

HEALTH PSYCHOLOGY

Over 2,500 years have passed since philosophers Plato and Aristotle argued that the human mind or soul could not be found within the material body. Approximately 2,000 years later, René Descartes proposed his own theory about the separation of mind and body, which was rooted in these ancient philosophies and became known as Cartesian dualism. While believing that mental experiences were functions of the soul, which must be separate from the physical, Descartes also believed that the soul and body influenced one another. It has been argued (e.g., Rubin & Wessely, 2001) that perhaps the most important effect of Cartesian dualism is that it placed the body in the domain of physicians and the mind in the domain of philosophers, psychiatrists, and psychologists, leading to the development of modern medicine and psychology. This phenomenon is evident in one of the most common practitioner questions, “Is this problem organic or psychological?” Today, health psychology works within this still influential mind-body dualism to bridge the gap between psychological and physical states.

Health psychology, although a recent area of development and growth within the general field of psychology, has its roots in the philosophies of Descartes and Hippocrates, who viewed health as the balance of physical and emotional factors evidenced through four bodily fluids or humors. The relationship between the psychological and the physical began to receive attention within psychology in the early twentieth century through the growth of psychodynamic and psychophysiological frameworks, two of several early influences on the field. Psychoanalytic theories generated the term *psychosomatic* in their consideration of otherwise unexplained physical illnesses. In the psychophysiological field, researchers began to notice that emotional factors such as stress are related to changes in physiological measures.

The discipline of health psychology experienced significant growth in the mid-1970s. Possible explanations for this growth include (1) inadequate explanation of health and illness by the biomedical model; (2) a growing focus on quality of life and prevention of illness; (3) the growth of chronic illness, over infectious disease, as the major challenge of medicine, with recognition of the influence of lifestyle factors; (4) improved quality and quantity of research in the behavioral sciences; and (5) increasing costs in the healthcare system and a search for alternative approaches (Gentry, 1984). The late 1970s saw the development of several professional organizations and publications dedicated to health psychology and to the more interdisciplinary field of behavioral medicine.

The tradition of mind-body dualism caused skepticism during this growth: Was studying medical patients with medical illnesses really psychology? Just as medicine was often guilty of dismissing the mind, historically psychology

was rooted in a dismissal of the body. Despite tremendous growth in the research and practice of health psychology as a discipline, this dualism remains in many administrative and governing structures, including some health insurance policies. Although differences are argued, such terms as behavioral medicine, medical psychology, and psychosomatic medicine are often used interchangeably with health psychology. The primary difference between behavioral medicine and health psychology is that behavioral medicine is an interdisciplinary field practiced by a variety of health professionals, including physicians, nurses, and social workers, whereas health psychology is discipline-specific to psychology.

Like most areas of psychology, the specialty of health psychology consists of professionals engaged in research, clinical practice, and teaching. In the first concise definition of health psychology, Matarazzo (1980) described it as “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, and the identification of etiologic and diagnostic correlates of health, illness, and related dysfunction” (1980, p. 815).

Developing out of this definition, clinical health psychology merged the focus from clinical psychology on the assessment and treatment of individuals in distress with the academic field of health psychology. Millon (1982) subsequently defined the practice of health psychology as “the application of knowledge and methods from all substantive fields of psychology to the promotion and maintenance of mental and physical health of the individual and to the prevention, assessment, and treatment of all forms of mental and physical disorder in which psychological influences either contribute to or can be used to relieve an individual’s distress or dysfunction” (p. 9). Consistent with this merged focus, health psychology has a strong research foundation, both basic and applied. Its theories and interventions are empirically based, and its clinical applications are developed from experimentation and research findings.

Health psychology researchers and practitioners formulate their questions and interventions within a variety of theoretical orientations, including psychodynamic, existential, cognitive social learning theory, behavioral, cognitive-behavioral, and systems approaches (Frantsve, Sledge, Kerns, & Desan, 2008). The biopsychosocial model (Engel, 1977) is commonly used as the most inclusive approach to health through its focus on the complex interactions among biological (e.g., injury, disease), psychological (e.g., depression, anxiety, values, expectations), and social (e.g., family, community, work) factors. The model encourages comprehensive assessment and treatment of health issues, which includes the integration of health psychology with traditional medical care. As a result, health psychologists have the ability to work in a broad variety of health care settings with other health

care professionals. This focus on integration and synthesis of factors stands in contrast to the simplistic division of dualism.

Health psychology addresses a broad range of issues through research and practice. These issues include psychological conditions secondary to disease, injury, or disability (e.g., post-myocardial infarction depression and fear of engaging in sexual activities; alteration of body image secondary to burns, amputation, or menopause) and somatic presentations of psychological dysfunction (e.g., chest pain in panic attack, somatization disorders). In addition, psychophysiological disorders (e.g., tension and migraine headache, spastic colitis) and physical symptoms responsive to behavioral interventions (e.g., vasospasms, enuresis, fecal incontinence, anticipatory nausea) are appropriate areas for health psychology.

