REVISTA BRASILEIRA DE MEDICINA DE FAMÍLIA E COMUNIDADE
RBMFC

www.rbmfc.org.br
ISSN 2197-7994

Research Articles

Analysis of the scientific production on burnout syndrome in primary care physicians: A narrative review with systematic search.

Análise da produção científica sobre a síndrome de burnout *em médicos da atenção primária: uma revisão narrativa com busca sistematizada.*

Análisis de la producción científica sobre el síndrome de burnout en médicos de atención primaria: una revisión narrativa con búsqueda sistemática.

Fernando Augusto Figueiredo Montandon[1], Rodrigo Pastor Alves Pereira[1], Leonardo Cançado Monteiro Savassi[1]

[1]Universidade Federal de Ouro Preto – Ouro Preto (MG), Brazil.

ABSTRACT

Introduction: Burnout syndrome is an adjustment disorder related to chronic stress in the work environment, with consequences both to the professional's health and quality of life and to their work organization and performance. Physicians from all specialties are vulnerable to the development of burnout syndrome. Those who work in primary health care — general practitioners and family physicians — seem to be at higher risk since they are exposed to several stressors in their practice. Research on burnout syndrome in primary care physicians has been gaining prominence in the past 20 years, but the scarcity of studies in Brazil makes it difficult to characterize the real impact of this syndrome on these professionals. **Objective:** To review the literature searching for publications related to burnout syndrome in primary care physicians and analyze them, systematizing the areas of interest. **Methods:** This is a narrative literature review on the burnout syndrome in primary care physicians based on a systematic search in the electronic databases PubMed and Scientific Electronic Library Online (SciELO), using the following descriptors: "burnout, professional", "physicians, primary care", and "physicians, family". The search was conducted in October 2018 and allowed the identification of 192 publications, of which 55 were included in the analysis and categorized according to the year of publication, country of origin, study design, and areas of interest. **Results:** Most studies (40) adopted an observational descriptive cross-sectional design. We also found two systematic reviews of observational studies, two qualitative descriptive studies, two longitudinal cohort studies, two randomized clinical trials, two opinion papers, two editorials, one time trial, one time series, and one case study. We found many topics investigating burnout syndrome in primary care physicians, but the studies are often observational and describe the prevalence of the syndrome in these professionals and the various associated variables. The most frequently studied variables are sociodemographic aspects and those related to the work environment or to the professional. Studies collecting epidemiological data about primary care physicians in Brazil are scarce, but this is an important step toward understanding how this syndrome behaves in our context. **Conclusions:** We need studies on the prevalence and impact of burnout syndrome on primary care physicians that can particularly investigate factors related to the environment and the work process. Clinical trials can provide evidence to combat burnout effectively. Qualitative studies can collect data on the motivations of professionals, as well as their behaviors, opinions, and expectations, guiding strategies for coping with this syndrome.

Keywords: Burnout, professional; Primary health care; Physicians, family.

Corresponding author:
Fernando Augusto Figueiredo Montandon
E-mail: fafmontandon@live.com

Funding:
no external funding.
Ethical approval:
not applicable
Provenance:
not commissioned.
Peer review:
external.
Received: 02/19/2021.
Approved: 10/22/2021.

How to cite: Montandon F, Pereira RPA, Savassi LCM. Analysis of the scientific production on burnout syndrome in primary care physicians: A narrative review with systematic search. Rev Bras Med Fam Comunidade. 2022;17(44):2937. https://doi.org/10.5712/rbmfc17(44)2937

