Chapter 1
What Is Wellbeing?

Denny Scaria, Mary L. Brandt, Eugene Kim, and Brenessa Lindeman

What is wellbeing? The Oxford English Dictionary informs us that "wellness first appeared in written English in 1654 and, "like adding "ness" to "ill" to make "illness" it was a way to designate the state of being well (i.e. absence of disease)" [1] Despite its' early origins, the concept of "wellness" fell out of favor and the word is hardly found in any publication from the 1800s until the 1960s. If and when it was used, it was used only in the context of the absence of disease.

The modern understanding of the term wellness originated with Halbert L. Dunn in 1961. Dr. Dunn, chief of the National Office of Vital Statistics, was "looking for new terminology to convey the positive aspects of health that people could achieve, beyond simply avoiding sickness" [1]. His ideas led to the slow growth of a movement concerned with optimizing health rather than just preventing disease. The wellness movement gained momentum over the next two decades, reflected by the first publications in the medical literature concerning "wellness" in the early 1980s. "Wellness," intoned Dan Rather in November 1979, introducing a "60 Minutes" segment on a new health movement known by that name. "There's a word you don't

D. Scaria
Department of Surgery, Baylor College of Medicine, Houston, TX, USA
e-mail: Denny.Scaria@bcm.edu

M. L. Brandt
Division of Pediatric Surgery, Baylor College of Medicine, Texas Children's Hospital, Houston, TX, USA
e-mail: mlbrandt@texaschildrens.org

E. Kim
Division of Pediatric Surgery, USC Keck School of Medicine, Children's Hospital Los Angeles, Los Angeles, CA, USA
e-mail: eugeneskim@chla.usc.edu

B. Lindeman (✉)
Department of Surgery, University of Alabama School of Medicine, Birmingham, AL, USA
e-mail: blindeman@uabmc.edu

E. Kim, B. Lindeman (eds.), *Wellbeing*, Success in Academic Surgery,
https://doi.org/10.1007/978-3-030-29470-0_1

hear every day" [1]. A PubMed search bears this out. The first article on physician wellness, published in 1980, was entitled "Physician Survival: Should the Doctor Come First?", and explored difficult doctor-patient relationships and the effect they had on the physician (and, as a result, on the patient) [2]. The first articles in PubMed on physician burnout were published in 1981: "Burnout: A current problem in Pediatrics" [3] and "Physician burnout: When the healer is wounded" [4].

The concept of burnout first appeared in 1974 in a publication by Herbert Freudenberger who developed the term "to describe the consequences of severe or prolonged stress and anxiety experienced by people working in the "healing professions" [5]. Burnout is defined by Merriam-Webster as "exhaustion of physical or emotional strength or motivation usually as a result of prolonged stress or frustration" [6]. In the medical literature, burnout is defined by the presence of one or more of three cardinal "symptoms" of burnout: "losing enthusiasm for work (emotional exhaustion), viewing and/or treating patients and colleagues as objects (depersonalization) and feeling others could do your job better than you (low personal achievement)" [7]. And too often, the surgical literature which addresses physician wellbeing is in fact addressing burnout. This may be because of the assumption that reduction in burnout leads to greater wellbeing. And as such, it is important to be reminded that although burnout is often used as a surrogate for lack of physician wellbeing, it is not the opposite of wellbeing. The opposite of wellbeing is the distress that results when one is not able to appropriately respond to the stresses that result from caring for others.

1.1 Origin of Wellbeing Concepts

Wellbeing is not just a modern concept, but it was addressed thousands of years ago, starting with Plato, Socrates, Epicurus and Aristotle. Two distinct schools of thought about wellbeing have been described in the literature: hedonistic and eudaimonistic [8]. The hedonistic view argues that the good life consists of a life with more positive than negative pleasures. On the other hand, eudaimonism argues that the good life consists of the life that is worth seeking or living.

