.9			
From 2016 to 2018	9	7.3	4	10.3	13	8.0			
Total	123	100.0	39	100.0	162	100.0			
Did you study medicine at a public	Did you study medicine at a public or private university?								
Public	75	61.0	13	32.5	88	54.0			
Private	48	39.0	27	67.5	75	46.0			
Total	123	100.0	40	100.0	163	100.0			

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Table 2. Continuation

Degree in the field of practice									
	Yes No		General						
Study variables	N	%	N	%	n	%			
In which year did you obtain the degree of palliative care physician?									
From 1998 to 2010	2	1.7	_	_	2	1.7			
From 2011 to 2013	13	10.7	_	_	13	10.7			
From 2014 to 2017	46	38.0	_	_	46	38.0			
From 2018 to 2021	60	49.6	_	_	60	49.6			
Total	123	100.0		_	123	100.0			
How did you obtain the degree of pa	alliative care	physician?							
Degree awarded by the AMB for time of experience	10	8.1	_	_	10	8.1			
Sufficiency Test by the AMB	77	62.6	_	_	77	62.6			
Medical Residency in PM by CNRM	36	29.3	_	_	36	29.3			
Total	123	100.0	_	_	123	100.0			
How many years have you worked in	n palliative c	are?							
From 1 to 2 years	16	13.1	14	35.0	30	18.5			
From 3 to 5 years	19	15.6	11	27.5	30	18.5			
From 6 to 10 years	51	41.8	6	15.0	57	35.2			
From 11 to 15 years	22	18.0	6	15.0	28	17.3			
From 16 to 25 years	14	11.5	1	2.5	15	9.3			
More than 25 years	0	0.0	2	5.0	2	1.2			
Total	122	100.0	40	100.0	162	100.0			
During your medical studies, did you	ı have conta	ct with palliati	ve care?						
Yes	13	10.6	6	15.0	19	11.7			
No	110	89.4	34	85.0	144	88.3			
Total	123	100.0	40	100.0	163	100.0			
During your medical residency/spec	ialization in	another area, o	did you have	contact with pa	alliative care	?			
Yes	79	64.2	19	47.5	98	60.1			
No	44	35.8	21	52.5	65	39.9			
Total	123	100.0	40	100.0	163	100.0			

One case lacked information on the year of medical school completion

The greater number of physicians graduating after the 2000s may reflect the fact that PM is a recent field of practice in Brazil. Among the 123 participants with a proven degree in PM, 13 physicians (10.7%) obtained the degree between 2011 and 2013; 46 physicians (38%) between 2014 and 2017, and 60 physicians (49.6%) between 2018 and 2021.

Of those with a degree of specialist in PM, 77 (62.6%) obtained the degree by means of a

"Sufficiency Test by the AMB," 36 (29.3%) by a "Medical residency in palliative medicine by CNRM," and 10 (8.1%) had a "degree awarded by the AMB for time of experience" in the field.

In Brazil, there are two ways to become a physician with a proven field of practice in PM: degree granted by the AMB sufficiency test or residency in PM by CNRM. In 2011, when PM was established as a field of practice in the country,

some physicians received the PM practice degree by time of experience and by proof of prerequisite specialty, without taking a sufficiency test.

This group, which corresponded to a small portion of the study participants (8.1%), includes physicians who have already worked in PC and were responsible for the first specialized services in Brazil. The reduced total of physicians with a degree by time of experience can be explained by the fact that PM is a recently recognized area of expertise in the country and worldwide, with a still discrete number of professionals with longer experience.

Length of experience in PM was 1 to 2 years for 30 participants; 3 to 5 years for 30 participants; 6 to 10 years for 57 participants; 11 to 15 years for 28 participants; 16 to 25 years for 15 participants, and more than 25 years for two participants. Only 10.5% of the physicians surveyed reported having more than 16 years of experience in PM.

The higher number of physicians who obtained the degree through the AMB test can be explained by the fact that residency programs in PM currently require dedication of 60 hours per week for 1 year, with a gross monthly remuneration of 3,330.43 reais ¹⁰. The low remuneration for medical residency and the extensive weekly workload required may justify this greater demand for obtaining a degree through the AMB test.

According to ANCP, 258 physicians passed the AMB sufficiency test in PM between 2012 and 2019 ¹¹. According to the CNRM website, Brazil has 16 medical residency services in PM and a total of 145 physicians with PM residency completed by 2020. During this research, data for 2021 were not yet available on the CNRM website ¹².

Cross-referencing the ANCP and CNRM data, we observed that eight physicians have both proof of medical residency in PM and the degree awarded by AMB. By 2020, Brazil had 395 physicians with proven practice in PM (sum of AMB degrees and CNRM residencies in PM). This confirms that the number of physicians with a proven practice in PM is still too low to meet the growing demand for palliative care in a continental country such as Brazil, despite the significant number of degree awarded to physicians in the field, especially in the last 3 years.