RESUMO

Introdução: A síndrome de *burnout* é um transtorno adaptativo ao estresse crônico no ambiente laboral, com consequências tanto na saúde e na qualidade de vida do profissional quanto em sua organização e desempenho no trabalho. Médicos de todas as especialidades estão vulneráveis ao desenvolvimento da síndrome de *burnout*. Aqueles que atuam na atenção primária à saúde – generalistas e médicos de família e comunidade – parecem apresentar maior risco, visto que estão expostos a diversos estressores no trabalho. As pesquisas sobre a síndrome de *burnout* em médicos da atenção primária à saúde vêm ganhando destaque nos últimos 20 anos, e a escassez de estudos no Brasil dificulta a caracterização do real impacto dessa síndrome nesses profissionais. **Objetivo:** Revisar a literatura na busca por publicações relacionadas à síndrome de *burnout* em médicos da atenção primária à saúde e analisá-las, sistematizando as áreas de interesse. **Métodos:** Revisão narrativa da literatura sobre a síndrome de *burnout* em médicos da atenção primária à saúde, por meio de busca sistematizada nas bases eletrônicas PubMed e *Scientific Electronic Library Online* (SciELO), utilizando os seguintes descritores: "*burnout*, *professional"*, "*physicians, primary care*" e "*physicians, family*". A busca foi realizada em outubro de 2018 e possibilitou a identificação de 192 publicações, das quais 55 foram incluídas na análise e categorizadas quanto a ano de publicação, país de origem, desenho do estudo e áreas de interesse. **Resultados:** A maior parte dos estudos era do tipo observacional descritivo transversal, metodologia utilizada em 40 trabalhos. Também foram identificadas duas revisões sistemáticas de estudos observacionais, dois estudos descritivos qualitativos, dois estudos longitudinais de coorte, dois ensaios clínicos randomizados, dois artigos de opinião, dois editoriais, um ensaio temporal, uma série temporal e um estudo de caso. Identificamos uma variedade de temas investigados sobre a síndrome de *burnout* em médicos da atenção primária à saúde, mas são frequentes estudos observacionais que descrevem a prevalência da síndrome nesses profissionais e as diversas variáveis de associação. As mais frequentemente estudadas são as sociodemográficas e as relacionadas ao ambiente laboral ou ao profissional. Percebe-se escassez de estudos que levantem dados epidemiológicos em médicos da atenção primária à saúde no Brasil, passo importante para o conhecimento de como essa síndrome se comporta em nosso meio. **Conclusões:** Fazem-se necessárias pesquisas de prevalência e sobre o impacto da síndrome de *burnout* nos médicos da atenção primária à saúde, que investiguem principalmente fatores relacionados ao ambiente e ao processo laboral. Ensaios clínicos podem prover evidências no combate eficaz ao *burnout*. Estudos qualitativos podem levantar dados sobre as motivações dos profissionais, além de comportamentos, opiniões e expectativas, direcionando estratégias para o enfrentamento dessa síndrome.

Palavras-chave: Esgotamento profissional; Atenção primária; Médicos de família.

RESUMEN

Introducción: el Síndrome de Burnout es un trastorno adaptativo al estrés crónico en el entorno laboral, con consecuencias tanto en la salud y calidad de vida del profesional, como en la organización y desempeño en el trabajo. Médicos de todas las especialidades son vulnerables al desarrollo de Síndrome de Burnout. Los que trabajan en la atención primaria de salud (APS) – médicos generales y los médicos de familia y de la comunidad – parecen correr un mayor riesgo, ya que están expuestos a diversos estresores en el trabajo. La investigación sobre Síndrome de Burnout en médicos de atención primaria de salud ha ido ganando protagonismo en los últimos veinte años y la escasez de estudios en Brasil dificulta la caracterización del impacto real de este síndrome en estos profesionales. **Objetivo:** revisar la literatura en la búsqueda de publicaciones relacionadas con la Síndrome de Burnout en médicos de la atención primaria de salud y analizarlas, sistematizando las áreas de interés. **Métodos:** revisión narrativa de la literatura sobre Síndrome de Burnout en médicos de atención primaria de salud, mediante búsqueda sistemática en las bases de datos electrónicas PubMed y SciELO, utilizando los siguientes descriptores: "Burnout, Professional", "Physicians, Primary Care" y "Physicians, Family". La búsqueda se realizó en octubre de 2018 y permitió identificar 192 publicaciones, de las cuales 55 fueron incluidas para análisis y categorizadas según año de publicación, país de origen, diseño del estudio y áreas de interés. **Resultados:** la mayoría de los estudios fueron de tipo observacional transversal, siendo esta metodología utilizada en 40 estudios. También se identificaron dos revisiones sistemáticas de estudios observacionales, dos estudios descriptivos cualitativos, dos estudios de cohortes longitudinales, dos ensayos clínicos aleatorizados, dos artículos de opinión, dos editoriales, una contrarreloj, una serie temporal y un estudio de caso. Identificamos una variedad de temas investigados sobre Síndrome de Burnout en médicos de atención primaria de salud, pero son frecuentes los estudios observacionales que describen la prevalencia del síndrome en estos profesionales y las distintas variables de asociación. Las más estudiadas son las sociodemográficas y las relacionadas con el entorno laboral o con el profesional. Faltan estudios que levanten datos epidemiológicos en médicos de atención primaria de salud en Brasil, un paso importante para comprender cómo se comporta este síndrome en nuestro país. **Conclusiones:** es necesaria una investigación sobre la prevalencia y el impacto de la Síndrome de Burnout en los médicos de atención primaria de salud, investigando principalmente factores relacionados con el entorno y el proceso de trabajo. Los ensayos clínicos pueden proporcionar evidencia en la lucha eficaz contra el *burnout*. Los estudios cualitativos pueden levantar datos sobre las motivaciones de los profesionales, además de comportamientos, opiniones y expectativas, orientando estrategias para afrontar este síndrome.