For a surgeon, wellbeing through a hedonistic lens may consist of greater positive pleasures, such as going through a great surgical case, getting manuscripts published, being praised by colleagues, going on vacation to a favorite destination, being loved by significant others, and enjoying favorite foods and drinks. Negative experiences may include the arduous nature of the work, being called to see inappropriate consults, a nurse or resident reporting mistreatment, and the coding department constantly filling an inbox with inquiries. However, if the positive pleasures outweigh the negative pleasures, then the hedonistic approach to wellbeing is sustainable.

In contrast, the good life may look quite different to those ascribing to the eudaimonistic view. The writings of Ryff et al. offer a framework of components of the good life referred to collectively as psychological wellbeing [9, 10]. These include

self-acceptance, personal growth, relatedness, autonomy, relationships, environmental mastery and purpose in life. Let us look at the wellbeing of the above surgeon from a eudaimonistic perspective. Surgeons are living the good life if they are happy with who they are and the choices they made in the past. They are glad to be assistant program director and that they spent time traveling during research years in residency. They have a strong group of friends at work that they trust and can confide in. They are satisfied with relationships they have with family. They have set reasonable standards for themselves, and they are content with where they are in their careers. Even though their colleagues may be publishing more and may be more academic, they believe that they are putting their efforts into what they truly believe in and are happy with that. They may work at a county hospital where they and the staff have a high degree of mutual respect. They can get the most out of a team to care for patients. With regards to long-term goals, they find meaning in their work as they help those less fortunate through the county hospital and are grateful for being able to be physicians. Moreover, they continuously feel challenged as trauma surgeons and look back at how much they have grown over the years as human beings and as surgeons. If you ascribed to the eudaimonistic view of a good life, you would argue that this surgeon, regardless of the negative pleasures he may be experiencing day to day, is living the good life and has wellbeing. He has "eudaimon" or he would be described as "flourishing."

1.2 Concept of Wellbeing

Despite consideration of a definition of wellbeing and descriptions of the good life from the hedonistic and eudaimonistic perspectives, we must also consider how it has been used in the literature. While some have argued that wellbeing is a construct, something that is dependent on the existence of a mind, Dodge et al. posit that it is not a construct and suggest that it can be measured [11, 12]. However, this level of granularity is seldom seen in the literature on wellbeing in surgeons and surgery residents.

One of the landmark studies about surgeon burnout was published in 2009 and surveyed approximately 25,000 surgeons through the American College of Surgeons [13]. Around 8000 recipients responded, making it one of the largest studies done at the time and perhaps to this day, on evaluating the perceptions of surgeons on burnout and career satisfaction. In this study, 40 percent of respondents met criteria for burnout, 30% screened positive for depression, and significant percentages had a mental or physical quality of life more than one half of the standard deviation lower compared to the general population. Moreover, only 74% would choose a career in surgery again. In their discussion of the findings, the authors call for increased efforts to improve the physical and emotional health of surgeons, but they do not define these terms or wellbeing specifically.

Similar patterns emerge upon examination of the literature on residents. A survey of US general surgery residents in 2014 collected surveys from 753 general surgery

residents, and 69 percent of these residents met criteria for burnout, with 44 percent having considered dropping out and 44 percent indicating that they would not pursue general surgery again if given the option [14]. Among the respondents, female residents and those working more hours were more likely to be burned out. Following this, a systematic review of wellbeing in residents from all specialties suggests sleep, exercise, family interactions, religious activity and missing significant life events as wellbeing markers, all of which were reduced in training, but goes further to describe that there is no consensus yet on how wellbeing should be measured [15]. The author goes on to note that the included studies touch upon aspects of wellbeing that have been put forth in the psychology literature such as autonomy, competence and relatedness.

