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ORIGINAL ARTICLE

The Role of Empathy and Emotional Labor as Predictors of Burnout Syndrome in Brazilian Oncologists

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ABSTRACT

Background: Among medical specialties, oncologists have been consistently identified as a group with heightened risk for Burnout Syndrome. **Objective:** The present study aimed to identify the frequency and predictive power of emotional labor and physician empathy for Burnout Syndrome in medical oncologists. **Method:** In a cross-sectional design, 128 physicians with 10 years of experience on average answered an online survey, including the Spanish Burnout Inventory (assessing enthusiasm towards the job, psychological exhaustion, indolence, and guilt), the Emotional Demand scale from the Questionnaire on the Experience and Assessment of Work, the Emotional Dissonance taken from the Frankfurt Emotion Work Scales, and the Jefferson Empathy Scale - Physician Version (assessing perspective-taking, compassionate care, and the ability to put oneself in the patient's place). **Result:** Higher Burnout Syndrome scores were observed for enthusiasm towards the job subscale of the Spanish Burnout Inventory, which can also represent a lack of enthusiasm towards the job, followed by psychological exhaustion. About half of the participants showed critical levels of illness, which can lead to serious problems in the quality of work and a high risk of absence due to related health issues. Overall, Burnout Syndrome was best predicted by higher levels of emotional demand, while some dimensions were also predicted by emotional dissonance and empathy. **Conclusion:** Empathy was best associated with preventive levels of Burnout Syndrome and benefits the physician-patient relationship, which is related to increasing patients' satisfaction and appreciation of physicians who are sensitive to their emotional demands.

Keywords: Burnout, Psychological; Emotions; Empathy; Occupational Stress; Physician-Patient Relations.

INTRODUCTION

Burnout Syndrome is an occupational phenomenon derived from chronic workplace stressors, resulting in physical and mental exhaustion associated with emotional detachment and cynicism about the job (Carlotto et al., 2021; Maslach & Leiter, 2016). Its etiology is multifactorial, including physical, social, and psychological factors that have not been successfully managed over time (Romão et al., 2025; Ryan et al., 2023). The

main symptoms of Burnout Syndrome are fatigue, cardiorespiratory changes, migraines, gastrointestinal problems, insomnia, discouragement, agitation, aggressiveness, anxiety, increased substance use (alcohol and drugs), and isolation (Edu-Valsania, Laguía, & Moriano, 2022; Fontes, 2020; Gil-Monte, 2005; WHO, 2022). Burnout Syndrome was recently included in the International Classification of Diseases, 11th revision (ICD-11; WHO, 2019), due to the highly stressful nature of clinical practice and

the challenges of balancing professional experience, work expectations, and personal fulfillment (Alabi et al., 2021).

Burnout Syndrome, derived from a specific stress response, can be characterized in four dimensions according to Gil-Monte's (2005) model: (1) Enthusiasm towards the job: characterized as the worker's desire to achieve expected goals in his/her role and the personal and professional return that these activities should bring (evaluated in reverse to characterize Burnout Syndrome); (2) Psychological Exhaustion: defined by the physical and emotional exhaustion resulting from work activity and the constant need to interact with people who have demands and/or problems to solve (e.g., cancer patients); (3) Indolence: negative attitudes and behaviors of indifference, detachment, coldness or insensitivity towards the people who frequent his/her work; and (4) Guilt: negative feelings that the worker develops because he/she believes that he/she is not meeting the expectations and social demands of his/her professional role. Guilt occurs after these symptoms and does not necessarily occur with all workers. Studies using this model to assess Burnout Syndrome have shown that healthcare workers are more likely to be identified as having a more serious profile of Burnout Syndrome (Esteves et al., 2019; Pinheiro et al., 2020).

In the field of healthcare, oncologists are among the medical specialties at a higher risk for developing Burnout Syndrome (Eelen et al., 2014; Lavasani, 2023; Low et al., 2019; Yasgur, 2022). Professionals in the field of oncology experience more stress-inducing situations than other medical specialties, from breaking bad news and managing the suffering of cancer patients to helping with difficult decision-making and end-of-life care (Cubero et al., 2016; Murali & Banerjee, 2018). According to the European Society for Medical Oncology (Banerjee et al., 2017), 71% of oncologists suffer from Burnout Syndrome, with younger oncologists being the most affected by symptoms of exhaustion, low personal accomplishment, and emotional detachment. Unmarried physicians show higher emotional exhaustion and lower personal accomplishment at the beginning of their careers due to the increased demands, uncertainties regarding job stability, long working hours, and new responsibilities assigned to the role (Low et al., 2019; Mendes & Yaphe, 2017; Taranu et al., 2022; Yates & Samuel, 2019). The COVID-19 pandemic reinforced emotional exhaustion, further aggravating the chronic occupational stress of oncologists (Hlubocky et al., 2021; Jiménez-Labaig et al., 2021).

The intense emotional burden experienced by oncologists who spend long hours providing patient support over the years following the same patient is a constant challenge for physician mental health (Tetzlaff et al., 2022; Yasgur, 2022). When facing difficult situations in patient care, medical oncologists often indicate their inability to express emotions at work, which increases psychological burden and emotional detachment and reduces professional fulfillment (Dunn et al., 2021; Kovács et al., 2010). Time spent with patients and work overload (often due to working hours and short staffing) also contributes to the increase in Burnout Syndrome (Yeob et al., 2020). This ability to modify (in intensity or quality) an emotion to reach occupational rules is known as emotional labor and has two dimensions (Andela et al., 2016, 2018; Zapf et al., 2021):

A quantitative dimension (emotional demand), which is characterized by the frequency in which an experience is perceived as emotional at work (e.g., team relationship, serious cases), and a qualitative dimension (emotional dissonance), which relates to the divergence between how an emotion is felt and what is the appropriate way to express it (e.g., sympathy and support for difficult patients and their families).

Not all emotion is bad for the physician: The ability to adopt the patient's perspective and demonstrate empathy enhances job satisfaction and commitment and reduces Burnout Syndrome (Juliá-Sanchis et al., 2019; Park et al., 2020; Rotenstein et al., 2023; Yue et al., 2022). Empathy refers to the levels of self-perceived empathy by physicians, such as perspective-taking, compassionate care, and the ability to put oneself in the patient's place and understand their concerns and perspectives (Hojat, 2016; Sanders et al., 2021; van Vliet & Back, 2021). Although building a relationship in which the patient feels supported and understood may represent an additional emotional demand, empathetic attitudes can enhance efficiency, strengthen personal accomplishment and self-esteem, and protect against professional stress (Sanders et al., 2021; Witte et al., 2025).