Palabras-clave: Agotamiento profesional; Atención primaria de salud; Médicos de familia.

INTRODUCTION

The term burnout was first described in the literature by the psychoanalyst Herbert Freudenberger in 1974, referring to a state of physical and emotional exhaustion resulting from the dedication to

demands and requirements involved in work processes.[1] In 1982, Maslach and Jackson reported the response of workers to different stress situations in the workplace, suggesting signs and symptoms that would characterize burnout syndrome (BOS) in professionals, especially in occupational contexts with considerable interpersonal involvement and situations of high emotional demand.[2] Therefore, these authors used the term burnout to define a psychological syndrome or adjustment disorder related to chronic stress in the work environment, which develops in response to continuous exposure to interpersonal stressors, affecting both the professional's health and quality of life and their work organization and performance.[3,4]

In their study, Maslach and Jackson[2] characterized three components that define BOS in professionals: *exhaustion*, *cynicism,* and *inefficiency.* These components were summarized in a "symptomatic triad", using the same concepts: *emotional exhaustion* (EE), *depersonalization* (DP), and *reduced personal accomplishment* (RPA).[2,3]

EE is the main aspect of BOS and refers to the feeling of fatigue and exhaustion, with physical and psychological manifestations, leading to the depletion of the professional's emotional resources.[5,6] This component conveys the idea of being physically and emotionally overwhelmed by demands in the work environment. The physical symptoms can be compared to those reported in chronic stress situations (fatigue, insomnia, headache, musculoskeletal pain, changes in appetite, allergies, gastrointestinal or menstrual cycle disorders) and may interfere with the individual's perception of well-being and functionality.[4,7-9] Psychological symptoms (depressed or irritable mood, distress, anxiety, and concentration impairment) may also manifest and negatively affect productivity and harmony in the work environment.[10,11] DP is the dimension characterized by *cynicism*, involving negative feelings and attitudes toward others,[5,6] observed when the professional starts to treat clients and co-workers as "objects",[10] lacking sensitivity, humanization, and empathy and potentially generating interpersonal conflicts and isolation, in addition to professional dissatisfaction.[7,8,12] RPA represents the component of *ineffectiveness*, reflecting the feeling of not performing work tasks properly, with perceived productive incapacity and failure, which may result in reduced professional interest and self-esteem.[3,7,12]

In order to assess and measure the incidence of BOS components in professionals, several evaluation instruments have been developed, among which the most widely used is the Maslach Burnout Inventory (MBI), created in the 1980s by Maslach and Jackson. This questionnaire has 22 items that evaluate the professional's feelings and attitudes toward work, in addition to the frequency of signs and symptoms.[13] It is currently the gold standard for assessing and measuring BOS, validated and used in several countries,[3,4,12] including a translated version in Portuguese.[14]

Medical professionals are often overloaded with responsibilities and demands related to patient care. In the current scenario, with increasing pressure for the incorporation of practices and procedures aimed at the best performance of physicians — in addition to the professional devaluation experienced by this class from society —, BOS has become a common condition among these professionals. Its estimated prevalence ranges from 3% to more than 80% among physicians from different specialties worldwide, depending on the different definitions, assessment instruments, and cut-off points used for this syndrome.[12,15-18] It affects more than 50% of physicians in the United States of America, a country where BOS is significantly more prevalent in these professionals than in the general population.[19,20] In Brazil, according to the Federal Council of Medicine, most (57%) of a sample of 7.7 thousand medical professionals from all states had some worrying degree of BOS.[21] More precisely, 33.9% of cases from this sample presented moderate syndrome, and 23.1% had a high level of the syndrome.[21] Even under highly satisfactory working conditions, up to 40% of physicians may present burnout symptoms.[19]

The etiology of this syndrome in physicians is described as multifactorial, depending on the exposure to different triggers and facilitators related to both the professional and the work process.[12] BOS is associated with undesirable outcomes not only for the professional's physical and mental health but also for care quality, culminating in a higher number of medical errors and judicial actions.[6,10,12,18,22,23] It is associated with reduced expression of empathy, with negative repercussions on the physician-patient relationship and patient satisfaction.[5,18,23] The consequences of burnout also have practical implications, such as absenteeism, productivity issues, and job dissatisfaction.[5,24] Professionals are more likely to abandon the practice, ask for sick leaves, and present depressive symptoms.[20] Substance abuse, car accidents, and marital and family conflicts are also problems associated with BOS faced by physicians.[18,24]