While the studies above measured burnout, others have attempted to measure psychological wellbeing. A 2004 study of residents in North Carolina assessed their psychological wellbeing, which they only defined as the absence of psychological distress, using the Symptom Checklist-90 and Perceived Stress Scale, finding that more than a third of the residents met criteria for clinical psychologic distress [16]. Moreover, a study by Salles et al. used the short grit scale to determine the association between grit and psychological wellbeing, finding the two were positively correlated. However, as we have pointed out above, this may only approach one aspect of the different components of a person's wellbeing [17]. Multiple groups have also studied the association between emotional intelligence and psychological wellbeing, finding that those with higher emotional intelligence were less likely to be burned out [18–20]. Therefore, although studies conducted in surgery to date may be attempting to assess wellbeing, what is measured most often is the absence of negative experiences such as burnout rather than true wellbeing.

Therefore, what is wellbeing and how do we measure it? Merriam Webster defines wellbeing as "the state of being happy, healthy, or prosperous" [21] which they differentiate from wellness: "the quality or state of being in good health especially as an actively sought goal" [22]. However, Dodge et al. studied this question at length, stating "As interest in the measurement of wellbeing grows, there is a greater necessity to be clear about what is being measured, and how the resulting data should be interpreted, in order to undertake a fair and valid assessment" [11]. They argued that defining wellbeing is fundamental to measuring it, and went further to propose a new conceptual framework for wellbeing, shown in Fig. 1.1:

"The balance point between an individual's resource pool and the challenges faced."

In a follow up paper the authors propose a multidimensional framework (Fig. 1.2) to measure wellbeing that incorporates both the challenges and resources from the model above [12].

This framework is similar to the Job Demands-Resources (JD-R) theory initially proposed by Bakker et al. [23]. This posits that all jobs are characterized by a set of job demands, those aspects of the job that that require physical and/or cognitive

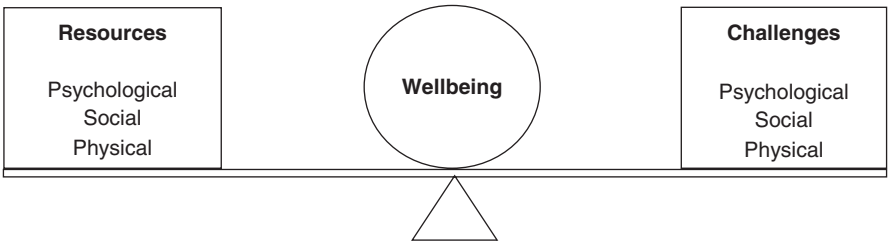

Fig. 1.1 Wellbeing can be viewed as a see-saw balance between psychological, social and physical resources versus psychological, social and physical challenges [11]

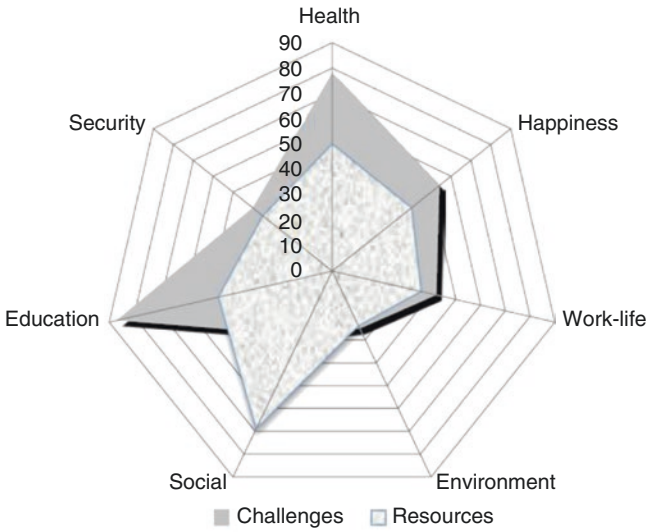

Fig. 1.2 Wellbeing can be further analyzed as a multidimensional balance between challenges and resources. Factors that contribute to wellbeing, such as physical health, happiness, work-life balance, work environment, social support, education, and security, each are faced with balancing reousrces and challenges. Some areas have greater resources than challenges, while other areas are the opposite. It is important to consider wellbeing as a multidimensional concept [12]

engagement, and resources, both personal and work-related facets that can stimulate personal growth and help employees to achieve work-related goals. According to JD-R theory, work engagement is fostered and individuals perform well when the work environment poses high job demands in combination with sufficient job and personal resources to meet those demands [24]. One study identified that more positive perceptions of job resources were related to lower levels of burnout in surgical trainees [25]. Thus interventions that strive to optimize individuals' job demands and increase both their personal and professional resources should be targeted [26].

