

## INTRODUCTION III

**1.1 RELATION MIND-BODY:** The idea that our minds and emotions play a critical role in our health—a fundamental premise in integrative medicine—is far from new. Many ancient healing systems emphasize the interconnection between mind and body in healing, including Hippocrates, the father of Western medicine, who taught that good health depends on a balance of mind, body, and environment. Modern scientific research supports this age-old tenet of medical wisdom. It began in the 1920s, when Harvard scientist Walter Cannon, MD, identified the fight-or-flight response through which the body secretes hormones called catecholamines, such as epinephrine and non-epinephrine. When they enter the blood stream, these hormones produce changes in the body—i.e. a quickened heart or increased breathing rate—that put the person in a better physical state to escape or confront danger.

In the following decade, Hungarian-born scientist Hans Selye, MD, pioneered the field of stress research by describing how the wear-and-tear of constant stress could affect us biologically.

Since then, scores of scientific breakthroughs have illuminated the mind-body connection in health. Experimental psychologist Neal Miller, PhD, discovered that we can be trained to control certain physical responses, such as blood pressure, that were previously considered to be involuntary. This discovery gave birth to biofeedback, which has now been found to be effective in the treatment of anxiety, attention deficit disorder, headache, hypertension, and urinary incontinence. Harvard cardiologist Herbert Benson, MD, identified the flip side of the stress response, which he called the “relaxation response.” Benson demonstrated that meditation, yoga, and other relaxation techniques can bring about physiological changes including a lower heart rate, lower breathing rate, and decreased muscle tension along with positive changes in brain waves. Mind-body techniques that elicit this relaxation response have been successful in treating many stress-related disorders.

Research by psychologist Robert Ader, PhD, at the University of Rochester provided a link between the brain, behavior and immune function, and founded the new field of psychoneuroimmunology, which researches ways to increase immune function through the use of the mind.

Based on a Buddhist meditation practice, Jon Kabat-Zinn, PhD, at the University of Massachusetts, developed Mindfulness Based Stress Reduction (MBSR), a meditation technique that has successfully reduced physical and psychological symptoms in many medical conditions, including pain syndromes.

“When we are on automatic pilot, trying to get someplace else all the time without being attentive to where we already are, we can leave a wake of disaster behind us in terms of our own health and wellbeing, because we’re not listening to the body. We’re not paying attention to its messages; we’re not even in our bodies much of the time,” explains Kabat-Zinn. “Mindfulness—paying attention on purpose in the present moment nonjudgmentally—immediately restores us to our wholeness, to that right inward measure that’s at the root of both meditation and medicine.”

Guided imagery, which utilizes the power of imagination to heal, has been shown to reduce anxiety and pain in people with a wide range of medical conditions, including asthma, back pain, and headache, and to help patients better tolerate medical procedures and treatments. “Imagery utilizes the natural language of the unconscious mind to help a person connect with the deeper resources available to them at cognitive, affective and somatic levels,” explains Martin L. Rossman, MD. Innovative research by Dean Ornish, MD, and his colleagues found that a program integrating mind-body techniques such as yoga, meditation, stress management, and group support with diet and exercise reversed coronary artery disease. “What we are finding is that comprehensive lifestyle changes may ‘turn on’ the beneficial parts of the genome and ‘turn off’ the more harmful parts,” says Dr. Ornish.

Today, these breakthroughs in our understanding of the mind-body connection have translated into effective therapies that support a patient’s journey through illnesses and trauma. Virtually every major medical center now has a stress management or mind-body clinic, and practices such as meditation, yoga, and group support are woven into the medical treatment of heart disease, cancer, and other serious illnesses.

**1.2 EMERGENCE OF HEALTH PSYCHOLOGY:** Health psychology is the study of psychological and behavioral processes in health, illness, and healthcare. It is concerned with understanding how psychological, behavioral, and cultural factors contribute to physical health and illness. Psychological factors can affect health directly. For example, chronically occurring environmental stressors affecting the hypothalamic–pituitary–adrenal axis, cumulatively, can harm health. Behavioral factors can also affect a person's health. For example, certain behaviors

can, over time, harm (smoking, excessive alcohol consumption) or enhance health (exercise, low fat diet). Health psychologists take a biopsychosocial approach. In other words, health psychologists understand health to be the product not only of biological processes (e.g., a virus, tumor, etc.) but also of psychological (e.g., thoughts and beliefs), behavioral (e.g., habits), and social processes (e.g., socioeconomic status and ethnicity).

By understanding psychological factors that influence health, and constructively applying that knowledge, health psychologists can improve health by working directly with individual patients or indirectly in large-scale public health programs. In addition, health psychologists can help train other healthcare professionals (e.g., physicians and nurses) to take advantage of the knowledge the discipline has generated, when treating patients. Health psychologists work in a variety of settings: alongside other medical professionals in hospitals and clinics, in public health departments working on large-scale behavior change and health promotion programs, and in universities and medical schools where they teach and conduct research.

Although its early beginnings can be traced to the field of clinical psychology, four different divisions within health psychology and one related field, occupational health psychology (OHP), have developed over time. The four divisions include clinical health psychology, public health psychology, community health psychology, and critical health psychology. Professional organizations for the field of health psychology include Division 38 of the American Psychological Association (APA), the Division of Health Psychology of the British Psychological Society (BPS), and the European Health Psychology Society. Advanced credentialing in the US as a clinical health psychologist is provided through the American Board of Professional Psychology.