Although physicians from all specialties are vulnerable to BOS, the highest prevalence rates are found in those who work on the front line of health services, where overload in the work process and interpersonal relationships is common, including primary health care (PHC) physicians — general practitioners and family physicians (FP). The complex task of improving health care by coordinating care for people at different levels of complexity, combined with the increased demand for problem resolution without high-technology equipment — therefore demanding high clinical skills — puts the PHC physician at risk of depleting their emotional resources.[24,25] Furthermore, the commitment to the longitudinal care of individuals and families under their responsibility is a necessary competence for the professional who works in this area. They often have to deal with emotionally difficult situations and ethical dilemmas, which can cause mental overload, value conflicts, and loss of emotional control, contributing to the development of this syndrome.[6,24-26]

PHC studies show that around 40% of FPs have some degree of burnout, but the prevalence may vary from 10% to more than 80% in the different countries where BOS was studied.[4,7,10] Family and community medicine is among the medical specialties with the highest rates of this syndrome, reaching second place in a systematic review.[12] A recent Brazilian study carried out in Montes Claros (Minas Gerais) reported the alarming prevalence of 100% of BOS, at a moderate level, in the 89 PHC physicians participating in the study.[27]

Scientific interest in this syndrome in PHC physicians has actually increased in the past 20 years in several countries; nonetheless, epidemiological studies are scarce in Brazil[17,24] and often assess physicians from other specialties.[12,17] Knowing the prevalence and factors associated with BOS development is crucial for its characterization and for determining its real impact on vulnerable professionals. Moreover, the search for potential preventive and management measures — in individual, collective, and occupational domains — makes it possible to tackle the issue. Considering this context and taking into account the current focus given to BOS in physicians from different specialties, we need to better describe the PHC research and publication fields.

This study aimed to review the literature searching for publications related to BOS in PHC physicians — general practitioners and FP — over the last 20 years and analyze them, systematizing the areas of scientific interest in the subject.

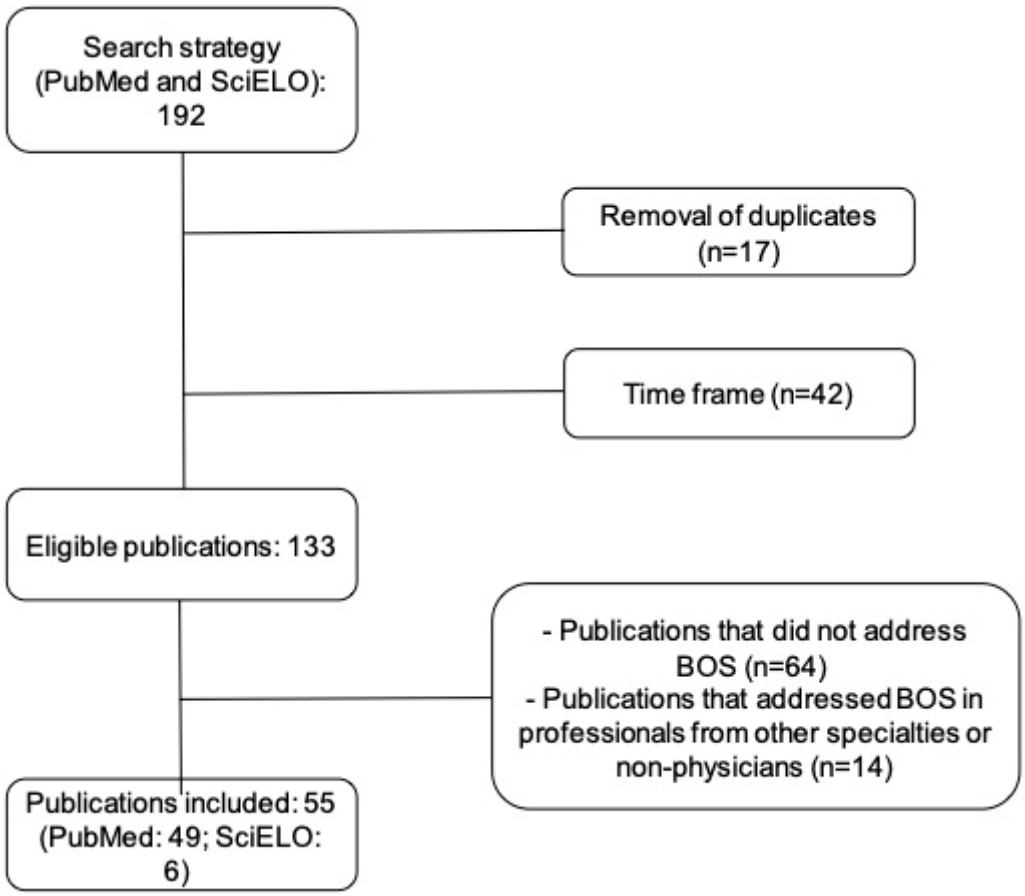
METHODS

This is a narrative review of national and international literature on the theme "burnout syndrome in PHC physicians", based on a systematic search and analysis of the scientific production published in journals indexed in the electronic databases PubMed and Scientific Electronic Library Online