Health psychologists may also identify psychological presentations of organic disease (e.g., hypothyroidism presenting as depression, steroid-induced psychosis) resulting in appropriate medical treatment. Attending to somatic complications associated with behavioral factors (e.g., mismanagement of diabetes, failure to comply with hypertensive medication) and psychological and behavioral aspects of stressful medical procedures (e.g., pain, lumbar puncture, debriding of wounds, cardiac catheterization) can improve patients' experiences in the health care environment. Health psychologists can help prevent future health problems by addressing behavioral risk factors for disease, injury, and disability (e.g., smoking, excess weight, substance abuse, risk-taking). Problems of health care providers and health care systems (e.g., physician-patient relationships, staff delivery systems) are also areas in which health psychology can intervene (APA Div. 38, 2004).

Health psychologists may work with a variety of specific patient populations. These populations include patients with acute or chronic pain (e.g., burn, low back pain headache, cancer pain), chronic disease (e.g., cardiovascular, pulmonary, gastrointestinal, endocrine, musculoskeletal, hematologic, autoimmune, neurologic, rheumatologic, AIDS), or psychophysiological conditions (e.g., migraine headache). Additionally, common patient populations may be those with traumatic injuries or terminal illness. Other groups might include patients undergoing particular procedures, such as pre- or postsurgical patients or dental patients. Health psychologists may target behavior with patients with risky behavior patterns (e.g., smoking, sedentary lifestyle) or patients with difficulty adhering to treatment recommendations. Finally, physicians, nurses, dentists, and other health-care providers may be the target population for study or intervention (APA Div. 38, 2004).

Potential competence areas for practicing clinical health psychologists reflect the numerous interventions that may be used with these patient populations. Specific competencies will depend on the patient population most frequently encountered by the psychologist. Interventions

may be delivered through individual, family, or group psychotherapy or education. Most often, interventions will be short-term, particularly if provided within a health care environment. Clinical health psychologists should be familiar with assessment of specific patient populations (e.g. patients with pain or spinal cord injuries) and neuropsychological assessment. In addition, competence should be developed in major treatment programs (e.g., eating disorders, stroke rehabilitation, or pain programs). These treatment programs may require skills in relaxation therapies, behavioral modification techniques, and perhaps biofeedback or hypnosis. Compliance motivation is a necessary area of competence across many patient populations and clinical settings. Clinical health psychologists also use many health promotion and public education skills. Lastly, in working with other health professionals consultation and liaison skills are important (Belar & Deardorff, 2004).

Following are brief examples of research in four health areas commonly addressed by health psychology: pain, insomnia, HIV/AIDS, and smoking and tobacco use. These examples demonstrate the relationship between psychological and physical states and the effectiveness of health psychology interventions to improve health and related issues such as quality of life or coping.

With respect to pain, a meta-analysis of 25 research trials by Morley, Eccleston, and Williams (1999) demonstrated the effectiveness of cognitive-behavioral therapy (CBT; including behavior therapy and biofeedback) in addressing the major impacts of pain. Treatment with CBT interventions resulted in significant improvements in measures of pain experience, mood and affect, cognitive coping and appraisal (increase in positive coping and decrease in negative coping), pain behavior and activity level, and social role functioning compared to patients not receiving a treatment intervention (e.g., a waiting list control group). Compared to patients receiving an alternative intervention (e.g., alternative treatment control group), CBT interventions produced significantly greater changes in pain experience, cognitive coping and appraisal (increase in positive coping), and behavioral expression of pain.

Concerning research on insomnia, Morin and colleagues (2006) reviewed 37 studies published between 1998 and 2004 and found substantial support for the impact of psychological and behavioral therapies on improvement in sleep parameters related to insomnia, both as a primary condition and as a condition secondary to medical or psychiatric disorders. Five techniques were found to meet criteria for empirically supported treatment for insomnia: stimulus control therapy (e.g., getting up at the same time each day, avoiding daytime napping), relaxation, paradoxical intention (e.g., attempting to stay awake rather than sleeping), sleep restriction, and cognitive-behavioral therapy (e.g., addressing faulty beliefs about sleep). Improvements gained through these interventions were maintained over time.

To address the depression and other psychiatric symptoms that often co-occur with HIV/AIDS, Fulk and colleagues (2004) reviewed research on pharmacological, psychological, and complementary or alternative treatments for these symptoms. Both interpersonal therapy (IPT) and CBT were found to be effective for managing the common experiences of depression, anxiety, or fear. Group and family therapy were also found to be effective interventions. In addition, health psychologists can assist with patient education and motivation about other interventions found to be effective for reducing psychiatric comorbidities, including medication compliance, exercise, and stress management.

