

The biopsychosocial model states that health and illness are determined by a dynamic interaction between biological, psychological, and social factors.

LEARNING OBJECTIVE

Explain how the biopsychosocial model can help us to understand how biology, psychology, and culture interact to influence our health

KEY POINTS

According to the biopsychosocial model, interactions between people's genetic makeup (biology), mental health and personality (psychology), and sociocultural environment (social world) contribute to their experience of health or illness.

The biological influences on mental health and mental illness are varied, and include genetics, infections, physical trauma, nutrition, hormones, and toxins.

The psychological component looks for potential psychological explanations for a health problem, such as lack of self-control, emotional turmoil, or negative thinking.

Social and cultural factors are conceptualized as a particular set of stressful events (being laid off, for example) that can differentially impact mental health depending on the individual and his or her social context.

The biopsychosocial theory posits that each one of these factors is not sufficient to create health or mental illness, but the interaction between them determines the course of one's development.

Despite its usefulness, there are issues with the biopsychosocial model, including the degree of influence that each factor has, the degree of interaction between factors, and variation across individuals and life spans.

TERMS

biopsychosocial

Referring to the idea that the mind and the body are inseparable entities.

The biopsychosocial model of health and illness is a framework developed by George L. Engle that states that interactions between biological, psychological, and social factors determine the cause, manifestation, and outcome of wellness and disease. Historically, popular theories like the nature versus nurture debate posited that any one of these factors was sufficient to change the course of development. The biopsychosocial model argues that any one factor is not sufficient; it is the interplay between people's genetic makeup (biology), mental health and behavior (psychology), and sociocultural environment (social world) that determine the course of their health-related outcomes.

Biopsychosocial model of health and illness



This diagram shows how biological, psychological, and sociological factors overlap to determine overall health.

Biological Influences on Health

Biological influences on health and illness include genetics, infections, physical trauma, nutrition, hormones, and toxins. Many disorders have an inherited genetic vulnerability. In schizophrenia, for example, if one monozygotic twin develops schizophrenia, there is at least a 60% chance the co-twin will also develop that disorder. Considering that the prevalence of schizophrenia in the population is only 1%, it is clear that genetic factors play an important role in the development of this disorder. At the same time, 40% of co-twins do not develop schizophrenia, suggesting that genes do not account for all of the inheritance. Instead, certain non-biological (i.e., environmental) factors play a role in the expression of the disorder in those with a pre-existing genetic risk.

Psychological Influences on Health

The psychological component of the biopsychosocial model includes potential psychological factors that may contribute to the development of a health problem. These include lack of self-control, emotional turmoil, and negative thinking. Individuals with a genetic vulnerability may be more likely to display negative thinking that puts them at risk for depression. Alternatively, psychological factors may exacerbate a biological predisposition by putting a genetically vulnerable person at risk for other risk behaviors. For example, depression on its own may not cause liver problems, but a person with depression may be more likely to abuse alcohol, and, therefore, develop liver damage. Increased risk-taking leads to an increased likelihood of disease.

Social Influences on Health

Social factors include socioeconomic status, culture, technology, and religion. For instance, losing one's job or ending a romantic relationship may place one at risk of stress and illness. Such life events may

predispose an individual to developing depression, which may, in turn, contribute to physical health problems. The impact of social factors is widely recognized in mental disorders like anorexia nervosa (a disorder characterized by excessive and purposeful weight loss despite evidence of low body weight). The fashion industry and the media promote an unhealthy standard of beauty that emphasizes thinness over health. This exerts social pressure to attain this "ideal" body image despite the obvious health risks.

Cultural Factors

Also included in the social domain are cultural factors. For instance, differences in the circumstances, expectations, and belief systems of different cultural groups contribute to different prevalence rates and symptom expression of disorders. For example, anorexia is less common in non-western cultures because they put less emphasis on thinness in women.

Cultural factors can even differ across a single city, from lower-income to higher-income areas, and rates of disease and illness differ across these communities accordingly. Culture can even change biology, as research on epigenetics is beginning to show. Specifically, research on epigenetics suggests that the environment can actually alter an individual's genetic makeup. For instance, research shows that individuals exposed to over-crowding and poverty are more at risk for developing depression with actual genetic mutations forming over only a single generation.

Application of the Biopsychosocial Model

The biopsychosocial model states that the workings of the body, mind, and environment all affect each other. The theory posits that each one of these factors is not sufficient to bring about health or illness, but the interaction between them is what determines outcomes. Health promotion must address all three factors, as a growing body of empirical literature suggests that it is the combination of health status, perceptions of health, and sociocultural barriers to accessing health care that influence the likelihood of a patient engaging in health-promoting behaviors, like taking medication, proper diet or nutrition, and engaging in physical activity.

Source: Boundless. "The Biopsychosocial Model of Health and Illness." Boundless Psychology. Boundless, 21 Aug. 2015. Retrieved 21 Oct. 2015 from <https://www.boundless.com/psychology/textbooks/boundless-psychology-textbook/stress-and-health-psychology-17/introduction-to-health-psychology-85/the-biopsychosocial-model-of-health-and-illness-326-1286>