(SciELO) in Portuguese, English, or Spanish since 2000. Three distinct and consecutive searches were performed in both databases, combining the following descriptors: “burnout, professional” and “physicians, primary care” and “physicians, family” in the first search; “burnout, professional” and “physicians, primary care” in the second search; and “burnout, professional” and “physicians, family” in the third search.

Two independent reviewers conducted the searches in October 2018. We compared the titles and abstracts identified by each reviewer and verified the consensus and dissent regarding eligibility after applying time restrictions and removing duplicates. In order to have a real perspective of the areas of interest in the subject, we included publications that addressed BOS in PHC physicians without restrictions as to the methodology used or the level of evidence presented. Publications that did not address BOS or did not assess the syndrome in PHC physicians were excluded. In the case of disagreement regarding the inclusion of an article in the review, a third researcher was invited to discuss the characteristics of the work and, after the agreement of at least two researchers, include it in the study.

The search strategy used in both databases allowed the identification of 192 publications, of which 55 (PubMed: 49; SciELO: 6) met the inclusion criteria. We analyzed the abstracts of the publications included and categorized them according to the year of publication, country of origin, study design, and areas of interest investigated. When necessary, we consulted the full text of the publication to examine relevant information for its categorization. Figure 1 details the methodology.



BOS: burnout syndrome.
Figure 1. Details of the methodology used.

RESULTS

Out of the 192 publications retrieved by the search strategy, 137 were excluded based on previously determined criteria, totaling 55 publications included in this review. The articles analyzed were published between 2000 and 2018 (26 from 2000 to 2009 and 29 from 2010 to 2018). Most studies had data from European countries (15 from Spain, two from Israel, two from Serbia, and one from each of the following countries: Croatia, Denmark, France, Netherlands, Italy, Portugal, United Kingdom, Sweden, and Switzerland). We identified 24 publications from the American continent (ten from the USA, six from Mexico, three from Brazil, two from Canada, two from Cuba, and one from Peru), two from Australia, and one from Egypt.

Most studies (40) adopted an observational descriptive cross-sectional design. We also found two systematic reviews of observational studies, two qualitative descriptive studies, two longitudinal cohort studies, two randomized clinical trials, two opinion papers, two editorials, one time trial, one time series, and one case study. Almost all studies measuring the incidence of BOS used the MBI questionnaire or one of its variations; few used other instruments that evaluated, for instance, self-esteem, stress level, or other related variables.

Table 1 categorizes the publications included in this review as to the year of publication, country of origin, study design, and areas of interest investigated.

Table 1. Categorization of the studies included in the review.

Authors	Year of publication	Country of origin	Study design	Areas of interest
Grassi[28]	2000	Italy	Observational, descriptive, cross-sectional.	Association of BOS levels with psychiatric morbidities.
Cebrià[29]	2001	Spain	Observational, descriptive, cross-sectional.	Association of BOS levels with sociodemographic variables and personality traits.
Tena[30]	2002	Spain	Observational, descriptive, cross-sectional.	Association of BOS levels with sociodemographic variables.
Albino[11]	2002	Province of Cáceres (Spain)	Descriptive, cross-sectional, analytical.	Association of BOS levels with sociodemographic, individual, and work variables.
Sobrequés[31]	2003	Spain	Observational, descriptive, cross-sectional.	Association of BOS with professional sociodemographic variables and those related to job satisfaction.
Siguero[32]	2003	Spain	Observational, descriptive, cross-sectional.	Prevalence of BOS and psychiatric morbidities; association of BOS and mental health levels with sociodemographic and work variables.
Cebrià[33]	2003	Spain	Observational, descriptive, cross-sectional.	Association of BOS levels with sociodemographic factors and pharmaceutical expenditure in health services.

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Table 1. Continuation.