In this scenario, we question how 400 physicians with proven expertise in PM could provide care

for the massive contingent of patients requiring palliative care in a country with the territorial extension of Brazil.

Some authors advocate a PM model focused on the general practitioner. Quill and Abernethy ¹³ criticized the physician-centered model of PC in favor of a more sustainable model, focusing on the general practitioner as the main manager of PC patient care. They believe that the specialist-centric model may not meet the growing demand of PC patients. Moreover, specialists may undermine the therapeutic relationship and fragment the primary care plan.

General practitioners can therefore be an important support network for PC patients, given the reality of the country. In this more sustainable model, only the more complex cases would be referred to physicians with proven expertise in PM. The generalist model would allow to reduce costs and would not be detrimental to the field of specialized PM, given the increasing number of patients who need complex palliative care.

Another important point for this discussion: why can't new medical specialties be incorporated as prerequisite areas for physicians to obtain proof of practice in PM? All physicians, regardless of their specialty, deal with life-threatening diseases. Isn't PM a basic and fundamental need, inherent to any medical specialty? Perhaps the surest way to ensure a greater number of specialists would be to allow more physicians to apply for a PM degree.

Since 2011, when PM became a field of practice in Brazil, the following specialties were considered prerequisites for the AMB test candidate: anesthesiology, pediatrics, geriatrics, oncology, clinical medicine, and family medicine ⁵. In 2013, after Resolution 2,068/2013 ¹⁴, intensive care medicine and head and neck surgery were added as prerequisite specialties. In 2019, with Resolution 2,221/2018 ¹⁵, four more specialties were added to the list: mastology, oncology surgery, nephrology, and neurology. Expanding the specialties that can be prerequisites can be an important strategy to increase the number of physicians applying for PM sufficiency tests.

While 144 participants reported not having had contact with PC during medical school (88.3%),

98 (60.1%) reported studying PC during specialization or medical residency in other area.

This scarce approach to PC in medical schools corroborates data reported in the literature. In Brazil, palliative care education in medical training remains deficient and restricted in undergraduate curricula. When offered, it is incorporated into content of major areas, with insufficient workload ¹⁶.

Besides PM, we also evaluated the other medical specialties participants worked in, showing that 83 physicians reported having one medical specialty, 63 claimed to have two, seven claimed to have three, and one physician reported having four or more. The most frequent specialties were clinical medicine (98 physicians), geriatrics (54 physicians), family and community medicine (21 physicians), oncology (15 physicians), and intensive care medicine (12 physicians).

Since clinical medicine is a prerequisite for most clinical specialties, this probably explains its prevalence among the participants' responses. As most geriatricians also have clinical medicine as a second specialty, the role of geriatricians in PM is very significant and should be considered in the results analysis. Note also the growing space of family and community medicine in palliative care, which shows that primary care is an important focus of PC care in Brazil.

Work activity of participating physicians

Table 3 presents the expressive results regarding the physicians' PC work activity. Among the participants, 90.8% reported currently working with PC at some level of care, 40 (27.2%) working in the public sector, 40 (27.2%) in the private sector, and 67 (45.6%) in both.

Table 3. Characterization of physicians regarding current practice in palliative care, by degree in palliative medicine and general medicine

Degree in the field of practice								
	Yes		No		General			
Study variables	N	%	N	%	N	%		
Do you currently work as a palliative care physician?								
Yes	117	95.1	31	77.5	148	90.8		
No	6	4.9	9	22.5	15	9.2		
Total	123	100.0	40	100.0	163	100.0		
At what level of care do you work? (Only for those who currently work with PC)								
Hospital	25	21.6	6	19.3	31	21.1		
Outpatient clinic	3	2.6	1	3.2	4	2.7		
Home Care	7	6.0	2	6.5	9	6.1		
Hospital/outpatient clinic	18	15.5	8	25.8	26	17.7		
Hospital/home care	14	12.1	6	19.4	20	13.6		
Outpatient clinic/home care	8	6.9	1	3.2	9	6.1		
Hospital/outpatient clinic/home care	41	35.3	7	22.6	48	32.7		
Total	116	100.0	31	100.0	147	100.0		
Do you have a multiprofessional team at your place of work as a palliative care physician? (Only for those who currently work with PC)								
Yes	97	84.3	25	80.6	122	83.6		
No	18	15.7	6	19.4	24	16.4		
Total	115	100.0	31	100.0	146	100.0		

