

Chapter 2

What Is Health from an Occupational Health Perspective?

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In understanding and explaining what the phenomenon of occupational health revolves around, we have to take a closer look at the concept of health, as well as asking the question: what is health? Answering this question is almost impossible because health is a highly complicated, complex, and context-dependent concept. Most of us agree that this concept is much more than simply the absence of illness, yet health is also dependent on culture and experience since health is something that changes throughout the entire life course. If it is so difficult to define health, then we could be asking what is the point of writing this chapter? The aim is to help the readers to be attentive to the complexity of the concept of health so that it can be used to reflect on various issues in terms of the challenges facing occupational health.

In this chapter, we first introduce a short historic view on the concept of health, starting from the early philosophers. We then focus on developments in the field of health from concern with infectious diseases to the focus on lifestyle diseases, that is, a shift from a biomedical explanatory model to a biopsychosocial explanatory model. Finally, we will discuss the differences and overlap with regard to different approaches to a health-promoting perspective. In addition, the focus will be on the health concept and how we should understand it. Here, we will make an attempt to reflect on how we define, operationalize, and measure health.

2.1 Challenges

Health issues create major challenges and costs for society. At the same time, they cause major losses for employers in terms of sickness absenteeism, sickness presenteeism, and production losses. The state of Norway annually spends 37.7 billion

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kroner on illness benefit, that is, about 14,500 Norwegian kroner for every employee in Norway. If all the losses are taken in account, the cost was estimated to be around 61.4 billion kroner in 2013, or 23,600 Norwegian kroner for every employee. In addition, the employer's losses have to be considered. In a report on the cost to industries (Hem, 2011), it was estimated that employers pay 13,000 Norwegian kroner every week (Hem, 2011). As an agenda in the workforce health issues should not be seen as a burden, since they produce increased opportunities and advantages. These can be in the form of reduced costs, reduced risk, and lower absenteeism and turnover. For employers, health issues can contribute to them establishing a good reputation for protecting their employees, which is favorable when collaborating with partners and for future employees. Last, but absolutely not least, placing health issues on the agenda could lead to higher productivity if the employees are healthier, happier, and more motivated.

2.2 History

The question of what health really is has been on people's minds since the dawn of time. The early Greek philosophers were later convinced that maintaining good health and fighting off disease was related to natural rather than supernatural factors. These included both physical and social health determinants and defined health as a state of dynamic balance between inner and outer surroundings. Thus, they oriented medicine toward a more scientific and humanistic perspective. The Greek philosopher Plato (428–348 B.C.) said that when looking for the reasons and treatment of disease, we should look at the human as a whole rather than focusing only on parts of the body.

Hippocrates (ca. 460–377 B.C.) is viewed as the western father of medicine and is thought to be one of the most influential people in the history of medicine. He rejected the supernatural and set the foundation for medicine as a science. Illness was not necessarily a result of the wrath of the gods, rather it was caused by environmental factors, diet, and lifestyle.

Aristotle (384–322 B.C.) believed that one should be careful when dealing with anything one could not measure. The physical is easily measurable, but the mind is not so easily measured. Based on this view, we have numerous important studies on diseases and their treatment, but the understanding is that a disease can be explained as a lack in the human's physical apparatus. Aristotle introduced eudaimonia as the highest of all human needs, that is, self-realization and the realization of one's potential.

The lack of concurrence between the philosophical thought and how to live the good life, and how human health is constructed, probably stems from the scientific revolution, where health was related to biological science. This conceptualized health in relation to the human body. Descartes (1596–1650) introduced the mind and body dualism. This means that humans consist of two separate parts: the body and the mind. Medical technology escalated this trend. Descartes suggested that the

body and mind do connect at one point, “pineal gland” (later called epiphysis), but that they did not affect each other. The biomedical model is based on such thoughts.

