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Editorial commentary: Burnout in cardiology—Going to the heart of the misunderstanding

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Burnout has been defined as a work-induced syndrome combining emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment. Over the last years, the burnout phenomenon has elicited growing interest among the medical community. Studies seeking to estimate the prevalence of burnout among physicians, across various specialties and geographic areas, have multiplied. Such studies have generally yielded alarming results, giving rise to numerous calls for action. In their review, Panagioti et al. [1] specifically address the issue of cardiologist burnout. Based on the finding that about half of US cardiologists suffer from burnout, the authors make thoughtful recommendations on how to promote well-being among those professionals. Endorsing a holistic approach to occupational health, Panagioti et al. [1] suggest that burnout among cardiologists may be best mitigated by stress-reduction actions taken at both the organization and the physician level. Indirectly, the authors' review also raises important questions regarding the burnout construct itself and its use in occupational health research. At least three problems affecting burnout studies are worth-considering in connection with the authors' review. In our estimation, these problems call for a change in how the issue of physician well-being is approached and dealt with.

A first problem concerns the causal link assumed to exist between occupational adversity and burnout. While burnout has been regarded as a syndrome *resulting from* unresolvable work stress, the available measures of burnout (e.g., the Maslach Burnout Inventory or the Shirom-Melamed Burnout Measure) in fact provide limited information on the etiology of the symptoms that they aim to assess [2]. Typically, respondents are questioned about how they feel at work, but the extent to which the reported feelings can be specifically imputed to occupational, as opposed to nonoccupational, stressors remains unclear [2,3]. Thus, contrary to what is commonly believed, burnout measures may not allow us to confidently identify *work-induced* symptoms. Substantiating the concerns raised regarding the actual determinants of the symptoms assessed by burnout measures, Dyrbye et al. [4] found in a study of 545 US medical students that personal life events were strongly related to the experience of burnout. In a similar vein, a recent survey of 2115 Dutch medical residents showed that both job demands and resources and home demands and resources contributed to burnout [5]. Such results are consistent with the finding that off-job activities affect daily levels of work engagement—a variable showing a strong negative correlation with burnout [6]. The implication of work-*un*related factors in the development of burnout symptoms may be particularly worth-examining in research on physicians. In a study conducted by the UK Medical Careers Research Group, Surman et al. [7] surveyed UK-trained doctors up to 5 years after graduation for six graduation year cohorts (1996, 1999, 2002, 2005, 2008, and 2012). Physicians were found to report more satisfaction with their job than with their leisure time, both 1 year ($ns > 16{,}000$) and 5 years ($ns > 11{,}000$) after graduation. These findings suggest that, among physicians, life outside work might be a greater source of discontent than life in the workplace.

Second, the alarming findings derived from burnout assessments contrast with the results obtained when other, closely related variables are examined. As an illustration, there is evidence that, despite the adaptive challenges associated

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with the practice of medicine, a vast majority of physicians enjoy their work and are satisfied with their career in countries such as the UK and the US [7,8]. For instance, in a study involving 6590 US physicians from various specialties [9], only 14% of respondents were found to be "somewhat dissatisfied" or "very dissatisfied" with their career (only 4% were found to be "very dissatisfied"). In a recent survey of 1117 US physicians [10], while 45% of respondents were concluded to be burned out, 83% were satisfied with their career choice, and 80% with their medical specialty. Making sense of these concurrent results is challenging when reasoning within the framework of burnout research. Indeed, in focusing on variables such as job satisfaction or career achievement, investigators may be tempted to conclude that most physicians have a rather positive and fulfilling relationship with their work. Such conclusions would not align well with the view that burnout has become epidemic among physicians, given that burnout presumably describes "a crisis in one's relationship with work" [11, p. 21].

Third, burnout researchers often overlook the fact that the prevalence of a syndrome cannot be estimated if the syndrome in question is not diagnosable (i.e., *identifiable*). Problematically, despite more than 40 years of sustained research, there is no diagnosis for burnout [2,12]. Drawing inferences about the number of cases of burnout among cardiologists (or other workers) is therefore unwise. As repeatedly underlined in past research, the currently reported estimates of physician burnout prevalence rely on categorization criteria that are (a) arbitrary, both clinically and theoretically, (b) adjustable at convenience, and (c) possibly overinclusive in view of what full-blown burnout is supposed to be [2,12,13]. Such research practices are confusing and trap investigators in endless debates regarding the reality of the burnout epidemic claimed to afflict physicians.

In view of this general state of affairs, and given the overlap of burnout with depression [12–16], occupational health specialists may need to shift their focus from burnout to job-related depression, in the interest of research advance and, ultimately, of workers' well-being [12]. By contrast with burnout, depression, in its various forms, is diagnosable [13]. Consequently, the prevalence of depression can be accurately estimated. Methods for etiologically linking depression to work stress are available, in both research and clinical settings [12]. Just as burnout, depression can be (a) studied from both a social and an individual perspective [16] and (b) examined dimensionally (i.e., on a continuum, as a process) [12,17]. Estimating the prevalence of *job-related* depression among physicians could permit us to get a more accurate idea of how occupational adversity impacts those professionals' health—while depression among physicians has been investigated [18], the specific issue of job-related depression has been neglected. Additionally, it would be informative to more closely examine, in a diachronic perspective, whether (a) the numbers of applicants to medical schools have decreased, (b) larger proportions of physicians are retiring from practice prematurely, (c) larger proportions of physicians of working age have left patient care for other kinds of work, and (d) suicide rates among physicians have increased.

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