## **Origins and development**

Psychological factors in health had been studied since the early 20th century by disciplines such as psychosomatic medicine and later behavioral medicine, but these were primarily branches of medicine, not psychology. Health psychology began to emerge as a distinct discipline of psychology in the United States in the 1970s. In the mid-20th century there was a growing understanding in medicine of the effect of behavior on health. For example, the Alameda County Study, which began in the 1960s, showed that people who ate regular meals (e.g., breakfast), maintained a healthy weight, received adequate sleep, did not smoke, drank little alcohol, and exercised regularly were in better health and lived longer.

In addition, psychologists and other scientists were discovering relationships between psychological processes and physiological ones. These discoveries include a better understanding of the impact of psychosocial stress on the cardiovascular and immune systems, and the early finding that the functioning of the immune system could be altered by learning.

Psychologists have been working in medical settings for many years (in the UK sometimes the field was termed medical psychology). Medical psychology, however, was a relatively small field, primarily aimed at helping patients adjust to illness. In 1969, William Schofield prepared a report for the APA entitled *The Role of Psychology in the Delivery of Health Services*. While there were exceptions, he found that the psychological research of the time frequently regarded mental health and physical health as separate, and devoted very little attention to psychology's impact upon physical health. One of the few psychologists working in this area at the time, Schofield proposed new forms of education and training for future psychologists. The APA, responding to his proposal, in 1973 established a task force to consider how psychologists could (a) help people to manage their health-related behaviors, (b) help patients manage their physical health problems, and (c) train healthcare staff to work more effectively with patients.

Led by Joseph Matarazzo, in 1977, APA added a division devoted to health psychology. At the first divisional conference, Matarazzo delivered a speech that played an important role in defining health psychology. He defined the new field in this way, "Health psychology is the aggregate of the specific educational, scientific and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, the identification of diagnostic and etiologic correlates of health, illness and related dysfunction, and the analysis and improvement of the healthcare system and health policy formation."

In the 1980s, similar organizations were established elsewhere. In 1986, the BPS established a Division of Health Psychology. The European Health Psychology Society was also established in 1986. Similar organizations were established in other countries, including Australia and Japan. Universities began to develop doctoral level training programs in health psychology. In the US, post-doctoral level health psychology training programs were established for individuals who completed a doctoral degree in clinical psychology.

A number of relevant trends coincided with the emergence of health psychology, including: Epidemiological evidence linking behavior and health.

The addition of behavioral science to medical school curricula, with courses often taught by psychologists.

The training of health professionals in communication skills, with the aim of improving patient satisfaction and adherence to medical treatment.

Increasing numbers of interventions based on psychological theory (e.g., behavior modification).

An increased understanding of the interaction between psychological and physiological factors leading to the emergence of psychophysiology and psychoneuroimmunology (PNI).

The health domain having become a target of research by social psychologists interested in testing theoretical models linking beliefs, attitudes, and behavior.[21] The emergence of AIDS/HIV, and the increase in funding for behavioral research the epidemic provoked.

In the UK, the BPS's reconsideration of the role of the Medical Section prompted the emergence of health psychology as a distinct field. Marie Johnston and John Weinman argued in a letter to the BPS Bulletin that there was a great need for a Health Psychology Section. In December 1986 the section was established at the BPS London Conference, with Marie Johnston as chair.

At the Annual BPS Conference in 1993 a review of "Current Trends in Health Psychology" was organized, and a definition of health psychology as "the study of psychological and behavioral processes in health, illness and healthcare" was proposed.

The Health Psychology Section became a Special Group in 1993 and was awarded divisional status within the UK in 1997. The awarding of divisional status meant that the individual training needs and professional practice of health psychologists were recognized, and members were able to obtain chartered status with the BPS. The BPS went on to regulate training and practice in health psychology until the regulation of professional standards and qualifications was taken over by statutory registration with the Health Professions Council in 2010.

**1.3 IMPORTANCE OF HEALTH PSYCHOLOGY:** In the health care, the definition of psychology refers to the professional study of expert of the clients and

patients regarding the behavioral development of human thought. This field of study generates information and data as to the handling of patients in their emotional stability, thought processes, behavioral stability and other forms of their mental action. In this profession, it is very critical to handle their emotional and behavioral concerns as complemented by their problems of physical and mental health.

Usually, the investigative processes along understanding, describing, predicting and controlling may be needed to respond the concern on psychological and emotional disturbances.

The confinement of a hospital or clinic indicates so much human pain is conducted by intravenous vaccines, injection, and injury operation.

The room background as excruciating human condition of health illness and recovery.

The medical expenses and miscellaneous expenses in the confinement of the clinic or hospital.

The personal burden of the daily activities of the family in visiting the hospital.

The personal health in relation to the possibility of death causes emotional worries to them.

The way to comfort them may apply those worried members of the family as to the health condition of the patients. The psychology of health provides the emotional mechanism to sustain high level of esteem and moral support to reduce the personal and social pain they encounter during the recovery period.

These are the following importance of psychology in health care :

It appreciates the way how we can comprehend the behavior of the patient to utilize appropriate psychological intervention from them.

It provides better understanding as to the relationship of the illness and proper way to conduct behavioral therapeutic intervention by the use of effective communication process.

It ensures effective coping mechanism to reduce the risks of stress-related illness as the result of illness including the feeling of pain in the health recovery of patients.

It informs the relationship of behavior and its influence to the well-being of the patient.

It helps the physician to explain the health-related behaviors that affected by the lifestyle (such as the personal vices of smoking, drinking, drug addiction and etc.) and its health consequences .

The study of psychology has an important role in the modification of behavior from the negative response such as depression and stress to positive counter-response such as moral and psychological support, understanding of the behavior, and other effective mechanisms to finally recover from the illness in the hospital.