The biomedical model of health focuses only on biological factors and excludes psychological, environmental, and social explanations. This model explains health as being the absence of disease or illness. Its main focus is on physical processes that influence our health, such as biochemical factors, physiology, or pathology. The assumption is that disease has an underlying cause; if the cause is removed, one will be healthy again (Engel, 1977; Espnes & Smedslund, 2009). This health model is closely attached to a disease model that is often described as being reductionist. This is because of the claim that it reduces disease to smaller body parts or limiting biological processes. Reductionism has become the big success of biomedical medicine. Development in this field is excessive, and its detailed knowledge is becoming even more extensive. The biomedical model emerged in the mid-nineteenth century and focuses on the physical body when diagnosing and initiating treatment which, at that time, was closely related to the challenges of infectious disease such as influenza and tuberculosis. The causes of these diseases were identified and the treatment implemented. The big breakthrough came with the discovery of penicillin. Large vaccination programs were carried out, and this led to a massive decline in the number of cases of such diseases (Engel, 1977). Based on this, the popularity of the biomedical model is understandable.

During the 1950s, there was an explosion of what were commonly referred to as lifestyle diseases (diabetes, cardiovascular diseases, cancer, etc.). These diseases compensate for the earlier infectious diseases as the main cause of death in western countries. We have also witnessed an increase in psychosomatic diseases, which include stress, burnout, back, and neck problems. Based on this development, it would be correct to assume that the existing method of medical treatment using the biomedical model is no longer adequate, and there has been a growing need for a greater focus on psychological and social processes in addition to the biomedical perspective.

The biopsychosocial model was launched as a reaction to biological reductionism and tried to build a bridge between the physical–biological and the psychological aspects of health. George L. Engel introduced in the 1970s the biopsychosocial model (Engel, 1977). Engel acknowledged the enormous contribution to the understanding of disease, but he disagreed with the view that diseases only had physical causes. He emphasized the importance of the psychological and social aspects of human illness (Matrazzo, 1980). Using the biopsychosocial model of health, Engel proposed that a more holistic understanding of the patient’s biological, social, psychological, and behavioral background should be considered when reaching a diagnosis and identifying treatment. The biopsychosocial model assumes that an individual’s own sense of how they feel will have great consequences for their health (Suls & Rothman, 2004) (see Fig. 2.1).

Biological influences continue to play a key role in the biopsychosocial model, where the physiological cause is identified and examined. However, biological factors are only one component of the whole picture of an illness. Psychological influences are viewed as another of the main components that can contribute to

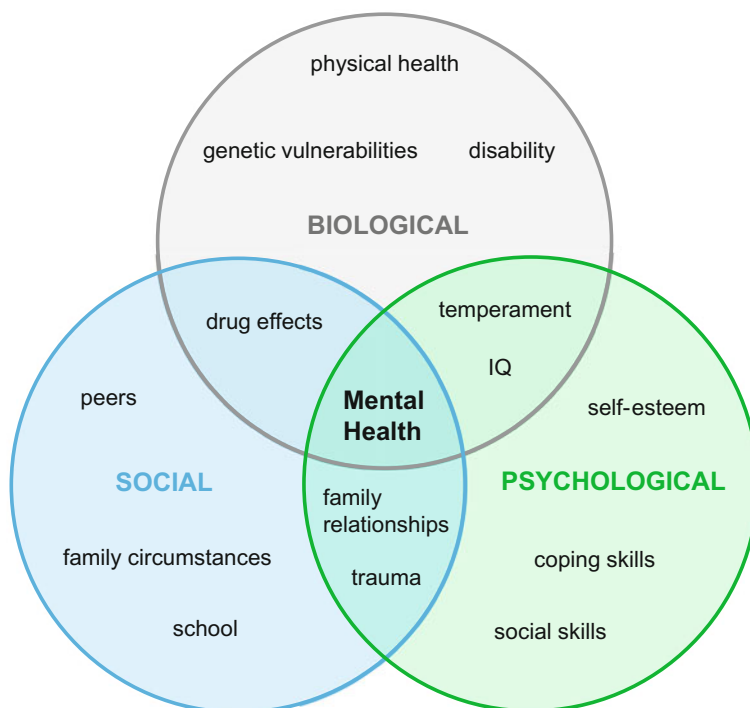


Fig. 2.1 Biopsychosocial health model

understanding the picture of an illness. This could, for example, include depression, health behavior, and negative thought patterns. The third key component is sociological influences, where we examine illness from a sociological perspective. Here we include, for example, economical relations, religion, and technology as important contributors to the development of disease. This model is based on the treatment of illness but it also includes health promotion as an essential component due to its focus on how to maintain and promote health throughout the lifecycle.

