Open Access

SCHOLARENA

Journal of Anesthesia and Therapeutics

SHORT COMMUNICATION

ISSN: 2639-7242

Burnout in Anesthesiology: When Exhaustion Overcomes the Duty

Moreira LG[1,2], Govêia CS[1,2], Miranda DB[3,4*] and Amorim MAS[1,5]

[1]*Brazilian Society of Anesthesiology (SBA), Rio de Janeiro, RJ, Brazil*
[2]*University of Brasília (UnB), Anesthesiology Residency Program, Brasília, DF, Brazil*
[3]*Pontifical Catholic University of Goiás (PUC-GO), Goiânia, GO, Brazil*
[4]*Federal University of Goiás (UFG), Institute of Tropical Medicine and Public Health, Goiânia, GO, Brazil*
[5]*José Quinan Teaching and Training Center, Goiânia, GO, Brazil*

[*]**Corresponding author:** Miranda DB, Pontifical Catholic University of Goiás (PUC-GO) and Federal University of Goiás (UFG), Institute of Tropical Medicine and Public Health, Goiânia, GO, Brazil, E-mail: denismarmiranda@hotmail.com

Citation: Moreira LG, Govêia CS, Miranda DB, Amorim MAS (2018) Burnout in Anesthesiology: When Exhaustion Overcomes the Duty. J Anesth Ther 1: 201

Abstract

This mini review article presents the concepts involving burnout syndrome as well as its three characteristics: emotional exhaustion, depersonalization and reduced personal accomplishment. It draws attention to a high prevalence rate (20%) among residents and anesthesiologists. Prophylaxis and treatment of burnout syndrome involve the early recognition of associated factors, such as increased level of anxiety.

Keywords: Review; Burnout Syndrome; Anesthesiology

Introduction

In 1974, Herbert Freundenberger defined Burnout as a pathological condition of physical and mental exhaustion caused by untreated stress in the workplace for a long period [1]. The current 1981 definition by Maslach and Jackson characterizes Burnout as a syndrome that includes physical, intellectual and mental exhaustion, consisting of three dimensions: emotional exhaustion (work-related fatigue), depersonalization (insensitivity and professional indifference toward the client) and reduced personal accomplishment (deterioration of self-competence and lack of satisfaction with self and work performances) [2,3].

The Burnout syndrome is more frequent among professionals directly dealing with people, such as police officers, teachers, nurses and doctors. Prolonged exhaustion can manifest clinically as fatigue, emotional instability, sleep and eating disorders, headaches, cardiovascular disorders and drug abuse. From the professional point of view, absenteeism, poor performance and willingness to quit the job may occur [3,4].

There are several tools proposed for the diagnosis of Burnout, and the most accepted is the Maslach Burnout Inventory (MBI). Two versions, one directed to health professionals and another, to teaching professionals, are formed by 9 evaluating items of emotional exhaustion, 5 items of depersonalization, and 8 items of personal accomplishment. Each proposed item has a 7-point Likert scale, which measures the frequency of feelings related to the syndrome. A third version, with 16 questions, is focused on other professions. The diagnosis is given by the proportional sum of items of each dimension, with high scores being related to the risk of Burnout [3].

The prevalence of Burnout syndrome is high among physicians, especially residents. Goldhagen, *et al.* report an incidence of 80% among resident doctors of different specialties. According to the authors, this population is exposed to three different sources of stress: situational (sleep deprivation, workload, poor teaching environment), personal (family, isolation, low financial income) and professional (responsibility toward the patient) [5]. Turgut, *et al.* affirm that Burnout prevalence is higher in second year residents compared to the fifth year ones, probably indicating the inability of the most inexperienced to deal with professional problems [6].

Among anesthesiologists, the incidence is variable but may be as high as 20%. Anesthesiologists undergo long working hours, with sleep and leisure deprivation, and constant demand for results [7-9]. In the United States, De Oliveira, *et al.* evaluated the incidence of Burnout among coordinators of Departments of Anesthesiology and demonstrated that low job satisfaction and lack of family support are independent factors for the development of the syndrome [4].

It is already known that Burnout is associated with stress, anxiety and depression situations, but there is not a consensus if it is a cause or a consequence of these symptoms [10]. Regarding anxiety, there are two proposed models: state and trait anxiety. The first is a transient emotional state of tension, which can vary in intensity over time. It refers to the appearance of signs of anxiety in response to a specific situation, such as tension, apprehension and activation of the sympathetic nervous system Trait anxiety refers to the inclination to react to stress with anxiety and a tendency to perceive several situations as a threat [11,12]. The STAI questionnaire is the most frequently used instrument to investigate the presence of anxiety [11]. Govêia, *et al.* evaluated the association between state anxiety, trait anxiety and Burnout in anesthesiologists in Distrito Federal, in Brazil. The authors reported an association between state anxiety and the emotional exhaustion and depersonalization dimensions of the syndrome [7]. Oliveira, *et al.* demonstrated that low job satisfaction and poor family support are independent factors for the development of Burnout in anesthesiology chair coordinators at universities in the United States [4].

