



REVIEW ARTICLE

Prevalence of burnout syndrome in Ecuadorian medical students

Prevalencia de síndrome de burnout en estudiantes de medicina de Ecuador

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ABSTRACT

Introduction: Bournout syndrome in medical practice ranges from 25 % to 60 %. Medical students do not escape from this reality.

Objective: to determine the prevalence of Bournout syndrome in medical students in Ecuador.

Methods: a search for information on the incidence of BS in medical students in Ecuador was carried out in the databases Medline, PubMed, SciELO, Embase, Google Scholar, Scopus. For this purpose, a specific search formula was used for each database, using a combination of terms with Boolean operators as nexuses.

Results: the literature consulted identified that, in Ecuador, Bournout syndrome is present in both students and health professionals. The incidence of Bournout syndrome was found to be between 14,81 % and 95,2 %, with a higher incidence in females (56,7 % to 66,67 %). As manifestations, burnout was present in 18 % to 35,19 % of the students; personal fulfillment was affected in 66,67 % to 77,55 % of the students.

Conclusions: Bournout syndrome constitutes a real health problem in undergraduate medical students in Ecuador. Based on the results, females, students with little family support and those who do extracurricular work are prone to develop it. There is a need for a transformation in medical education that favors better mental health in undergraduate medical students.

Keywords: Mental Health; Students, Medical; Health Personnel.

RESUMEN

Introducción: el síndrome de Bournout en la práctica médica oscila entre el 25 % y el 60 %. Los estudiantes de Medicina no escapan de esta realidad.

Objetivo: determinar la prevalencia del síndrome de Bournout en estudiantes de Medicina de Ecuador.

Métodos: se realizó una búsqueda de información en las bases de datos Medline, PubMed, SciELO, Embase, Google Scholar, Scopus sobre la incidencia del SB en estudiantes de medicina de Ecuador. Para ello se empleó una fórmula de búsqueda específica para cada base de datos, empleando la combinación de términos empleando operadores booleanos como nexos.

Resultados: la literatura consultada identificó que, en Ecuador, el síndrome de Bournout está presente tanto en estudiantes como en profesionales de la salud. La incidencia del síndrome de Bournout se encontró entre el 14,81 % y el 95,2 %, con mayor incidencia en las féminas (56,7 % al 66,67 %). Como manifestaciones, el agotamiento se presentó entre el 18 % y el 35,19 % de los estudiantes; la realización personal se afectó entre el 66,67 % y el 77,55 % de los estudiantes.

Conclusiones: el síndrome de Bournout constituye un problema de salud real en el pregrado de la carrera de medicina en Ecuador. En base a los resultados, las féminas, los estudiantes con poco apoyo familiar y aquellos que realizan trabajos extraescolares son propensos a desarrollarlo. Se necesita una transformación en la educación médica que favorezca una mejor salud mental en los estudiantes de pregrado de Medicina.

Palabras clave: Salud Mental; Estudiantes de Medicina; Personal de Salud.

INTRODUCTION

Burnout syndrome as a phenomenon has appeared throughout time and in all cultures. However, the term was first described in 1974, in the United States, by the psychoanalyst Herbert J. Freudenberger. He noted that, after a year of work, most volunteers experienced a gradual decrease in energy, leading to fatigue, symptoms of anxiety and depression, decreased motivation, and aggressiveness with the patient.⁽¹⁾

SB has been described in various professions such as telecommunications,⁽²⁾ and construction;⁽³⁾ however, it has been found to have a greater impact in the health care field.⁽⁴⁾

The prevalence figures of BS reported in the literature vary with the questionnaires used by different researchers, taking into account the applicable thresholds, coming from different sources, variety and interpretation of the results by the researchers.

During the 1970 and 1980, burnout victims were described as people who set unattainable or idealistic goals.⁽⁵⁾ Today, it is said that business burnout is largely due to pressure to meet the increasing expectations and demands of others, or intense competition to be better than others in the same organization or business, or to make more money, etc.

There is a wide range of assessment tools that are used to assess SB; however, the standard and most widely used test is the Maslach Burnout Inventory (MBI).⁽¹⁾

BS is common in medical practice, with a prevalence ranging from 25 % to 60 %, with little variation according to expert groups,⁽⁶⁾ in the case of Mexico, Carrillo et al.⁽⁴⁾ state that it ranges from 30 % in general practitioners to 60% in specialist physicians. Similarly, it is described that BS is less common among professionals compared to those in training.⁽⁶⁾

Rodríguez Ramírez ⁽⁷⁾ in his study concluded that the presence of stress makes the individual more vulnerable to suffer health problems that manifest themselves with different symptoms, such as: physical and mental fatigue, headaches, insomnia, gastrointestinal and cardiac problems, irritability, poor self-control, frustration and respiratory problems. In addition, it identified the psychosocial nature of SB, which not only affects the person who suffers from it, but also his or her social, family and work dynamics.