2.3 Health Promotion

The approach on how one act in accordance to health and treatment of health can be separated in three distinguished phases. Treatment/rehabilitation stands for treating and relieving injury that is already emerged. Discovering means and interventions for removing risk factors for disease is the aim of preventional work. Whilst health promotional work is to bring awareness to behavior that maintain and encourage health by advancing skills that gives control over the environment and increase the energy level. In real-life health promotion and preventive work are interacting and

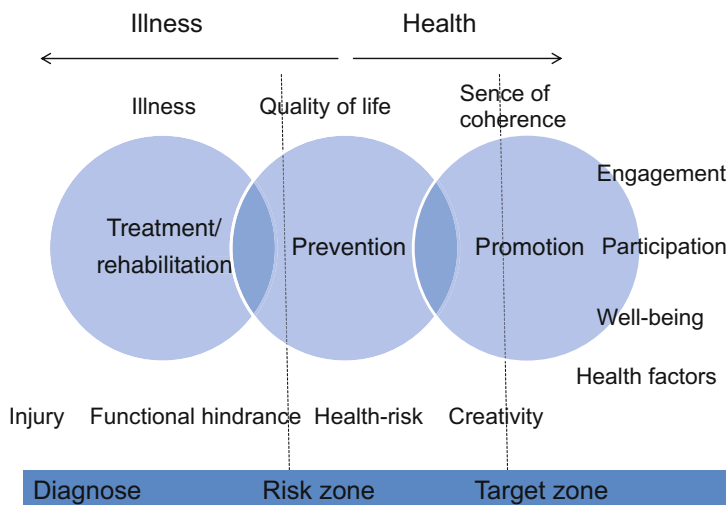


Fig. 2.2 Model of rehabilitation, prevention, and health promotion (Idébanken). *Source* Idébanken, <http://www.idebanken.org/innsikt/artikler/helsefremmende-arbeidsplasser>

complement each other, and different interventions can include the same elements (see Fig. 2.2).

WHO defines health promotion as “process of enabling people to increase control over, and to improve, their health” (WHO, 1986). The Ottawa charter for health promotion is an international agreement, elaborated and approved on the first international conference of health promotion, organized by WHO in Ottawa, Canada in 1986. Here they made an effort in supplementing WHO’s definition by adding that health is a recourse in a humans’ life, and not the object of the human existence. The Ottawa charter was the first document, which emphasized on health promotion and focused on making a conceptualization of health so that it could be more useable in health-related work and research. This was achieved when they realized which conditions had to be fulfilled for maintaining and achieving good health. In this agreement, it is stressed that health promotional work is closely associated with politics, all levels of the society and with the local environment. Through this, the aim was to achieve “health for everyone” within 2000. In Norway, one can, for example, see the effects of this through the Working Environmental Act, which in § 1-1 states that the act’s purpose is to ensure a work environment that provides the basis for a healthy and meaningful working situation.

2.4 Definition of Health

As we can see from this discussion of its historical development, health has traditionally been defined as the absence of disease (Nelson & Simmons, 2003). In light of this understanding, one can ask questions about the definition and the

understanding of health and about its approach to causal explanations for the development a disease. Is it possible for one to enjoy good health while dealing with a chronic disease? If someone does not have a disease but is feeling low, can we define them as having good health? The understanding of health has been debated for a long time, and today there is agreement that health is a complex concept that extends far beyond the absence of disease. The Central Bureau of Statistics reporting on Norway's (SSB) health research concluded that the absence of disease did not correlate with the main criteria for health. Ninety-six percent of individuals without chronic illnesses and seventy-one percent of those with chronic illnesses reported having either good or great health (Lunde, 1999).