Burnout Syndrome harms are both individual and organizational, due to absenteeism, leaves of absence, professional abandonment, and turnover (Edú-Valsania et al., 2022; Dewa et al., 2014; Rathert et al., 2018; Tyssen, 2018). These behaviors have been linked to emotional labor (assessed through demands and dissonance) and empathy (perspective-taking, compassionate care, and the ability to put oneself in the place of the patient) in physical and emotional strain. Thus, the present study aimed to examine how frequently emotional demands and dissonance occur in addition to a lack of empathy and how strongly they predict burnout syndrome among oncologists. Table 1 summarizes the hypotheses identified for the associations between emotional labor, empathy, and Burnout Syndrome.

METHODS

Design

This study adopted a cross-sectional and explanatory design following the STROBE guidelines (the complete checklist is included as Supplementary Material 1). The method was employed to determine the association between emotional labor, empathy, and Burnout Syndrome variables.

Participants

Sample size calculation was conducted using G*Power version 3.1.9.6 (Faul et al., 2007) based on Gil-Monte et al. (2023) broad analysis of the use of the Spanish Burnout Inventory in 17 countries. We have used the lowest effect size observed in all samples, which was 0.39 (the highest was 0.96) with a significance criterion of $\alpha=.05$ and $\beta=.05$. The minimum sample size needed to reach adequate power was estimated at 79 for bivariate normal models.

A non-probabilistic sample of 128 physicians working in oncology was included in the study (50.8% were female). Participants' ages ranged from 27 to 73 years ($M=39.91$ years, $SD = 8.45$). Most of them completed a medical residency in oncology (57.8%), and 29.1% finished their graduate studies. Participants

were mostly from the Southeast (37.5%) and the South (31.3%) of Brazil. The inclusion criterion used in the study was working in oncology for at least one year, and the average experience was 10.48 years ($SD = 8.60$). On average, physicians attended to 14 patients ($SD = 7$) daily.

Data Collection Procedure

Participants were selected by convenience through prior searches on Medical Associations, Oncology entities, and lists of oncologists from different hospitals in the country. Invitations were sent via social media and email. The invitations were forwarded to private clinics for distribution to oncologists, through both available emails and clinic profiles on social media.

Materials

The survey included sociodemographic and work-related data questions about age, sex, state of residence, education, professional experience, and number of daily patients. In addition, they have answered the following questionnaires:

Spanish Burnout Inventory (SBI). The 20-item instrument was developed by Gil-Monte (2005) and adapted to Brazilian culture by Gil-Monte, Carlotto, and Câmara (2010) to assess levels of burnout in four subscales: Enthusiasm towards the job (five items, reverse coded), including sentences such as "My work represents a stimulating challenge for me;" Psychological exhaustion (four items), including sentences such as "I feel pressured by work;" Indolence (six items), including sentences such as "I think I treat some patients with indifference;" and Guilt (five items), including sentences such as "I feel bad about some things I said at work." Items were rated on a 5-point Likert scale, ranging from (0) never to (4) every day.

This model can provide two diagnostic profiles: Profile 1 refers to a combination of low levels of enthusiasm towards the job and high levels of both psychological exhaustion and indolence; and Profile 2, which is related to the three dimensions of Profile 1 in addition to high scores in the guilt dimension. Although Profile 1 is a moderate form of discomfort, Profile 2 is a form of greater clinical impairment of the syndrome, often incapacitating the worker from performing his/her duties.

Emotional Demand scale from the Questionnaire on the Experience and Assessment of Work (QEEW). The seven-item instrument was developed by Van Veldhoven et al. (2002) to assess the frequency with which the need for emotional regulation is perceived to maintain the professional-client relationship. The scale included items such as "How often, in your work, are you confronted with situations that personally mobilize you emotionally?", which participants answered using a four-point Likert frequency scale, ranging from (1) never to (4) always. The Brazilian version was adapted by Taube, Carlotto, and Brust-Renck (2025).

Emotional Dissonance taken from the Frankfurt Emotion Work Scales (FEWS). The five-item scale was developed by Zapf et al. (1999) to assess the frequency with which participants feel an incongruence between the demands of emotions that must be expressed at work and their personal feelings and values. The scale included items such as "During your work, how often do you need to suppress your own feelings?", which participants answered using a five-point Likert frequency scale, ranging from (1) never to (5) very often. The Brazilian version was adapted by Taube, Carlotto, and Brust-Renck (2025).

Jefferson Empathy Scale - Physician Version (© Thomas Jefferson University). The 20-item instrument was developed by Hojat et al. (2001) and adapted to Brazilian culture by Paro et al. (2012) to assess empathy in three domains: Perspective Taking (10 items), including items such as "I have a good sense/sense of humor, which I consider contributes to a better clinical outcome;" Compassionate Care (eight items), including items such as "My patients feel better when I understand their feelings;" and Ability to Put Oneself in the Place of the Patient (two items), including items such as "It is difficult for me to see things from my patients' point of view." Items were rated on a 7-point Likert scale, ranging from (1) strongly disagree to (7) strongly agree.

Data Analysis Procedures

IBM SPSS Statistics, version 22.0, was used for data analysis. All measures showed normal distribution according to skewness and kurtosis and presented satisfactory internal consistency according to Cronbach's alpha. Thus, Pearson correlation anal-

Table 1. Expected Outcomes for Burnout Syndrome

Variable	Burnout Syndrome				References
	EJ	PE	IN	FG	
<i>Emotional Labor</i>					
Emotional Demand	-	+	+	NA	Esteves et al. (2019); Gajra et al. (2020); Le Blanc et al. (2001)
Emotional Dissonance	-	+	+	NA	Andela et al. (2016); Rafique et al. (2017)
<i>Empathy</i>					
Perspective Taking	+	-	-	-	Lamothe et al. (2014); Taleghani et al. (2017)
Compassionate Care	+	-	-	-	Duarte & Pinto-Gouveia (2017)
Ability to Put Oneself in the Place of the Patient	+	-	-	-	Perniciotti et al. (2020); Pinheiro et al. (2020)

Note. EJ = Enthusiasm towards the job; PE = Psychological Exhaustion; IN = Indolence; FG = Feelings of Guilt. + = Positive association; - = Negative association; NA = Not assessed. The associated variables are presented in a positive direction.

ysis was performed for the association between variables and the outcomes with the four dimensions of Burnout Syndrome, and multiple linear regression analysis (Enter method) was performed to identify predictors of each of the Burnout Syndrome dimensions (dependent variables). As independent variables in the regression, the scales of emotional labor and the dimensions of empathy were used. The critical level for the development of Burnout Syndrome, according to Profiles 1 and 2, was calculated based on the SBI manual (Gil-Monte, 2019).

Ethical Procedures

The research project was approved by the Institutional Review Board of Universidade do Vale do Rio dos Sinos (CAAE number 47574521.0.0000.5344) and Grupo Hospitalar Nossa Senhora da Conceição (CAAE number 47574521.0.3001.5530), in Brazil. All participants who agreed to participate provided informed consent via an online form. Data collection was conducted online between July and October 2022.