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Table 3. Continuation

	Degree in the field of practice								
	Yes No		Ger	General					
Study variables	N	%	N	%	N	%			
In which sector do you work as a pa work with PC)	lliative care ph	nysician? (On	ly for those wh	no currently					
Public	28	24.1	12	38.7	40	27.2			
Private	30	25.9	10	32.3	40	27.2			
Public and private	58	50.0	9	29.0	67	45.6			
Total	116	100.0	31	100.0	147	100.0			
What percentage of your current we who currently work with PC)	What percentage of your current weekly workload do you devote to PC? (Only for those who currently work with PC)								
100%	27	23.3	6	19.4	33	22.4			
75%	25	21.6	7	22.6	32	21.8			
50%	34	29.3	9	29.0	43	29.3			
25% or less	30	25.9	9	29.0	39	26.5			
Total	116	100.0	31	100.0	147	100.0			
Do you work in PC teaching?									
Yes	97	78.9	28	70.0	125	76.7			
No	26	21.1	12	30.0	38	23.3			
Total	123	100.0	40	100.0	163	100.0			
At what level of education do you work?*	(n=97)	(n=28)	(n=125)						
Undergraduate	38	39.2	13	46.4	51	40.8			
Specialization (≥360 h)	29	29.9	7	25.0	36	28.8			
Refresher (<360 h)	18	18.6	3	10.7	21	16.8			
Medical residency	66	68.0	14	50.0	80	64.0			
Others	16	16.5	5	17.9	21	16.8			

One case without information on the level of care, weekly workload and sector of PC work; two cases without information on the multidisciplinary team; PC: palliative care; * The variable described allows more than one answer, therefore, percentages may add up to more than 100% per specialty group and in general

Among the participants who currently work in PC, 48 (32.7%) reported working at three levels of care (outpatient clinic, home care, and hospital); 26 (17.7%) in hospital and outpatient clinic, 20 (13.6%) in hospital and home care; and 31 (21.1%) work in hospitals. This shows a trend that PC is still performed predominantly in the hospital setting.

Of the total sample, 122 physicians works together with a multiprofessional team in their workplace as palliative care providers (83.6%). Thus, the interdisciplinary PC team, considered

one of its pillars, has been prioritized in most cases. Importantly, we did not ask which professionals are part of the teams, and there may be heterogeneous teams in number and active specialists.

Regarding the weekly workload dedicated to PC work activity, 33 participants dedicate 100% of their workload; 32 dedicate 75% of their workload; 43 dedicate 50% of their workload; and 39 dedicate 25% or less of their weekly workload.

The main difficulties involving PC patient care highlighted by the participants were:

management of emotional, social and spiritual symptoms (65 participants); management of legal aspects (27 participants); and approach to family (19 participants). Only three participants considered the management of physical symptoms a major challenge.

As for the degree of personal satisfaction regarding their work as a palliative care physician, no participant answered being "very satisfied"; 88 (59.8%) considered themselves "satisfied"; 57 (38.8%) said they were "little satisfied"; and two (1.4%) considered themselves dissatisfied.

A Brazilian study with 2,000 physicians from all specialties asked about their degree of satisfaction with their work, to which more than half reported a salary reduction in the last three years (50.8%). Most considered that their working conditions worsened in the last three years (40.7% fully agree, and 16.8% partially agree). More than half of the physicians agree that they now have a higher workload (45.6% fully agree, and 9.8% partially agree).

Even with reservations about working conditions, physicians claimed to be satisfied with the profession: 43% of participants fully agree and 21.2% partially agree 8. The degree of satisfaction of PC physicians, therefore, seems to follow the trend of other medical specialties. Note that personal satisfaction is a complex and subjective aspect, resulting from several factors: working conditions, emotional overload, income, workload, among others.

Asked about the mental health impact of working with PM, 63.9% of the physicians considered that PM work impacts their mental health and 21.8% answered that working with PM has a partial impact. Of those who sought some type of support due to PC-related work overload, 59 (40.1%) reported having already sought psychological support and seven (4.8%) reported having sought pharmacological treatment. Nine physicians (6.1%) reported having sought both pharmacological and psychological support.

Our research also inquired about the mental health impact from working with PC. Health professionals may have difficulties in working with PC, especially regarding the acceptance of death, as well as conflicts with family members and even dilemmas with work team members, which generates suffering ¹⁷.

A 2007 CFM survey conducted in Brazil with 7,700 physicians from all states, classified 23% of the sample as having high burnout and 10% with extreme burnout ¹⁸. Data on burnout in Brazilian palliative care physicians are still scarce and future studies may help to compare the prevalence of burnout among PM physicians and other specialties/fields of practice in Brazil.

To mitigate possible negative impacts related to PM work activity in PM, medical residencies in the field should offer structured emotional support curricular activities, such as mentorship, psychological support, or participation in Balint groups. Emotional aspects involved in PC work seem to be an important point to be improved for better performance of PM professionals.