The severity of a disease, and in particular, the reduction in functional ability, has an influence on the experience of health. Only thirty percent of those experiencing difficulties related to illnesses in everyday life reports good health. One explanation may be that the disease plays a part in the whole understanding of health. The most celebrated definition of health comes from the WHO, which sees health as a condition of entire physical, mental, and social well-being (WHO, 1948). This definition has been the subject of considerable criticism, especially because of the notion that absence of disease is a condition for obtaining good health and that good health is obtained through complete well-being. The challenges are based on three assumptions contained in the definition. Without exception, disease and health cannot coexist. Disease is disease; there is no room for differentiating between a mild and a more serious illness, such as cancer. The definition gives the impression that it is universal. The form it takes includes all humans without considering individual and social characteristics. Despite these criticisms, there is still value in this definition because it includes the notion of a positive well-being and gives the health concept a multidimensional character.

A definition of health that claims health to be more than the absence of disease gives rise to obstacles when defining and dealing with a positive health concept (Nelson & Simmons, 2003). Health has been described as a continuum between two end points where we find positive health on one side and disease on the other. It is not only medics that are interested in the definition of health today; the concept is also of great interest amongst philosophers. In their paper, Ryff and Singer (1998) compared different approaches from both a medical and a philosophical standpoint. The two disciplines have approached the concept of health in largely different ways. The focus of medicine has been disease, treatment, and the prevention of disease, whereas the focus of philosophy has been on well-being and mind-body interaction. Ryff and Singer's argument for the interaction between the mental and soma has been neglected for the last hundred years. They emphasize that having a goal in life, a social network, self-confidence, and the sensation of mastering your environment are important predictors for good health. Furthermore, the interaction between the mind and the body is important when we interpret and master obstacles within ourselves to obtain our physical health status. Ryff and Singer concluded that positive emotions contribute to a restitution and prevention of a disease. In this definition of positive health, they introduce three key principles: (1) Health is more of a philosophical question rather than a medical one, and therefore there is a need

to articulate the good life, (2) well-being explains the relation between the mind and body in both mental and physical components and in how they affect each other, and (3) positive health is best understood as a multidimensional dynamic process rather than a scale that moves from bad health to good health. Interestingly, the discussion here might be framed by the question of whether health and disease are located at each extreme of the scale or whether they belong to two qualitative different scales. Positive psychology claims that qualitatively different results will be gained by analyzing positive health and negative health. Furthermore, they claim that by taking this research approach, new or additional predictors will be found for positive health. Below, we mention some of the studies that have examined this relationship.

Various empirical studies have focused on the concept of positive health. As early as 1994, Mackenbach, van den Bos, van de Mheen, and Stronks asked what were the health determinants for good and bad health, and whether these two conditions qualitatively differ from each other. Their study took an important step toward understanding health as a condition of well-being rather than being the lack of illness. Mackenbach, van den Bos, van de Mheen, and Stronks (1994) focused on socio-demographic variables that had earlier been used to predict disease, and they showed that these variables explained more of the variance in poor health than in good health. The researchers emphasized that the examined underlying variables were usually used in explaining the absence of disease and poor health. The results were explained within a model that was a better fit for examining poor health than it was for examining good health. The conclusion stated that the processes for generating good health have a lot in common with those that generate bad health; still, there is a distinct difference. Taking this into consideration, they recommended future research to examine other determinants, such as psychological, social, and cultural aspects, that consider the difference between pathogenesis and salutogenesis (Antonovsky, 1987).

In their study, Aronsson and Lindh (2004) argued that one could not understand factors that shape illness, discontent, and disorders. They suggested that by focusing on long-term healthy workers, one would identify areas for improving and intervening in the workplace, finding a common denominator to identify and improve constructive aspects. A study by Aronsson and Blom (2010) defined health using a behavioral-oriented or an action-oriented notion. They operationalised long-term health as a combination of low-level presenteeism and low levels of sickness absenteeism. They asked questions about which work-related and personal factors would increase the chances of workers remaining healthy. The results showed twenty-eight percent of the workers reporting being healthy throughout a long period of time. Furthermore, this study included other health benefit variables, such as management support, satisfaction with the work carried out, and clear goals. They also found that huge quantitative demands (e.g., workload and time pressure) hindering the satisfaction while working (Aronsson & Blom, 2010).