1.3 Definition of Wellbeing

Clear definitions lead to clear thinking and, in that spirit, we would like to propose an alternate definition of "physician wellbeing", as physician wellbeing is more than the above definition applied to physicians. We are in need of a definition to guide our discussions, strategies and research. We propose to define physician wellbeing as:

The ability to appropriately respond to expected and unexpected stresses in order to be healthy, happy and prosperous in work and in life.

Since prosperity is often misinterpreted as being only about money, it is important to understand the meaning of that word as well: Prosperity is "the condition of being successful or thriving" [27]. If we were to rephrase the definition with this in mind, it might look like this: Physician wellbeing is the ability to appropriately respond to expected and unexpected stresses in order to thrive in a healthy, happy and successful manner in work and in life. This definition also has the advantage of including the concept of resilience within the definition of wellbeing instead of considering it separately. Resilience, which has taken on a deserved and important role in discussions of physician wellbeing is defined as "1. the capability of a strained body to recover its size and shape after deformation caused especially by compressive stress and 2. an ability to recover from or adjust easily to misfortune or change" [28]. Resilience is innate to human beings, and is especially innate in physicians. Resilience by definition has two variables that cannot be separated – the force on the system and the system's response, or put a different way, the stresses of our work and our ability to respond.

Therefore, while most studies which describe interventions to improve wellbeing focus on reducing burnout, this may not be the best or only way to improve wellbeing. Wellbeing for a surgeon, thereby, may assume a state of balance between opposing forces. On one end there are the psychological, social and physical challenges. Psychological challenges may include burnout, social challenges may refer to the work environment, and physical challenges to the physical health of the surgeon. On the other end, resources could include psychological parameters such as grit, social resources may include support systems such as family, colleagues and friends, and lastly physical resources may again be state of good health. Therefore, rather than adopting a eudaimonisitc or a hedonistic view, wellbeing must be assessed in a customized manner for the individuals who are being assessed. Wellbeing for an attending surgeon and a surgical resident may not necessarily be able to be measured with the same tool. Although wellbeing in and of itself refers to a state of balance between resources and challenging demands, according to Wassell and Dodge, tools to measure wellbeing and the interventions to improve wellbeing should be customized to the group to which it is applicable [12]. We suggest that there may be a need for a tool developed in a multidisciplinary fashion to evaluate wellbeing designed for physicians and perhaps for surgeons specifically. Truly, the imperative underlying discussions of physician burnout is the common desire to ensure the safest and best care for our patients, a goal not entirely possible without a workforce whose wellbeing remains a critical component.