Lastly with regard to smoking and tobacco use, the U.S. Public Health Service clinical practice guidelines for treating tobacco use and dependence (2008) were developed through review of more than 8,700 research articles in this area. The guidelines identify several ways in which health psychologists can develop and guide patient efforts to treat tobacco dependence, which is a major cause of illness and mortality. Research demonstrates that a combination of behavioral counseling and medication is more successful than either intervention alone. Brief behavioral interventions are effective, particularly when repeated over time, and the likelihood of success increases with treatment intensity. In particular, interventions aimed at problem solving, skills development, and social support are most effective. Motivational counseling is effective for increasing future attempts to quit in patients who are not yet ready for active treatment. In addition to directly providing interventional services, health psychologists can educate and train other health professionals to provide these empirically based interventions to patients.

Health psychology is a diverse field that has grown substantially during its short history. Due to the increasing depth and breadth of areas within health psychology, increasing subspecialization is occurring within the field. Health psychologists, whether in research or practice, may develop specialization in particular patient groups (e.g., pediatrics, geriatrics, African American patients) or health issues (e.g., diabetes, surgical assessments, obesity). In addition, health psychologists exist across of spectrum of integration with medical practice, from separate private practices specializing in treatment of health issues (minimal integration) to fully collaborative work within a primary care practice (full integration). Although health psychology continues to challenge the historical influence of dualism, the complex relationships among behavior, psychological factors, and physical health are better understood and accepted. This understanding and treatment of the whole patient serves the aims of the discipline, the professional, and the patient to improve health and well-being.

REFERENCES

- American Psychological Association (APA) Division 38 (Health Psychology). (2004). *Commission for recognition of specialties and proficiencies in professional psychology (CRSPPP)*. Ashland, VA: Author.
- Belar, C. D., & Deardorff, W. W. (2004). *Clinical health psychology in medical settings: A practitioner's guidebook*. Washington DC: American Psychological Association.
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, *196*, 129–136.
- Frantsve, L. M. E., Sledge, W. H., Kerns, R. D., & Desan, P. (2008). Behavioral medicine. In A. Tasman, J. Kay, Lieberman, J. A., First, M. B., & M. Maj (Eds.), *Psychiatry* (3rd ed., pp. 2027–2046). West Sussex, UK: John Wiley & Sons.
- Fulk, L. J., Kane, B. E., Phillips, K. D., Bopp, C. M., & Hand, G. A. (2004). Depression in HIV-infected patients: Allopathic, complementary, and alternative treatments. *Journal of Psychosomatic Medicine*, *57*(4), 339–351.
- Gentry, W. D. (Ed.). (1984). *Handbook of behavioral medicine*. New York: Guilford Press.
- Matarazzo, J. D. (1980). Behavioral health and behavioral medicine. *American Psychologist*, *35*, 807–817.
- Millon, T. (1982). On the nature of clinical health psychology. In T. Millon, C. J. Green, & R. B. Meagher (Eds.), *Handbook of clinical health psychology* (pp. 1–27). New York: Plenum.
- Morin, C. M., Bootzin, R. R., Buysse, D. J., Edinger, J. D., Espie, C. A., & Lichstein, K. L. (2006). Psychological and behavioral treatment of insomnia: Update of the recent evidence (1998–2004). *Sleep*, *29*(11), 1398–1414.
- Morley, S., Eccleston, C., & Williams, A. (1999). Systematic review and meta-analysis of randomized controlled trials of cognitive-behaviour therapy for chronic pain in adults, excluding headache. *Pain*, *80*, 1–13.
- PHS Guideline Update Panel, Liaisons, and Staff. (2008). Treating tobacco use and dependence: 2008 update U.S. public health service clinical practice guideline executive summary. *Respiratory Care*, *53*(9), 1217–1222.
- Rubin, G. J., & Wessely, S. (2001). Dealing with dualism. *Advances in Mind Body Medicine*, *17*(4), 256–259.

SUGGESTED READINGS

- Baum, A., Revenson, T. A., & Singer, J. E. (Eds.). (2001). *Handbook of health psychology*. Mahwah, NJ: Lawrence Erlbaum.
- Stone, G. C., Weiss, S. M., Matarazzo, J. D., Miller, N. E., Rodin, J., Belar, C. D., et al. (Eds.). (1987). *Health psychology: A discipline and a profession*. Chicago: University of Chicago Press.

STEPHANIE C. WALLIO

VA Connecticut Healthcare System and University of Kansas

See also: Occupational Health Psychology