RESULTS

Descriptive Analysis of Burnout Syndrome

Means and standard deviation for all measures were presented in Table 2. Higher Burnout Syndrome scores were observed for enthusiasm towards the job subscale of SBI, meaning loss of motivation at work (given the scale was reverse coded), followed by psychological exhaustion—both serving as clinical criteria for Burnout Syndrome diagnosis.

The critical levels of Burnout Syndrome were estimated from the SBI Manual (Table 3). Results indicated that more than half of the oncologists assessed in the present study met the criteria for either Profile 1 or 2 (percentile 90 or greater). The oncologists in the present study were identified in greater proportion as Profile 2 (49.2%) than Profile 1 (12.5%), which indicates the

severity of the situation in which they find themselves, with most of them reaching levels of inability to continue to perform their daily tasks (Profile 2).

Predictions of Burnout Syndrome from Emotional Labor and Empathy

Regarding each individual dependent variable, the regression models presented in Table 4 clarify unique predictors of Burnout Syndrome dimensions. First, higher scores in the dimension of (lack of) enthusiasm towards the job were best predicted by lower emotional dissonance and higher empathy levels of perspective taking. Physicians who are less likely to feel overwhelmed by the feelings associated with patient care and are more likely to understand patients' feelings are more likely to lack enthusiasm and regard their jobs as less fulfilling.

Higher levels of the dimension psychological exhaustion were best predicted by higher scores of both emotional demand and emotional dissonance (both with high standardized beta values), in addition to lower levels of empathy ability to put oneself in the patient's place (Table 4). Higher scores of emotional demand and emotional dissonance at work were also predictors of the Indolence dimension of Burnout Syndrome, together with lower scores in empathy levels of perspective taking (Table 4). Emotional dissonance was the best predictor with higher standardized beta values, followed by empathy—perspective taking, and emotional demand.

Finally, higher levels of emotional dissonance were the best predictor of Burnout Syndrome dimension of Guilt, which is the best predictor of Profile 2 when assessing critical levels of Burnout Syndrome that are not compatible with conducting one's job. (Table 4), revealing that oncologists who perceive that their work is emotionally demanding also feel more guilty. We should note that higher scores of emotional demands and

Table 2. Descriptive Statistics of the Spanish Burnout Inventory, Emotional Labor Scales, and Jefferson Empathy Scale – Physician Version (n=128)

Measures	Min	Max	#	α	Means (SD)	Skewness (SE)	Kurtosis (SE)
<i>Spanish Burnout Inventory</i>							
Enthusiasm towards the job	1	5	5	0.91	4.06 (0.66)	-0.68 (0.22)	0.69 (0.43)
Psychological Exhaustion	1	5	4	0.90	3.22 (0.90)	-0.05 (0.22)	-0.47 (0.43)
Indolence	1	5	6	0.74	2.01 (0.50)	0.44 (0.22)	0.26 (0.43)
Guilt	1	5	5	0.85	2.04 (0.59)	0.62 (0.22)	0.59 (0.43)
<i>Emotional Labor Measures</i>							
Emotional Demand ^a	1	4	7	0.78	2.80 (0.49)	0.25 (0.22)	-0.20 (0.43)
Emotional Dissonance ^b	1	4	5	0.80	2.88 (0.66)	-0.05 (0.22)	-0.18 (0.43)
<i>Jefferson Empathy Scale - Physician Version</i>							
Perspective Taking	1	7	10	0.85	6.11 (0.57)	-0.52 (0.22)	-0.07 (0.43)
Compassionate Care	1	7	8	0.70	5.99 (0.63)	-0.74 (0.22)	0.80 (0.43)
Ability to Put Oneself in the Place of the Patient	1	7	2	0.67	5.80 (1.00)	-0.92 (0.22)	0.48 (0.43)

Note. α = Cronbach's Alfa. DP = Standard Deviation. SE = Standard Error. ^aEmotional Demand scale from the Questionnaire on the Experience and Assessment of Work; ^bEmotional Dissonance taken from the Frankfurt Emotion Work Scales.

higher scores of the empathy level of compassionate care were also likely to explain more Guilt ($p < .10$).

In summary, Burnout Syndrome was best assessed by emotional dissonance, which showed higher standardized beta values and predicted all four dimensions of the SBI (Table 4). Other predictors of each dimension of Burnout Syndrome were emotional demand (for psychological exhaustion and indolence) and empathy measures of perspective taking (for enthusiasm towards the job and indolence), compassionate care (for guilt), and the ability to put oneself in the place of the patient (for psychological exhaustion). All these measures are of clinical relevance in comprehending Burnout Syndrome in oncology physicians.

DISCUSSION

The high frequency of Burnout Syndrome observed among Brazilian oncologists corroborates previous studies from other countries (Banerjee et al., 2017; Gajra et al., 2020). In other areas, Burnout Syndrome was not as frequent, although anesthesiologists and surgeons, as well as other clinical specialties, presented slightly higher values of depression and anxiety (Bernburg et al., 2016). These differences may be related to the characteristics of the oncologist's work in clinically serious and complex contexts, with poor prognosis, high responsibilities, and demanding treatments (Bouza et al., 2020; Granek & Nakhsh, 2022; Ramos et al., 2022; Singh et al., 2022).

Participants not only showed symptoms that generate some

Table 3. Frequency and Percent of Physicians with Critical Level of Burnout Syndrome (based on percentile 90) from the Spanish Burnout Inventory's Manual (n=128)

Dimensions	P < 90	P ≥ 90
Enthusiasm towards the job	39(30.5%)	89(69.5%)
Psychological Exhaustion	62(48.4%)	66 (51.6%)
Indolence	74 (57.8%)	54 (42.2%)
Guilt	85(66.4%)	43 (33.6%)
Profile 1 ^a	112(87.5%)	16(12.5%)
Profile 2 ^b	65(50.8%)	63(49.2%)

^aProfile 1 include low levels of enthusiasm towards the job and high levels of both psychological exhaustion and indolence; ^bProfile 2 represents a more severe manifestation of Burnout Syndrome, including Profile 1 levels in addition to high scores of Guilt.

