BIOMEDICAL MODEL OF HEALTH PSYCHOLOGY

The biomedical model of medicine can be understood in terms of its answers to the following questions:

**What causes illness?** According to the biomedical model of medicine, diseases come from outside the body, invade the body and cause physical changes within the body, or originate as internal involuntary physical changes. Such diseases may be caused by several factors such as chemical imbalances, bacteria, viruses and genetic predisposition.

**Who is responsible for illness?** Because illness is seen as arising from biological changes beyond their control, individuals are not seen as responsible for their illness. They are regarded as victims of some external force causing internal changes. How should illness be treated? The biomedical model regards treatment in terms of vaccination, surgery, chemotherapy and radiotherapy, all of which aim to change the physical state of the body.

**Who is responsible for treatment?** The responsibility for treatment rests with the medical profession.

**What is the relationship between health and illness?** Within the biomedical model, health and illness are seen as qualitatively different – you are either healthy or ill, there is no continuum between the two.

**What is the relationship between the mind and the body?** According to the biomedical model of medicine, the mind and body function independently of each other. This is comparable to a traditional dualistic model of the mind–body split. From this perspective, the mind is incapable of influencing physical matter and the mind and body are defined as separate entities. The mind is seen as abstract and relating to feelings and thoughts, and the body is seen in terms of physical matter such as skin, muscles, bones, brain and organs. Changes in the physical matter are regarded as independent of changes in state of mind.

**What is the role of psychology in health and illness?** Within traditional biomedicine, illness may have psychological consequences, but not psychological causes.
For example, cancer may cause unhappiness but mood is not seen as related to either the onset or progression of the cancer.

Throughout the twentieth century, there were challenges to some of the underlying assumptions of biomedicine. These developments have included the emergence of psychosomatic medicine, behavioral health, behavioral medicine and, most recently, health psychology. These different areas of study illustrate an increasing role for psychology in health and a changing model of the relationship between the mind and body.

**Psychosomatic medicine**—The earliest challenge to the biomedical model was psychosomatic medicine. This was developed at the beginning of the twentieth century in response to Freud’s analysis of the relationship between the mind and physical illness. At the turn of the century, Freud described a condition called ‘hysterical paralysis’, whereby patients presented with paralyzed limbs with no obvious physical cause and in a pattern that did not reflect the organization of nerves. Freud argued that this condition was an indication of the individual’s state of mind and that repressed experiences and feelings were expressed in terms of a physical problem. This explanation indicated an interaction between mind and body and suggested that psychological factors may not only be consequences of illness but may contribute to its cause.

**Behavioral health** Behavioral health again challenged the biomedical assumptions of a separation of mind and body. Behavioral health was described as being concerned with the maintenance of health and prevention of illness in currently healthy individuals through the use of educational inputs to change behavior and lifestyle. The role of behavior in determining the individual’s health status indicates an integration of the mind and body.

**Behavioral medicine** A further discipline that challenged the biomedical model of health was behavioral medicine, which has been described by Schwartz and Weiss (1977) as being an amalgam of elements from the behavioral science disciplines (psychology, sociology, health education) and which focuses on health care, treatment and illness prevention.

Behavioral medicine was also described by Pomerleau and Brady (1979) as consisting of methods derived from the experimental analysis of behavior, such as behavior therapy and behavior modification, and involved in the evaluation, treatment and prevention of physical disease or physiological dysfunction (e.g. essential hypertension, addictive behaviors and obesity). It has also been emphasized that psychological problems such as neurosis and psychosis are not within behavioral medicine unless they contribute to the development of illness. Behavioral medicine therefore included psychology in the study of health and departed from traditional biomedical views of health by not only focusing on treatment, but also focusing on prevention and intervention. In addition, behavioral medicine challenged the traditional separation of the mind and the body.