Physicians were asked about the moment in their professional career when they became interested in PM. Only 11.7% said that such interest in began during medical school, whereas 52.8% reported showing interest during specialization or residency in another area, and 36.8% after already working as a physician in another area.

Regarding PC teaching, 125 physicians (76.7%) reported participating in such activities. Of these, 80 are preceptors in PM medical residency, 51 are undergraduate medical professors, 36 are professors in specialization courses, and 21 are professors in refresher courses.

A total of 77 participants work in a mixed teaching format (in-person and remote), 39 in a fully in-person teaching format, and 9 in fully remote teaching. Of the 61 physicians who reported having a post-graduate degree, 41 had a master's degree and 20 a PhD.

Thus, palliative care physicians are often concerned with PC teaching. Consequently, an important strategy for medical schools would be to prioritize hiring professors trained and with experience in PC to introduce the discipline into the academic culture.

According to the participants personal satisfaction (85.1%), opportunity to take care of others (68.2%), interest in teaching in the field (18.9%), dissemination of PC care (15.5%), income and work opportunity (10.1%), need to complement other medical specialties (10.1%), and teamwork opportunity (8.1%) were the main motivations to become PC physicians.

PC care is complex, as it demands technical-scientific knowledge and constantly coping with death and the dying process, leading to the development of humanitarian and emotional skills ¹⁹. Most study participants pointed to personal and professional satisfaction and being able to care for the suffering of others as the main motivations for working as palliative care providers.

The physician's path to becoming a palliative care provider involves professional and personal experiences, in which intrinsic motivations seem to be more determinant than extrinsic issues, with a few pointing to remuneration as an attractive. For the 15 participants who do not currently work in PC, lack of recognition of PC in the labor market, employment opportunities in other medical areas, and lack of identification with PC were factors for not working in the field. Of these, three justified not working in the field because they are still in PM residency.

When asked about the best strategy to increase the number of palliative care physicians in Brazil, 63.2% pointed to improving PC teaching in medical schools. A total of 17.2% argued that improving PC teaching in medical residency or specialization in other medical areas is the most important factor. Other cited strategies included increasing the number of openings for medical residency and specialization in PC (18.4%), improving the remuneration of palliative care physicians (10.4%), disseminating the principles of PC to the population (14.1%), and facilitating the process of obtaining a PM degree (4.3%).

Medical school is the ideal period to start PC teaching, but its inclusion on the curricula is not yet satisfactory. Thus, developing curricular frameworks to bring medicine undergraduates closer to PC is fundamental. Residencies and specializations in other medical areas can also be improved as PC teaching fields. Promoting the inclusion of PC in medical residencies, regardless of specialty, can be a strategy to increase the number of specialists in the field.

Limitations of this study

We can point out at least two limiting factors regarding this study: 1) lack of updated official data on PC physicians, thus potential research participants were not reached; b) sine the instrument used was a self-administered

questionnaire, some participants may have given more positive and socially acceptable answers, distorting some of the collected data.

Final considerations

Based on the study data, we conclude that PC physicians in Brazil are predominantly female, married, aged between 30 and 59 years, living in Southeastern Brazil, with income similar to the general average of physicians in the country. Most concluded medical school after the 2000s in a public institution, with medical specialty in clinical medicine, geriatrics, or family and community medicine.

Participants became interested in PC care during specialization/residency in another field, or after already working as physicians in another specialty. Most participants had a degree in PM, mainly awarded by the AMB sufficiency test, and less than 10 years of experience working in PC. Regarding their current PM work activity, the physicians reported working at different levels of care, predominantly hospitals.

Most physicians work in partnership with multiprofessional teams, both in the public and private sectors, and only a small portion works exclusively in PC. Participants pointed to the desire to care for others and personal satisfaction as the main motivations for working in PC. Most physicians develop teaching activities in the area, especially in PM medical residencies.

Among those who currently work in PC, most consider themselves satisfied to work in the field, but none answered with "very satisfied." A considerable percentage affirmed that working with PC has some impact on their mental health.

Creating greater space for PC teaching in medical schools, introducing more medical specialties as a prerequisite for obtaining a degree in PM, and providing a safe work environment for palliative care physicians, with adequate technical resources and focus on their psychological integrity, are important factors to increase the number of palliative care providers and improve their working conditions in Brazil. Further studies detailing the satisfaction of professionals working in palliative care are relevant to this context.

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Priscilla Biazibetti Mendes wrote the original master's dissertation on which this article was based and wrote the manuscript. José Ricardo de Oliveira was co-advisor of the master's dissertation on which the article was based and conducted a critical review. Alexandre de Araújo Pereira was advisor of the master's dissertation on which the article was based and conducted a critical review.

 Received:
 3.22.2022

 Revised:
 9.21.2022

 Approved:
 9.25.2022