Table 4. Multiple Linear Regression to Predict each Dimension of the Spanish Burnout Inventory with Subscales of Emotional Labor Measures and Jefferson Empathy Scale - Physician Version (n=128)

Burnout Syndrome Dimensions	Enthusiasm towards the job		Psychological exhaustion		Indolence		Guilt	
	β	t	β	t	β	t	β	t
Constant	-	4.82**	-	0.62	-	3.94**	-	1.6
Emotional Demand ^a	0.03	0.31	0.41	4.98**	0.17	2.00*	0.17	1.67 [†]
Emotional Dissonance ^b	-0.47	-4.99**	0.32	3.84**	0.43	4.95**	0.29	2.86*
JES - Perspective Taking	0.21	2.25*	0.01	0.08	-0.23	-2.64*	-0.14	-1.4
JES - Compassionate Care	0.04	0.4	0.01	0.1	0.07	0.76	0.18	1.82 [†]
JES - Ability to Put Oneself in the Place of the Patient	0.08	0.89	-0.15	-1.82 [†]	-0.12	-1.44	-0.13	-1.3
Adjusted R ²	0.31		0.46		0.41		0.19	
F (df=121)	12.08**		22.19**		16.17**		6.94**	
DW	1.7		2.07		2.01		1.03	
VIF	1.59		1.59		1.59		1.59	
DCox	< 0.001		< 0.001		< 0.001		< 0.001	

Note. Enter method was used. JES = Jefferson Empathy Scale - Physician Version. DW = Durbin Watson. VIF = Variance Inflation Factor. DCox = Cox length. ^aEmotional Demand scale from the Questionnaire on the Experience and Assessment of Work; ^bEmotional Dissonance taken from the Frankfurt Emotion Work Scales. [†] $p < .10$, * $p < .05$, ** $p < .001$.

type of discomfort for the performance of their work functions, but most of them suffered from guilt that aggravates Burnout Syndrome and can lead to serious problems in the quality of work and a high risk of absence due to related health issues (Profile 2). When the research was conducted, all professionals who answered our survey were on active duty, which leads us to believe that oncologists may be providing less emotional support and lower quality of care to patients during treatments than they would in healthier conditions. Previous studies showed similar critical levels of Burnout Syndrome (around 44%) in working physicians in primary health care (Pinheiro et al., 2020) and anesthesiology (Misiołek et al., 2017). About half (20–24%) of working healthcare professionals in other fields, such as nurses, health agents, dentists, and physiotherapists, were working under critical levels of Burnout Syndrome (Buratti et al., 2022; Esteves et al., 2019).

As in previous studies (Dunn et al., 2021; Yasgur, 2022), emotional labor (incongruence between actual feelings and what is appropriate to express, in addition to the overwhelmingness of emotions) is responsible for increasing feelings of psychological exhaustion suffered by oncologists. Oncologists' efforts to adopt their patients' point of view have also shown higher levels of (lack of) enthusiasm towards the job in other studies (Simões et al., 2021), unlike other primary healthcare professionals (Pinheiro et al., 2020).

When it comes to empathy, however, recognizing how difficult it is for physicians to put themselves in the place of the patient has (although only marginally) predicted lower levels of exhaustion. The effort of oncologists to regulate negative emotions at work is a source of suffering and psychological exhaustion, unlike what happens in other medical specialties (Andela et al., 2016; Kaur & Malodia, 2013). In other studies, (lack of) enthusiasm towards the job and psychological exhaustion were associated with poorer quality of life, higher levels of anxiety and depression (Franceschini & Santoro, 2017), and medical errors (Levine et al., 2022), highlighting other negative effects of Burnout Syndrome in oncologists.

Indolence, according to Gil-Monte's model (2005), is a way of coping with psychological exhaustion in order to protect oneself, expressed by feelings of indifference, insensitivity, and cynicism in the workplace as a way to avoid connection with patients and their families, but often generates suffering because one is unable to regulate one's emotions and express what one really feels. The empathetic attitude of understanding patients' perspective, however, appears to be a healthy way to manage (and reduce) indolence, in line with Yue et al.'s (2022) study, in which empathy had a negative effect on Burnout Syndrome. In oncology, empathy benefits the physician-patient relationship, which is known to increase patients' satisfaction and appreciation of physicians who are sensitive to their emotional demands (Sanders et al., 2021).

Compassion fatigue and its relationship with empathic skills are a widely studied topic to explain burnout among oncologists in previous studies (Barnett et al., 2022; Duarte & Pinto-Gouveia, 2017). Oncologists work under time pressure to advance treatment and feel emotional tension dealing with life and death situations daily, sometimes adopting behaviors of detachment and

indifference at work to cope with dissonance and demands of the job, reinforcing feelings of guilt (Blum, 2019; Misiołek-Marín et al., 2020).

Empathy, in this study, appeared to be a preventive factor for Burnout Syndrome, being related to less emotional distance from patients and coworkers, fewer feelings of indifference, and higher levels of personal satisfaction with work. The meta-analysis by Lelorain et al. (2023) reinforces the association between physician empathy and improved health outcomes for cancer patients. A central aspect of empathy is perspective taking (Park et al., 2020), and in the present study, this was the only predictor that was negatively associated with levels of indolence and guilt, and positively with (lack of) enthusiasm towards the job. In other words, perspective taking is the first step towards empathy, in which the physician perceives the situation and perspectives of the cancer patient to direct his/her interventions. This skill was associated with greater personal satisfaction at work, fewer attitudes of indifference towards patients and coworkers, less pressure, and feelings of guilt for attitudes and behaviors that are not consistent with the role of the oncologist. Although not always consistent (Altmann & Roth, 2021), similar results were found in a sample of general practitioners, indicating that empathy is an important and protective aspect for Burnout Syndrome (Lamothe et al., 2014). Empathy has not always been directly associated with Burnout Syndrome, but studies conducted with healthcare professionals have shown indirect effects mediated by resilience (Wu et al., 2022), professional support (Bredicean et al., 2021), job commitment and job satisfaction (Yue et al., 2022), mental health vulnerability, and several others were also described in a recent systematic review (Zhou, 2025). Although teaching empathy might not be an easy task, helping professionals to establish professional and mental health support, as well as develop commitment and satisfaction with work, might be a suitable proxy for preventing Burnout Syndrome.

Practical and Public Health Implications

It can be difficult for physicians to put themselves in the place of the patient and empathize with their suffering, given that they learn, from medical training, to repress their feelings and demonstrate neutral expressions, as the opposite would be related to a lack of professionalism. The limitations or difficulties that some physicians have in recognizing their own emotions can affect empathy and increase Burnout Syndrome; however, developing emotional labor can help develop empathy (Kerasidou & Horn, 2016).

The sample studied reveals levels of Burnout Syndrome that require health care, with more than half of oncologists showing symptoms that generate some type of discomfort and a higher degree of illness, with potential problems in the quality of care and risk of absence due to health issues (which in turn will overwhelm their coworkers). Interventions on occupational stress, signs and symptoms of Burnout Syndrome, emotional labor, and empathy are preventive strategies that organizations can propose to oncologists. Individual interventions are recommended and pertinent, as oncologists need emotional support and better working conditions to cope with the exhaustion that

incapacitates them for their work. Oncologists with Burnout Syndrome, experiencing stressful situations and emotional demands at work, may feel less comfortable communicating assertively with patients.

Strengths and Limitations

This study included a sample exclusively of oncologists, filling the gaps regarding the predictors of Burnout Syndrome in this group of physicians subject to very specific demands. The focus on investigating the emotional factors associated with Burnout Syndrome using appropriate measures and with psychometric quality is a strength of the study, as is the magnitude of the effect, which varied from medium to high.