References

1. Zimmer B. Wellness. The New York Times. https://www.nytimes.com/2010/04/18/magazine/18FOB-onlanguage-t.html. Accessed 24 Feb 2019.
2. Evans CE. Physician survival: should the doctor come first? Can Fam Physician. 1980;26:856–9.
3. Pines A. Burnout: a current problem in pediatrics. Curr Probl Pediatr. 1981;11:3–32.
4. Golin M. Physician burnout: when the healer is wounded. Am Med News. 1981;24(29):1–2.
5. Rothenberger DA. Physician burnout and Well-being: a systematic review and framework for action. Dis Colon Rectum. 2017;60:567–76.
6. Merriam Webster Dictionary. Burnout. https://www.merriam-webster.com/dictionary/burnout.
7. Brandt M. Sustaining a career in surgery. Am J Surg. 2017;214:707–14.
8. Deci EL, Ryan RM. Hedonia, eudaimonia, and Well-being: an introduction. J Happiness Stud. 2008;9(1):1–11. https://doi.org/10.1007/s10902-006-9018-1.
9. Ryff CD. Happiness is everything, or is it? Explorations on the meaning of psychological Well-being. J Pers Soc Psychol. 1989;57(6):1069–81. http://coursedelivery.org/write/wp-content/uploads/2015/02/2-Happiness-is-everything-or-is-it.pdf
10. Ryff CD, Keyes CLM. The Structure of Psychological Well-Being Revisited. 1995;69(4):719–727.
11. Dodge R, Daly A, Huyton J, Sanders L. The challenge of defining wellbeing. Int J Wellbeing. 2012;2(3):222–35. https://doi.org/10.5502/ijw.v2i3.4.
12. Wassell E, Dodge R. A multidisciplinary framework for measuring and improving wellbeing. Int J Sci Basic Appl Research. 2015;21(2):97.
13. Shanafelt TD, Balch CM, Bechamps GJ, et al. Burnout and career satisfaction among american surgeons. Ann Surg. 2009;250(3):463–70. https://doi.org/10.1097/SLA.0b013e3181ac4dfd.
14. Elmore LC, Jeffe DB, Jin L, Awad MM, Turnbull IR. National Survey of burnout among US general surgery residents. J Am Coll Surg. 2016;223(3):440–51. https://doi.org/10.1016/j.jamcollsurg.2016.05.014.
15. Raj KS. Well-being in residency: a systematic review. J Grad Med Educ. 2016;8(5):674–84. https://doi.org/10.4300/JGME-D-15-00764.1.
16. Zaré SM, Galanko J, Behrns KE, et al. Psychological Well-being of surgery residents before the 80-hour work week: a multiinstitutional study. J Am Coll Surg. 2004;198(4):633–40. https://doi.org/10.1016/j.jamcollsurg.2003.10.006.
17. Salles A, Cohen GL, Mueller CM. The relationship between grit and resident Well-being. Am J Surg. 2014;207(2):251–4. https://doi.org/10.1016/j.amjsurg.2013.09.006.
18. Lin DT, Liebert CA, Tran J, Lau JN. Emotional intelligence as a predictor of resident Well-being. J Am Coll Surg. 2016;223(2):352–8. https://doi.org/10.1016/j.jamcollsurg.2016.04.044.
19. West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. Lancet. 2016;388(10057):2272–81. https://doi.org/10.1016/S0140-6736(16)31279-X.
20. Wall J. Millennium Generation Poses New Implications for Surgical Resident Education. American College of Surgeons. https://www.facs.org/education/resources/rap/millennium-generation-poses-new-implications-for-surgical-resident-education. Published 2012.
21. Merriam Webster Dictionary. Definition of Well-Being. https://www.merriam-webster.com/dictionary/well-being. Accessed 24 Feb 2019.
22. Merriam Webster Dictionary. Definition of Wellness. https://www.merriam-webster.com/dictionary/wellness. Accessed 24 Feb 2019.
23. Schaufeli WB, Bakker AB. Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. J Org Behavior. 2004;25:293–315.
24. Bakker AB, Demerouti E, Sanz-Vergel AI. Burnout and work engagement: the JD-R approach. Ann Rev Org Psychol Org Behavior. 2014;1:389–411.

25. Lindeman B, Petrusa E, McKinley S, Hashimoto DA, et al. Association of burnout with emotional intelligence and personality in surgical residents: can we predict who is most at risk? J Surg Educ. 2017;74(6):e22–30.
26. Wingerden V, Bakker D. A test of a job demands-resources intervention. J Manag Psychol. 2016;31(3):686–701.
27. Merriam Webster Dictionary. Definition of Prosperity. https://www.merriam-webster.com/dictionary/prosperity. Accessed 24 Feb 2019.
28. Merram Webster. Resilience. https://www.merriam-webster.com/dictionary/resilience.