Authors	Year of publication	Country of origin	Study design	Areas of interest
Hernández[34]	2003	Cuba	Observational, descriptive, cross-sectional.	Differences between response to stress and BOS at different health care levels.
Kushnir[35]	2004	Israel	Observational, descriptive, cross-sectional.	Association of BOS levels with sociodemographic factors; discussion of theoretical bases for BOS.
Beltrán[36]	2005	Mexico	Observational, descriptive, cross-sectional.	Prevalence of BOS, clinical manifestations, and association with sociodemographic and work factors.
Beltrán[37]	2005	Mexico	Observational, descriptive, cross-sectional.	Association of BOS levels with sociodemographic and work factors.
Esteva[38]	2005	Spain	Observational, descriptive, cross-sectional.	Prevalence of BOS; association of sociodemographic factors with BOS.
Benson[39]	2005	Australia	Opinion paper.	Role of Balint groups in BOS prevention.
Aceves[40]	2005	Mexico	Observational, descriptive, cross-sectional.	Prevalence of BOS components; association with sociodemographic and work risk factors.
Tabares[41]	2006	Mexico	Observational, descriptive, cross-sectional.	Association between job satisfaction and BOS.
Lee[42]	2008	Canada	Observational, descriptive, cross-sectional.	Association of BOS levels with sociodemographic factors; proposes strategies to reduce stress in individual and work contexts.
Kjeldmand[26]	2008	Sweden	Descriptive, qualitative.	Influence of Balint groups on job satisfaction and BOS prevention.
Vela-Bueno[56]	2008	Spain	Observational, descriptive, cross-sectional.	BOS prevalence; association of BOS levels with sociodemographic variables and sleep quality.
Ratanawongsa[57]	2008	USA	Longitudinal, prospective cohort.	Association of BOS with sociodemographic variables and the quality of physician-patient communication.
Soler[43]	2008	United Kingdom	Observational, descriptive, cross-sectional.	BOS prevalence; association of BOS levels with sociodemographic and work variables.
Truchot[44]	2008	France	Observational, descriptive, cross-sectional.	Association of BOS levels with sociodemographic variables; relationship with the type of career orientation.
Linzer[45]	2009	USA	Observational, descriptive, cross-sectional.	Association of BOS with variables related to working conditions and care quality.
Bovier[46]	2009	Switzerland	Observational, descriptive, cross-sectional.	Association of BOS with job satisfaction and mental health.

Continue...

Table 1. Continuation.

Authors	Year of publication	Country of origin	Study design	Areas of interest
Zantinge[47]	2009	Netherlands	Secondary analysis of an observational, descriptive, cross-sectional study.	Association of BOS with job satisfaction and care quality for mental health patients.
Krasner[18]	2009	USA	Intervention, time trial.	Effect of an intensive educational program on the well-being, emotional aspects, BOS symptoms, and capacity for relating to patients.
Nielsen[48]	2009	Denmark	Case study.	Supervision and Balint groups to prevent stress and BOS.
Aguilera[23]	2010	Mexico	Observational, descriptive, cross-sectional.	BOS prevalence; association of BOS levels with sociodemographic variables.
Trindade[25]	2010	Brazil	Observational, descriptive, cross-sectional.	BOS prevalence; association of BOS levels with sociodemographic variables.
Putnik[49]	2011	Serbia	Observational, descriptive, cross-sectional.	Association of BOS levels with work-related characteristics and work-home interference.
Feliciano[3]	2011	Brazil	Descriptive, qualitative.	Professional testimony about work expectations and reality.
Cubillo[50]	2012	Spain	Longitudinal, prospective cohort.	Analysis of BOS progression and elaboration of an explanatory model; association of BOS with sociodemographic variables.
Kumar[51]	2012	Canada	Opinion paper.	Debate on the “overdramatization” of BOS.
Gómez-Gascón[7]	2013	Spain	Randomized clinical trial.	Effectiveness of an intervention to prevent and treat BOS.
Stanetić[52]	2013	Serbia Republic	Observational, descriptive, cross-sectional.	Prevalence of BOS regarding age and length of service.
Ožvačić Adžić[6]	2013	Croatia	Observational, descriptive, cross-sectional.	Prevalence of BOS and association with sociodemographic and individual professional variables.
Cruz[55]	2013	Spain	Observational, descriptive, cross-sectional.	Prevalence of BOS; association with sociodemographic variables.
Beltrán[56]	2013	Mexico	Observational, descriptive, cross-sectional with an analytical and comparative component.	Association of BOS with sociodemographic and psychosocial work variables.
Gómez[9]	2014	Cuba	Observational, descriptive, cross-sectional.	Association of BOS levels with professional well-being and self-esteem.

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Table 1. Continuation.