Considering that empathy is a protective factor against Burnout Syndrome, it is important that communication skills and empathic relationship training be integrated into pre- and post-graduate academic training spaces as a form of prevention in the medical career, with relevance in oncology (Keshtkar et al., 2024). Further studies are needed to assess whether the lack of empathy and Burnout Syndrome of oncologists influence communication with patients.

This study has some limitations that should be considered. One of them is its cross-sectional, non-probabilistic sampling design, which prevents the analysis of causal relationships. Another is the regionality of the largest portion of the sample investigated, belonging to the South and Southeast regions, which have sociocultural and work characteristics that are distinct from other regions of the country. It is recommended that this study be expanded with random samples from different states of Brazil and organizational contexts. Based on the investigation, some potential areas for further studies are identified. Thus, studies suggest that they include other variables of an emotional nature, such as regulation and emotional intelligence, and coping strategies that increase the explanatory power of the dimensions of Burnout Syndrome.

Conclusion

The results of the study are alarming and draw attention to a serious public health problem in oncological care, given that the frequency of Burnout Syndrome has been increasing over the years (De Hert, 2020). Burnout Syndrome in oncology is on the rise, surpassing that of other specialties in the health area, indicating that emotional variables are associated with a higher frequency of the syndrome (Rebegea et al., 2022). Interventions aimed at training in managing emotions at work and developing empathic skills may protect oncologists from Burnout Syndrome. It is the responsibility of organizations to provide support for these individual and team demands, offering better working conditions. It is essential that oncologists receive support from organizations to recognize Burnout Syndrome as a serious and prevalent disease among physicians and a public health problem.

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AUTHORS' CONTRIBUTION

Fernanda B. Romeiro: Conceptualization, methodology investigation, writing, and approval of the final version.

Mary Sandra Carlotto: Conceptualization, methodology investigation, supervision, editing, and approval of the final version.

Margarida Figueiredo-Braga: Supervision, editing, and approval of the final version.

Priscila G. Brust-Renck: Data analysis, writing, editing, translation, and approval of the final version.

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CONFLICT OF INTEREST

The authors declare that there were no conflicts of interest in the collection of data, analysis of information, or writing of the manuscript.

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REVIEW PROCESS

This study has been reviewed by external peers in double-blind mode. The editor in charge was David Villarreal-Zegarra. The review process is included as supplementary material 2.

DATA AVAILABILITY STATEMENT

Data is available upon request to the authors.

DECLARATION OF THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE

We have not used generative artificial intelligence in any form. The final version of the manuscript was reviewed and approved by all authors.

DISCLAIMER

The authors are responsible for all statements made in this article.

REFERENCES

- Alabi, R. O., Hietanen, P., Elmusrati, M., Youssef, O., Almangush, A., & Mäkitie, A. A. (2021, October 1). Mitigating burnout in an oncological unit: A scoping review. *Frontiers in Public Health*, Vol. 9, 677915. <https://doi.org/10.3389/fpubh.2021.677915>
- Altmann, T., & Roth, M. (2021). The risk of empathy: longitudinal associations between empathy and burnout. *Psychology & health*, 36(12), 1441-1460. <https://doi.org/10.1080/08870446.2020.1838521>
- Andela, M., Truchot, D., & Huguenotte, V. (2018). Job demands, emotional dissonance and elderly abuse: The moderating role of organizational resources. *Journal of Elder Abuse & Neglect*, 30(5), 368-384. <https://doi.org/10.1080/08946566.2018.1514343>
- Andela, M., Truchot, D., & Van der Doef, M. (2016). Job stressors and burnout in hospitals: The mediating role of emotional dissonance. *International Journal of Stress Management*, 23(3), 298-317. <https://doi.org/10.1037/str0000013>
- Banerjee, S., Califano, R., Corral, J., de Azambuja, E., De Mattos-Arruda, L., Guarneri, V., Hutka, M., Jordan, K., Martinelli, E., Mountzios, G., Ozturk, M. A., Petrova, M., Postel-Vinay, S., Preusser, M., Qvortrup, C., Volkov, M. N. M., Tabernero, J., Olmos, D., & Strijbos, M. H. (2017). Professional burnout