From the researchers' experience, this disease is common in healthcare settings around the world, however, in Latin America and Ecuador⁽⁸⁾ it has a serious impact on healthcare workers. It carries serious consequences such as inhumane treatment, suicidal thoughts, resignation, convulsive service and hostile work environment.⁽⁹⁾

Like professionals, university students may find themselves in contexts in which they are exposed to psychosocial risks and harm in the face of significant or non-significant stress. Appropriate, chronic, or inappropriate requirements depend on the unfavorable regulatory environment of higher education and the student's academic work.⁽¹⁰⁾

In the special case of health science students, they develop a dedication to preparing their knowledge to provide some relief to the community, which in turn can enhance the hospital services experience with their knowledge. To this is added the realization of practices throughout the profession, as a form of teaching; which leads to a pressure both by the teachers of the different subjects and by those in charge of watching over and training in the areas. This link to the practice also incorporates them to the medical guards and the presence in the operating rooms and operating rooms, adding another source of pressure and stress.⁽¹¹⁾

For all of the above, the objective of this study was to determine the incidence of burnout syndrome in medical students in Ecuador.

METHODS

A search for information was conducted in the databases Medline, PubMed, SciELO, Embase, Google Scholar, Scopus on the incidence of BS in medical students in Ecuador. For this purpose, a specific search formula was used for each database, using a combination of terms with Boolean operators as nexuses.

The search criteria used were articles published on Burnout syndrome in the medical educational environment in Ecuador. All articles available online in full text, independent of language, relevant to the topic, published since 2018 were retrieved. In the case of books, those published in the last 10 years were used, except for legal texts.

DEVELOPMENT

SB presents a psychosocial character that is intimately related to the negative conditions of work activity and organization, it is first necessary to consider and extrapolate the concept of work. It ranges from activity/caregiving to learning among college students, to a better understanding of the nature, risks, and protective factors associated with school burnout in this population.

Research on burnout has revealed three aspects of the burnout syndrome concept: burnout, personalization, and occupational underachievement. The first refers to the feeling of not being able to give more. The second imagines a withdrawn attitude towards others, especially those who benefit from one's work, but also towards co-workers. The latter refers to a feeling of not completing tasks correctly and being incompetent at work.

In the case of Ecuador, a study conducted by Ramírez et al.,⁽⁸⁾ aimed to determine the prevalence of burnout syndrome and its dimensions, as well as related factors, in nurses and physicians of medical health institutions. In a sample of 166 health professionals, a prevalence of BS of 4,2 % was found. Regarding burnout dimensions, a prevalence of 26.5% was found for emotional exhaustion, 25,9 % for depersonalization and 42,2 % for low self-fulfillment. The professionals with the highest burnout were those with more than 12 years of experience as medical personnel, who worked more than 8 hours a day, and who attended more than 18 patients a day.

Students constitute, within the BS, a special population. The student may develop maladaptive and harmful reactions, such as the so-called school BS, with negative consequences for their psychosocial well-being in relation to their academic role and profession, dissatisfaction with their studies and hence dropout.⁽¹⁰⁾ In addition, it can be considered that, in the long term, this may have repercussions on their perception of the professional image of their career, affecting their performance after graduation, conditioning the possibility of dropping out in postgraduate studies.

Incidence in medical students in Ecuador

A study carried out in Ambato, at the Los Andes Regional Autonomous University (UNIANDES) presented a sample of 1,600 students. Of the students with burnout, 28.82% presented moderate/high SB and 18.88% with cynicism presented moderate/high SB. It was found that the highest levels of SB were found in the faculties of Health Sciences and Human Sciences and Education.⁽¹²⁾

A study conducted in the Faculty of Medical Sciences of the Los Andes Regional Autonomous University (UNIANDES), in Ecuador by Espinosa Pira et al.⁽¹⁰⁾ aimed to identify the presence of SB in students of that faculty. The study was applied in 90 students, with a mean age of $21,9 \pm 2,08$ years, of whom 56,7 % were females, 87,8 % were single and 25,5 % had after-class jobs. The SB was present in 88,9 % of the students, with predominance in females, without identifying an association between sex and the level of SB. The most affected dimension was personal fulfillment, where 43 students presented severe BS.

Herrera Ormaza⁽¹³⁾ conducted a study at the Pontifical Catholic University of Ecuador where 276 students were analyzed (99 from the School of Psychology, 98 from Medicine and 79 from Nursing, Nutrition and Physiotherapy). The overall prevalence of SB was 93,11 %, and in medical students 95,2 %. The most affected dimension was personal fulfillment (77,55 %). As a result, among the 276 participants, 6,88 % of mild SB, 49,64 % of moderate SB and 43,47 % of severe SB were observed.

At the University of Cuenca, in a similar study, it was found that the recurrence rate of SB was 14,81 %, where 62,5 % were women, 50 % worked in the Pediatrics service and 87,5 % were single. As for the dimensions, the level of mental exhaustion we found 35.19%; Personalization is high with 42,59 % and personal gratification is low with 66,67 % ⁽¹⁴⁾.

In the Chimborazo Higher Polytechnic School, in a sample of 86 students with a professional medical degree, 100 % were single and have no children. With respect to sex, the female sex predominated (57 women for 66.27 %). The clinical signs found according to the presence of burnout syndrome were personality decline (40.70 %), followed by emotional exhaustion (18 %), occurring more frequently in the female sex.⁽¹⁵⁾

CONCLUSIONS

Bournout syndrome constitutes a real health problem in undergraduate medical students in Ecuador. Based on the results, females, students with little family support and those who perform extracurricular work are prone to develop it. A transformation is needed in medical education that favors better mental health in undergraduate medical students.

Conflicts of Interest

The authors declare no conflicts of interest in relation to this research.

Sources of Financing

The authors declare that they have not received funding for the development of this research.

Declaration of Authorship

All authors participated in the conceptualization, research, writing - initial draft, writing - revision and editing.

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