Authors	Year of publication	Country of origin	Study design	Areas of interest
Dolan[20]	2014	USA	Observational, descriptive, cross-sectional.	Comparison of two BOS severity assessment instruments.
Varner[57]	2014	USA	Observational, descriptive, cross-sectional.	Prevalence of depression and BOS; association with sociodemographic variables.
Kotb[10]	2014	Egypt	Observational, descriptive, cross-sectional.	BOS prevalence; association of BOS with socioeconomic variables.
Kushnir[58]	2014	Israel	Observational, descriptive, cross-sectional.	BOS association with referral rates.
Torres[8]	2015	Spain	Observational, descriptive, cross-sectional.	Association of BOS with the issuing of medical certificates.
Rabatin[16]	2015	USA	Longitudinal; time series.	Association of working conditions and BOS with care quality and medical errors.
Morelli[24]	2015	Brazil	Systematic review of observational studies.	BOS prevalence; association of BOS with individual and work variables.
Linzer[59]	2015	USA	Randomized clinical trial.	Effectiveness of interventions in improving working conditions and BOS.
West[60]	2015	USA	Editorial.	Presentation of the Linzer study[59]
Ifediora[5]	2016	Australia	Observational, descriptive, cross-sectional.	Association of BOS levels with after-hours work in home care.
Montero-Marin[15]	2016	Spain	Observational, descriptive, cross-sectional.	Validation and reliability of a BOS classification model in clinical subtypes.
Malta[4]	2016	Portugal	Observational, descriptive, cross-sectional, with an analytical component.	Prevalence of BOS; association of BOS with sociodemographic variables.
Adler[61]	2016	USA	Editorial.	BOS causes related to health system failures.
Yuguero[62]	2017	Spain	Observational, descriptive, cross-sectional.	Association of BOS with empathy and sociodemographic variables.
Puffer[19]	2017	USA	Observational, descriptive, cross-sectional.	BOS prevalence.
Solís-Cóndor[22]	2017	Peru	Observational, descriptive, cross-sectional.	Prevalence of BOS; association of BOS with sociodemographic variables.
Moreira[12]	2018	Brazil	Systematic review of observational studies.	Prevalence of BOS in different medical specialties; association of BOS with sociodemographic and work factors.

BOS: burnout syndrome.

DISCUSSION

When analyzing the publications on BOS in PHC physicians included in this review, we frequently found observational studies describing the prevalence of the syndrome in these professionals and the various associated variables. The most frequently studied variables — usually investigated by questionnaires — are sociodemographic aspects (e.g., age, gender, schooling, marital status, number of children, alcohol consumption or tobacco use, among others) and those related to the work environment or to the individual (e.g., working conditions, workload, type of occupation, length of service, job satisfaction, empathy or stress levels, psychiatric comorbidities, and impact on mental heal th).[4-6,9-12,19,22,23,25,28-55] Other specific observational studies focused on other associated variables, such as: rate of referrals, medical errors, issuing of medical certificates, influence of burnout on pharmaceutical expenditure and sleep quality, the professional's intention to abandon the practice, care quality, and physician-patient communication.[8,16,56-58]

We underline that most observational studies analyzed were carried out in high-income countries in North America and Europe, with few Brazilian publications found. Three systematic reviews corroborate this trend.[12,17,24] Out of six Brazilian studies included in a recent systematic review[12] that evaluated the prevalence of BOS in physicians, none considered PHC professionals, while Mexico and Spain were the only countries that investigated the syndrome in FPs. Similarly, in the systematic review on the prevalence of BOS in physicians conducted by Rotenstein,[17] only publications from European countries, the United States, and Australia presented data on general practitioners. In another previous review[24] that analyzed individual and work-related variables associated with the incidence of the syndrome in PHC physicians, no Brazilian studies were included, with most of the data originating from European countries.

Although PHC physicians have one of the highest rates of BOS among the various medical specialties, our review reveals the scarcity of studies collecting epidemiological data on Brazilian professionals, which is an important step toward understanding how this syndrome behaves in our context. In Brazil, a country with a remarkable expansion of the Family Health Strategy (*Estratégia Saúde da Família* — ESF) to structure primary care, the quality of the service provided to a large part of the population can be affected by the physical and emotional health of professionals working in PHC, showing the need for investigations on the topic.[3]

Although MBI was the most used instrument to evaluate BOS in the studies included in the analysis, we found the use of other scales. We found a study[20] that compared two validated BOS measurement scales, suggesting that a single MBI item is reliable enough to evaluate the burnout level, facilitating the interpretation of the scale. Another investigation[15] also used MBI associated with different variables, such as sociodemographic factors, work experiences, causes and consequences of burnout, in addition to the professional's satisfaction with their health and work.