- in European young oncologists: Results of the European Society for Medical Oncology (ESMO) Young Oncologists Committee Burnout Survey. *Annals of Oncology*, 28(7), 1590–1596. <https://doi.org/10.1093/annonc/mdx196>
- Barnett, M. D., Hays, K. N., & Cantu, C. (2022). Compassion fatigue, emotional labor, and emotional display among hospice nurses. *Death Studies*, 46(2), 290–296. <https://doi.org/10.1080/07481187.2019.1699201>
- Bernburg, M., Vitzthum, K., Groneberg, D. A., & Mache, S. (2016). Physicians' occupational stress, depressive symptoms and work ability in relation to their working environment: a cross-sectional study of differences among medical residents with various specialties working in German hospitals. *BMJ Open*, 6(6), e011369. <https://doi.org/10.1136/bmjopen-2016-011369>
- Blum, L. D. (2019). Physicians' goodness and guilt—emotional challenges of practicing medicine. *JAMA Internal Medicine*, 179(5), 607–608. <http://doi.org/10.1001/jamainternmed.2019.0428>
- Bouza, E., Gil-Monte, P. R., Palomo, E., Bouza, E., Cortell-Alcocer, M., Del Rosario, G., ... Soriano, J. B. (2020). Work-related burnout syndrome in physicians in Spain. *Revista Clínica Española*, 220(6), 359–363. <https://doi.org/10.1016/j.rce.2020.02.002>
- Bredicean, C., Tamasan, S. C., Lungeanu, D., Giurgi-Onu, C., Stoica, I. P., Panfil, A. L., Vasilian, C., Secosan, I., Ursoniu, S., & Patrascu, R. (2021). Burnout toll on empathy would mediate the missing professional support in the COVID-19 outbreak. *Risk Management and Healthcare Policy*, 14, 2231–2244. <https://doi.org/10.2147/RMHP.S300578>
- Carlotto, M. S., Abbad, G. D. S., Sticca, M. G., Carvalho-Freitas, M. N. D., & Oliveira, M. S. D. (2021). Burnout syndrome and the work design of education and health care professionals. *Psico-USF*, 26(2), 291–303. <https://doi.org/10.1590/1413-82712021260208>
- Cubero, D. I. G., Fumis, R. R. L., de Sá, T. H., Dettino, A., Costa, F. O., Van Eyll, B. M. R. H. A., Beato, C., Peria, F. M., Mota, A., Altino, J., Azevedo, S. J., Rocha Filho, D. R., Moura, M., Lessa, A. E., & Del Giglio, A. (2016). Burnout in medical oncology fellows: A prospective multicenter cohort study in Brazilian institutions. *Journal of Cancer Education*, 31(3), 582–587. <https://doi.org/10.1007/s13187-015-0850-z>
- Dewa, C. S., Loong, D., Bonato, S., Thanh, N. X., & Jacobs, P. (2014). How does burnout affect physician productivity? A systematic literature review. *BMC Health Services Research*, 14, 1–10. <https://doi.org/10.1186/1472-6963-14-325>
- Duarte, J., & Pinto-Gouveia, J. (2017). The role of psychological factors in oncology nurses' burnout and compassion fatigue symptoms. *European Journal of Oncology Nursing*, 28, 114–121. <https://doi.org/10.1016/j.ejon.2017.04.002>
- Dunn, T. J., Terao, M. A., Blazin, L. J., Spraker-Perlman, H., Baker, J. N., Mandrell, B., Sellers, J., Crabtree, V. M., Hoffman, J. M., & Burlison, J. D. (2021). Associations of job demands and patient safety event involvement on burnout among a multidisciplinary group of pediatric hematology/oncology clinicians. *Pediatric Blood & Cancer*, 68(11), e29214. <https://doi.org/10.1002/pbc.29214>
- Edú-Valsania, S., Laguía, A., & Moriano, J. A. (2022). Burnout: A review of theory and measurement. *International Journal of Environmental Research and Public Health*, 19(3), 1780. <https://doi.org/10.3390/ijerph19031780>
- Eelen, S., Bauwens, S., Baillon, C., Distelmans, W., Jacobs, E., & Verzelen, A. (2014). The prevalence of burnout among oncology professionals: Oncologists are at risk of developing burnout. *Psycho-Oncology*, 23(12), 1415–1422. <https://doi.org/10.1002/pon.3579>
- Esteves, G. G. L., Leão, A. A. M., & Alves, E. de O. (2019). Fadiga e Estresse como preditores do burnout em profissionais da saúde. *Revista Psicologia: Organizações e Trabalho*, 19(3), 695–702. <https://doi.org/10.17652/rpot.2019.3.16943>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191. <https://doi.org/10.3758/BF03193146>
- Gajra, A., Bapat, B., Jeune-Smith, Y., Nabhan, C., Klink, A. J., Liassou, D., ... Feinberg, B. (2020). Frequency and causes of burnout in US community oncologists in the era of electronic health records. *JCO Oncology Practice*, 16(4), e357–e365. <https://doi.org/10.1200/JOP.19.00542>
- Gil-Monte, P. R. (2005). *El síndrome de quemarse por el trabajo (burnout): Una enfermedad laboral en la sociedad del bienestar*. Pirámide.
- Gil-Monte, P. R. (2019). CESQT. Cuestionario para la Evaluación del Síndrome de Quemarse por el Trabajo [SBI: The Spanish Burnout Inventory] (Version 2). TEA Ediciones.
- Gil-Monte, P. R., Espejo, B., Checa, I., Gil-LaOrden, P., Angeline J. K., Carlotto, M. S., ... & Viotti, S. (2023). Factor structure and measurement invariance of the Spanish Burnout Inventory among professionals across 17 countries and regions. *Applied Research in Quality of Life*, 18(2), 869–892. <https://doi.org/10.1007/s11482-022-10108-1>
- Graneek, L., & Nakash, O. (2022, June 1). Oncology healthcare professionals' mental health during the COVID-19 pandemic. *Current Oncology*, 29, 4054–4067. <https://doi.org/10.3390/curroncol29060323>
- Hert, S. (2020). Burnout in healthcare workers: Prevalence, impact and preventative strategies. *Local and Regional Anesthesia*, 13, 171–183. <https://doi.org/10.2147/LRA.S240564>
- Hlubocky, F. J., Symington, B. E., McFarland, D. C., Gallagher, C. M., Dragnev, K. H., Burke, J. M., Lee, R. T., El-Jawahri, A., Popp, B., Rosenberg, A. R., Thompson, M. A., Dizon, D. S., Srivastava, P., Patel, M. I., Kamal, A. H., Daugherty, C. K., Back, A. L., Dokucu, M. E., & Shanafelt, T. D. (2021). Impact of the COVID-19 pandemic on oncologist burnout, emotional well-being, and moral distress: considerations for the cancer organization's response for readiness, mitigation, and resilience. *JCO Oncology Practice*, 17(7), 365–374. <https://doi.org/10.1200/OP.20.00937>
- Hojat, M. (2016). Empathy in health professions education and patient care. In *Empathy in Health Professions Education and Patient Care*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-27625-0>
- Hojat, M., Mangione, S., Nasca, T. J., Cohen, M. J. M., Gonnella, J. S., Erdmann, J. B., Veloski, J., & Magee, M. (2001). The Jefferson Scale of Physician Empathy: Development and preliminary psychometric data. *Educational and Psychological Measurement*, 61(2), 349–365. <https://doi.org/10.1177/00131640121971158>
- Jiménez-Labaig, P., Pacheco-Barcia, V., Cebrià, A., Gálvez, F., Obispo, B., Páez, D., Quílez, A., Quintanar, T., Ramchandani, A., Remon, J., Rogado, J., Sánchez, D. A., Sánchez-Cánovas, M., Sanz-García, E., Sesma, A., Tarazona, N., Cotés, A., González, E., Bosch-Barrera, J., Fernández, A., Felip, E., Vera, R., Rodríguez-Lescure, Á., & Élez, E. (2021). Identifying and preventing burnout in young oncologists, an overwhelming challenge in the COVID-19 era: a study of the Spanish Society of Medical Oncology (SEOM). *ESMO Open*, 6(4), 100215. <https://doi.org/10.1016/j.esmoop.2021.100215>
- Juliá-Sanchis, R., Richart-Martínez, M., García-Aracil, N., José-Alcaide, L., Piquer-Donat, T., & Castejón-de-la-Encina, M. E. (2019). Measuring the levels of burnout syndrome and empathy of Spanish emergency medical service professionals. *Australasian Emergency Care*, 22(3), 193–199. <https://doi.org/10.1016/j.auvec.2019.04.003>
- Kaur, S., & Malodia, D. L. (2013). Does Emotional Labour Influence Burnout? *International Journal of Management & Information Technology*, 6(2), 784–793. <https://doi.org/10.24297/ijmit.v6i2.735>
- Kerasidou, A., & Horn, R. (2016). Making space for empathy: Supporting doctors in the emotional labour of clinical care ethics in clinical practice. *BMC Medical Ethics*, 17, 1–5. <https://doi.org/10.1186/s12910-016-0091-7>
- Keshkar, L., Madigan, C. D., Ward, A., Ahmed, S., Tanna, V., Rahman, I., Bostock, J., Nockels, K., Wang, W., Gillies, C. L., & Howick, J. (2024). The effect of practitioner empathy on patient satisfaction: a systematic review of randomized trials. *Annals of Internal Medicine*, 177(2), 196–209. <https://doi.org/10.7326/M23-2168>
- Kovács, M., Kovács, E., & Hegedűs, K. (2010). Is emotional dissonance more prevalent in oncology care? Emotion work, burnout and coping. *Psycho-Oncology*, 19(8), 855–862. <https://doi.org/10.1002/pon.1631>
- Lamothe, M., Boujut, E., Zenasni, F., & Sultan, S. (2014). To be or not to be empathic: The combined role of empathic concern and perspective taking in understanding burnout in general practice. *BMC Family Practice*, 15(1). <https://doi.org/10.1186/1471-2296-15-15>
- Le Blanc, P. M., Bakker, A. B., Peeters, M. C. W., Van Heesch, N. C. A., & Schaufeli, W. B. (2001). Emotional job demands and burnout among oncology care providers. *Anxiety, Stress and Coping*, 14(3), 243–263. <https://doi.org/10.1080/10615800108248356>
- Lelorain, S., Gehenne, L., Christophe, V., & Duprez, C. (2023). The association of physician empathy with cancer patient outcomes: A meta-analysis. *Psycho-Oncology*, 32(4), 506–515. <https://doi.org/10.1002/pon.6108>
- Levine, M., Riedinger, C., Khadraoui, W., Barrington, D., Vetter, M., Yeager, K., Fowler, J., & Vetter, M. (2022). Self-reported medical errors, depression, anxiety, stress and burnout in a large NCI-designated comprehensive cancer center. *Gynecologic Oncology*, 166(1), S253–S254. [https://doi.org/10.1016/s0090-8258\(22\)01737-1](https://doi.org/10.1016/s0090-8258(22)01737-1)
- Low, Z. X., Yeo, K. A., Sharma, V. K., Leung, G. K., McIntyre, R. S., Guerrero, A.,