Prophylaxis and treatment of Burnout syndrome involve the identification of associated factors and the establishment of programs to improve the work environment and the professional's ability to deal with stressful situations [13]. Since the diagnosis of anxiety is less complex than that of Burnout, identification of its presence favors the early action in the prevention of the syndrome [7]. Also, several studies describe reduction in symptoms after the institution of programs for stress management among physicians [13-15]. McCue and Sachs were able to reduce MBI scores in resident physicians who participated in a stress-management workshop [13]. Ospina-Kammerer and Figley reduced signs of emotional exhaustion in family physicians by encouraging the practice of breathing exercises [14]. Finally, Saadat, *et al.* developed a program to teach medical residents how to deal with stressful situations in the family and work environments. There was a significant reduction of anxiety and depression among the residents of the study group [15]. Interventions to address the stress are focused on the individual and the environment. Strategies that promote well-being include encouraging autonomy and leadership, as well as work environment control, good professional relations, and organizational justice. In addition to these, the acquisition and development of positive adaptive individual coping mechanisms should be stimulated, with the aim of increasing resilience and reducing vulnerability. The practice of self-care, healthy nutrition, assertive communication, flexibility, and sense of humor should be stimulated [16].

The Burnout syndrome is harmful to the professional, the institution, and the patient. Risk situations such as anxiety should be identified and preventive measures should be early implemented to avoid further harm.

References

1. Bauer J, Hafner S, Kachele H, Wirsching M, Dahlbender RW (2003) The Burnout syndrome and restaring mental health at the working place. Psychoter Psychosom Med Psychol 53: 213–22.

2. Maslach C, Jackson S (1981) Manual of Maslach Burnout Inventory. Consult Psychol Press 1: 1-17.

3. Tamayo M, Tróccoli B (2009) Burnout characterization scale (ECB) construction and validation. Psicol Student. Estud Psicol 14: 213–21.

4. Oliveira G, Ahmad S, Stock C, Harter RL, Almeida MD, et al. (2011) High incidence of Burnout in academic chairpersons of anesthesiology. Anesthesiology 114: 181-93.

5. Goldhagen B, Kingsolver K, Stinnett S, Jullia AR (2015) Stress and burnout in residents: impact of mindfulness-based resilience training. Adv Med Educ Pract 6: 525-32.

6. Turgut N, Karacalar S, Polat C, Özlem K, Fethi G, et al. (2016) Burnout syndrome during residency. Turk J Anaesthesiol Reanim. 44: 258-64.

7. Govêia C, Cruz T, Miranda D, Guimarães GMN, Ladeira LCA (2018) Association between burnout syndrome and anxiety in residents and anesthesiologists of the Federal Disctrict. Rev Bras Anestesiol 68: 442-6.

8. Magalhães E, Sousa OA, Govêia C, Ladeira LC, Queiroz DM, et al. (2015) Prevalence of burnout syndrome among anesthesiologists in the Federal District. Rev Bras Anestesiol 65: 104-10.

9. Lima F, Buunk A, Araújo M (2007) Burnout syndrome in residents of the Federal University of Uberlândia. Rev Bras Educ Med 31: 137-46.

10. Creedy D, Sidebotham M, Gamble J, Pallant J, Fenwick J (2017) Prevalence of burnout, depression, anxiety and stress in Australian midwives: a cross-sectional survey. Pregnancy Childbirth 17: 13.

11. Julian LJ (2011) Measures of anxiety: State-Trait Anxiety Inventory (STAI), Beck Anxiety Inventury (BAI), and Hospital Anxiety and Depression Scale-Anxiety (HADS-A). Arthritis Care Res 63: 467-72.

12. Andrade L, Gorenstein C, Vieira Filho A, Tung TC, Artes R (2011) Psychometric properties of the portuguese version of the state-trait anxiety inventory applied to college students: factor analysis and relation to the beck depression inventory. Braz J Med Biol Res 34: 367-74.

13. McCue J, Sachs C (1991) A stress management workshop improves residents' coping skills. Arch Intern Med.151: 2273–7.

14. Ospina-Kammerer V, Figley C (2003) An evaluation of the Respiratory One Method (ROM) in reducing emotional exhaustion among family physician residents. Int J Emerg Ment Health 5: 29-32.

15. Saadat H, Snow D, Ottenheimer S, Dai F, Kain ZN (2012) Wellness program for anesthesiology residents: a randomized, controlled trial. Acta Anaesthesiol Scand 56: 1130-8.

16. Saadat H, Kain ZN (2018) Wellness interventions for anesthesiologists. Curr Opin Anaesthesiol 31: 375-81.