Even though MBI is currently the gold standard instrument to evaluate BOS, the heterogeneity of definitions and measurements for this syndrome by different instruments or by modified versions of the original MBI can explain the great prevalence variability found in the literature.[17] Thus, the actual interpretation of BOS prevalence estimates cited in the different studies prompts questioning.

Studies are sparse on the management of the syndrome. We identified few trials that evaluated the effectiveness of preventive or intervention strategies in PHC physicians. Three intervention studies[7,18,59] and one case study[50] evaluated strategies for improving working conditions

and emotional aspects, controlling stress, and preventing BOS in PHC physicians. Providing feedback and communication skills training, using educational programs that adopt the mindfulness methodology, and participating in Balint groups were strategies reported for coping with BOS in these professionals.

Editorials and opinion papers included in this review also covered prevention and intervention, as well as BOS causes related to health system failures.[39,51,56,60] In addition, two qualitative studies[3,26] described experiences of physicians working in ESF teams and those participating in Balint groups, addressing different themes related to the professional's personal aspects and to work.

BOS has been observed in workers over time, and its study in Medicine has gained space in a context of profound technological changes and in the work organization of this profession in recent decades. In PHC, the physician-patient relationship follows many of these transformations, influenced by social changes, the increased access to information, and a person-centered approach, giving the patient more autonomy in their health care process and requiring from the physician communication skills, resilience, and empathetic engagement to deal with complex situations associated with stress in their practice.[61,62] In addition, health systems with high care pressure and scarce resources contribute greatly to the development of work and BOS stressors in these professionals.[63]

Recognizing the need to change the organization of health care, with the development of actions aimed at expanding knowledge and coping with this syndrome, is essential. Understanding a theme by the categorization of the information and results obtained, indicating new perspectives and possibilities to fill gaps in the knowledge field, is part of the science evolution process. Thus, the results found in this review can guide and promote the development of new research on burnout in PHC physicians, prioritizing fields still little explored or poorly consolidated in the literature. They can also encourage the investigation of this syndrome in Brazilian professionals responsible for PHC for a large part of the population through the country's universal public health system.

This study has some limitations. Since this is a narrative — rather than systematic — review, we did not attempt to critically analyze epidemiological evidence or interventions related to BOS, nor generalize quantitative data or resolve controversies. Despite adopting a systematic search strategy, we did not use explicit inclusion criteria, choosing to include publications in a comprehensive way, regardless of their level of evidence. Therefore, the results discussed in this study did not increase the statistical power of the outcomes investigated in the various publications included. Also, our methodology defined the search in only two databases (PubMed and SciELO), not reflecting the universe of research carried out on the subject. Specific African, Asian, and Latin American databases were not included, which might have led to omissions in data from middle- and low-income countries, such as Brazil. We believe that the Latin American and Caribbean Center on Health Sciences Information (BIREME) would have more information in the health area, covering the following databases in its collection: Latin American and Caribbean Health Sciences Literature (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE), Caribbean Health Sciences Literature (MedCarib), Pan American Health Organization/Institutional Repository for Information Sharing (PAHO-IRIS), World Health Organization Library Information System (WHOLIS).

Another limitation results from the heterogeneity reported in epidemiological studies regarding BOS definitions and measurements, which may affect the construction of knowledge of the actual impact of BOS on the study populations. The interpretation of this information might be affected by our subjectivity.

CONCLUSION

Burnout is a work-related syndrome characterized by emotional exhaustion and a sense of detachment from people and the work process, in addition to a perceived reduced personal accomplishment. The present review aimed to identify publications addressing "BOS in PHC physicians" in the literature to systematize the areas of interest studied in the past two decades.

Further research is necessary on the epidemiology and impact of BOS on PHC physicians, with a broader investigation of factors related to the environment and the work process, a field with fewer works. Validated instruments to define and measure the syndrome should be standardized, with the improvement of existing tools and even the validation of new ones that can be applied to different populations.

Considering the current concern for defining management strategies for professionals who develop BOS, clinical trials exploring different interventions are necessary to provide evidence for the effective combat against burnout. Qualitative studies can also be important to collect data on the professional's motivations, as well as to understand and interpret certain behaviors, opinions, and expectations, guiding strategies for coping with this syndrome in physicians and other professionals working in PHC.

AUTHORS' CONTRIBUTIONS

FAFM: Conceptualization, Data curation, Formal analysis, Writing – original draft, Writing – review & editing. LCMS: Conceptualization, Data curation, Formal analysis, Writing – original draft, Writing – review & editing. RPAP: Conceptualization, Data curation, Formal analysis, Writing – original draft, Writing – review & editing.

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