- Lu, B., Sin Fai Lam, C. C., Tran, B. X., Nguyen, L. H., Ho, C. S., Tam, W.W., & Ho, R. C. (2019). Prevalence of burnout in medical and surgical residents: A meta-analysis. *International Journal of Environmental Research and Public Health*, 16(9), 1479. <https://doi.org/10.3390/ijerph16091479>
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99–113. <https://doi.org/10.1002/job.4030020205>
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103–111. <https://doi.org/10.1002/wps.20311>
- Misiólek-Marín, A., Soto-Rubio, A., Misiólek, H., & Gil-Monte, P. R. (2020). Influence of burnout and feelings of guilt on depression and health in anesthesiologists. *International Journal of Environmental Research and Public Health*, 17(24), 1–17. <https://doi.org/10.3390/ijerph17249267>
- Misiólek, A., Gil-Monte, P. R., & Misiólek, H. (2017). Prevalence of burnout in Polish anesthesiologists and anesthetist nursing professionals: A comparative non-randomized cross-sectional study. *Journal of Health Psychology*, 22(4), 465–474. <https://doi.org/10.1177/1359105315604377>
- Murali, K., & Banerjee, S. (2018). Burnout in oncologists is a serious issue: What can we do about it? *Cancer Treatment Reviews*, 68, 55–61. <https://doi.org/10.1016/j.ctrv.2018.05.009>
- Park, J., Saha, S., Han, D., Jindal, M., Korthuis, P. T., Moore, R., & Beach, M. C. (2020). Are clinicians' self-reported empathic concern and perspective-taking traits associated with their response to patient emotions? Communication studies. *Patient Education and Counseling*, 103(9), 1745–1751. <https://doi.org/10.1016/j.pec.2020.04.016>
- Paro, H. B. M. S. B., Daud-Gallotti, R. M., Tibério, I. C., Pinto, R. M. M., & Martins, M. A. (2012). Brazilian version of the Jefferson Scale of Empathy: Psychometric properties and factor analysis. *BMC Medical Education*, 12(1), 73. <https://doi.org/10.1186/1472-6920-12-73>
- Perniciotti, P., Serrano, C. V., Jr., Guarita, R. V., Morales, R. J., & Romano, B. W. (2020). Síndrome de Burnout nos profissionais de saúde: Atualização sobre definições, fatores de risco e estratégias de prevenção. *Revista da Sociedade Brasileira de Psicologia Hospitalar*, 23(1), 35–52. <https://doi.org/10.57167/Rev-SBPH.23.98>
- Pinheiro, J. P., Sbicigo, J. B., & Remor, E. (2020). Associação da empatia e do estresse ocupacional com o burnout em profissionais da atenção primária à saúde [Association of empathy and occupational stress with burnout among primary health care professionals]. *Ciência & Saúde Coletiva*, 25(9), 3635–3646. <https://doi.org/10.1590/1413-81232020259.30672018>
- Rafique, T., Tasleem, S., Hassan, Q., Tariq, A., & Mumta, S. (2017). Antecedents and consequences of emotional labor: A review. *Bulletin of Business and Economics*, 6(4), 157–165.
- Ramos, A. P. S., Rousseng, S. C., Dias, M., & Benetti, M. (2022). COVID-19 and the mental health impacts on oncology healthcare professionals: Literature systematic review. *Revista Brasileira de Cancerologia*, 68(4), e-032536. <https://doi.org/10.32635/2176-9745.RBC.2022v68n4.2536>
- Rathert, C., Williams, E. S., & Linhart, H. (2018). Evidence for the quadruple aim: a systematic review of the literature on physician burnout and patient outcomes. *Medical Care*, 56(12), 976–984. <https://doi.org/10.1097/mlr.0000000000000999>
- Rebegea, L., Tarlungianu, C., Anghel, R., Firescu, D., Corobcean, N., & Gales, L. (2022). Burnout risk evaluation in medical oncology - radiotherapy personnel. *Archiv Euromedica*, 12, 1–6. <http://dx.doi.org/10.35630/2022/12/psy.ro.5>
- Romão, M. E., Setti, I., Alfano, G., & Barello, S. (2025). Exploring risk and protective factors for burnout in professionals working in death-related settings: A scoping review. *Public Health*, 241, 1–11. <https://doi.org/10.1016/j.puhe.2025.01.038>
- Rotenstein, L. S., Brown, R., Sinsky, C., & Linzer, M. (2023). The association of work overload with burnout and intent to leave the job across the healthcare workforce during COVID-19. *Journal of General Internal Medicine*, 38(8), 1920–1927. <https://doi.org/10.1016/j.puhe.2025.01.038>
- Ryan, E., Hore, K., Power, J., & Jackson, T. (2023). The relationship between physician burnout and depression, anxiety, suicidality and substance abuse: A mixed methods systematic review. *Frontiers in Public Health*, 11, 1133484. <https://doi.org/10.3389/fpubh.2023.1133484>
- Sanders, J. J., Dubey, M., Hall, J. A., Catzen, H. Z., Blanch-Hartigan, D., & Schwartz, R. (2021). What is empathy? Oncology patient perspectives on empathic clinician behaviors. *Cancer*, 127(22), 4258–4265. <https://doi.org/10.1002/cncr.33834>
- Simões, J. A., Prazeres, F., Maricoto, T., Simões, P. A., Lourenço, J., Romano, J. P., & Santiago, L. M. (2021). Physician empathy and patient enablement: Survey in the Portuguese primary health care. *Family Practice*, 38(5), 606–611. <https://doi.org/10.1093/fampra/cmab005>
- Singh, S., Farrelly, A., Chan, C., Nicholls, B., Nazeri-Rad, N., Bellicoso, D., Eisen, A., Falkson, C. B., Fox, C., Holloway, C., Kennedy, E., McLeod, R., Rothenberger, D., Trudeau, M., Shanafelt, T., & Bauman, G. (2022). Prevalence and workplace drivers of burnout in cancer care physicians in Ontario, Canada. *JCO Oncology Practice*, 18(1), e60–e71. <https://doi.org/10.1200/op.21.00170>
- Taleghani, F., Ashouri, E., & Saburi, M. (2017). Empathy, burnout, demographic variables and their relationships in oncology nurses. *Iranian Journal of Nursing and Midwifery Research*, 22(1), 41. https://doi.org/10.4103/ijnmr.ijnmr_66_16
- Taranu, S. M., Ilie, A. C., Turcu, A.-M., Stefaniu, R., Sandu, I. A., Pislaru, A. I., Alexa, I. D., Sandu, C. A., Rotaru, T.-S., & Alexa-Stratulat, T. (2022). Factors associated with burnout in healthcare professionals. *International Journal of Environmental Research and Public Health*, 19(22), 14701. <https://doi.org/10.3390/ijerph192214701>
- Taube, M. E., Carlotto, M. S., & Brust-Renck, P. G. (2025). Evidências de validade das escalas do trabalho emocional: Demanda emocional e dissonância emocional. *Revista Brasileira de Terapias Cognitivas*. In press.
- Tetzlaff, E. D., Hylton, H. M., Ruth, K. J., Hasse, Z., & Hall, M. J. (2022). Changes in burnout among oncology physician assistants between 2015 and 2019. *JCO Oncology Practice*, 18(1), e47–e59. <https://doi.org/10.1200/op.21.00051>
- van Vliet, L. M., & Back, A. L. (2021). The different faces of empathy in cancer care: From a desired virtue to an evidence-based communication process. *Cancer*, 127(22), 4137–4139. <https://doi.org/10.1002/cncr.33833>
- World Health Organization—WHO (2019). *Burn-out an “occupational phenomenon”*: International Classification of Diseases. <https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases>
- World Health Organization—WHO (2022). *Occupational stress, burnout and fatigue*. <https://www.who.int/tools/occupational-hazards-in-health-sector/occup-stress-burnout-fatigue>
- Yasgur, B. S. (2022). *A Tragedy of the Profession: Medscape Physician Suicide Report 2022*. <https://www.medscape.com/slideshow/2022-physician-suicide-report-6014970>
- Yates, M., & Samuel, V. (2019). Burnout in oncologists and associated factors: A systematic literature review and meta-analysis. *European Journal of Cancer Care*, 28(3), e13094. <https://doi.org/10.1111/ecc.13094>
- Yeob, K. E., Kim, S. Y., Park, B. R., Shin, D. W., Yang, H. Kook, Park, K., & Park, J. H. (2020). Burnout among oncologists in the Republic of Korea: A nationwide survey. *Current Problems in Cancer*, 44(1), 100535. <https://doi.org/10.1016/j.currprobcancer.2019.100535>
- Yue, Z., Qin, Y., Li, Y., Wang, J., Nicholas, S., Maitland, E., & Liu, C. (2022). Empathy and burnout in medical staff: Mediating role of job satisfaction and job commitment. *BMC Public Health*, 22(1), 1033. <https://doi.org/10.1186/s12889-022-13405-4>
- Zapf, D., Kern, M., Tschann, F., Holman, D., & Semmer, N. K. (2021). Emotion work: A work psychology perspective. *Annual Review of Organizational Psychology and Organizational Behavior*, 8(1), 139–172. <https://doi.org/10.1146/annurev-orgpsych-012420-062451>
- Zhou, H. (2025). Relationship between empathy and burnout as well as potential affecting and mediating factors from the perspective of clinical nurses: a systematic review. *BMC nursing*, 24(1), 38. <https://doi.org/10.1186/s12912-025-02701-0>
- Witte, H., Sverningsen, L., Grønkjær, L. L., & Donskov, F. (2025). Compassion training for healthcare professionals in oncology: A mixed-methods pilot study. *European Journal of Oncology Nursing*, 75, 102808. <https://doi.org/10.1016/j.ejon.2025.102808>
- Wu, W., Ma, X., Liu, Y., Qi, Q., Guo, Z., Li, S., ... & Zeng, Y. (2022). Empathy alleviates the learning burnout of medical college students through enhancing resilience. *BMC Medical Education*, 22(1), 481. <https://doi.org/10.1186/s12909-022-03554-w>