Research conducted on positive mental health suggests that mental health is a dynamic process that indicates more than the simple lack of disease. Seligman (2008) operationalised health as a combination of utmost status on each biological,

subjective, and functional intention. Positive health is related to a “person–environment fit” kind of thinking, and an optimal adaptation between physical capacity, demands, and an individual’s life resources. On its own, a positive mental health is seen as a goal in itself, as well as indicating a general health and high life expectancy. Seligman (2008) suggests that there is a logical explanation or rationale for studying positive mental health since it had earlier been a neglected field of study compared with the focus on poor mental health. The fundamental goal behind positive psychology lies in its close relation to health promotion, which is concerned with a change in the psychological focus toward building on strengths (Seligman, 2008). Seligman claims that when clinical illnesses come to an end, one does not simply end up with a positive mental health, including positive emotions, motivation, meaning, or positive relationships. Seligman (2008) mentions two main reasons for examining positive mental health in combination with poor mental health. First, humans continue to seek well-being while experiencing problems or/and disease. Second, the predictors of positive mental health, such as positive emotions, motivations, meaning, and positive relations, can protect against mental issues.

Another argument for shifting away from the “repairing and avoiding perspective” and toward a health promotion perspective is based on research that concludes that the medical objective of the search for disease does not show the expected significant association with the subjective health. The predictors used to explain poor health are failing when measuring subjective general health (Barsky, Cleary, & Klerman, 1992; Manderbacka, Lundberg, & Martikainen, 1999). Earlier research supports the notion of explaining more of the variance in subjective general health by using predictors related to both positive and negative health (Barsky et al., 1992). Several researchers agree on the need for more variables when researching the positive end of the health continuum (Aronsson & Blom, 2010; Aronsson & Lindh, 2004; Benyamini, Idler, Leventhal, & Leventhal, 2000; Mackenbach et al., 1994). Benyamini et al. (2000) examined other predictors for positive physical and psychological functioning, for example, engagement, positive affect, and social support. They found that the positive indicators were among the most important predictors for subjective health, both now and in the future. Happy and energetic people had a higher probability than others for maintaining a positive assessment of their health (Benyamini et al., 2000).

The discussion above has underlined the need to include both ends of the health continuum if we are to fully understand human subjective health. Equilibrium and balance are two qualitative different dimensions. Mind and body are not independent of each other, neither are they independent of the context around us.

2.5 Occupational Health

Health is closely related to function, and people tend to define their health in terms of how they function around their tasks. Here we find that occupational and health psychology deal with physical and mental health and well-being. The purpose of

occupational health psychology is to develop, maintain, and promote workers health directly, as well as the health of their families (Quick et al., 1997). The earlier strong focus on negative factors concerning work (demands, stress, and lack of motivation) has more recently been balanced with a greater attention placed on the positive factors concerning occupational health, such as a focus on resources, well-being, and motivation (Bauer & Jenny, 2012). Today, we find a growing agreement on the need to include both demands and resources in understanding the underlying processes.

2.6 Conclusion

In conclusion, it is necessary to reflect on the important question of who is in charge of our health. Is it the individual, or is it the society? This is a difficult, but an important political discussion. We know that lifestyle has an important impact on health, and hence we have some control over improving our health, such as through diet and exercise. We also know that health is influenced by social differences, something that is explained by determinants from social positions. The strong focus on lifestyle, as well as the individual's behavior, has been criticized as a search for scapegoats. People are blamed for behavior over which they have little or no control (Fugelli & Ingstad, 2009). The line between individual and society is unclear, and it is less likely that individual changes can rise without the society also changing. This view was agreed upon and became dominant in the World Health Organisation's first world conference with health promotion on the agenda. The conclusion noted a reciprocal commitment. The aim of this chapter has been to capture the complexity in the notion of health; when faced with difficulties in society, the importance of understanding this complexity is important, both for the employers and, not least, the employees.

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