El rol de la empatía y del trabajo emocional como predictores del síndrome de burnout en oncólogos brasileños

RESUMEN

Introducción: Entre las especialidades médicas, los oncólogos han sido identificados de forma consistente como un grupo con mayor riesgo de desarrollar síndrome de burnout. **Objetivo:** Este estudio tuvo como objetivo identificar la frecuencia y el poder predictivo del trabajo emocional y de la empatía médica sobre el síndrome de burnout en oncólogos clínicos. **Método:** En un diseño transversal, 128 médicos con un promedio de 10 años de experiencia respondieron una encuesta en línea que incluía el Inventario Español de Burnout (que evalúa entusiasmo por el trabajo, agotamiento psicológico, indiferencia y culpa), la escala de Demanda Emocional del Cuestionario sobre la Experiencia y Evaluación del Trabajo, la disonancia emocional tomada de las Frankfurt Emotion Work Scales, y la Escala de Empatía de Jefferson - Versión para Médicos (que evalúa la toma de perspectiva, el cuidado compasivo y la capacidad de ponerse en el lugar del paciente). **Resultados:** Se observaron puntuaciones más altas en la subescala de entusiasmo por el trabajo del Inventario Español de Burnout, lo que también puede representar una falta de entusiasmo, seguidas por el agotamiento psicológico. Aproximadamente la mitad de los participantes presentó niveles críticos de afectación, lo que puede generar serios problemas en la calidad del trabajo y un alto riesgo de ausentismo por problemas de salud relacionados. En general, el síndrome de burnout fue mejor predicho por niveles más altos de demanda emocional, mientras que algunas dimensiones también fueron predichas por disonancia emocional y empatía. **Conclusión:** La empatía se asoció principalmente con niveles preventivos del síndrome de burnout y beneficia la relación médico-paciente, lo que se relaciona con un aumento en la satisfacción de los pacientes y una mayor valoración hacia médicos sensibles a sus demandas emocionales.

Palabras claves: Burnout psicológico; Emociones; Empatía; Estrés ocupacional; Relaciones médico-paciente.