

<b>HEALTH PROMOTION AND DISEASE PREVENTION</b> <b>A Handbook for Teachers, Researchers, Health Professionals and Decision Makers</b>	
<b>Title</b>	<b>Psychological Foundations of Health Sciences</b>
<b>Module: 4.5</b>	<b>ECTS: 0.25</b>
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<b>Key words</b>	Concepts in health psychology, risk behaviours, stress, stressful events, coping strategies, health communication
<b>Learning objectives</b>	At the end of this topic students should be able to: <ul style="list-style-type: none"> <li>• identify psychological factors of health and illness;</li> <li>• understand and apply basic concepts in health psychology;</li> <li>• understand and apply basic models of health behaviour;</li> <li>• understand stress and coping with stressful events;</li> <li>• explain and apply communication skills in health care delivery.</li> </ul>
<b>Abstract</b>	Recent developments in theories and models in the field of health psychology are discussed in this module. The application of the basic psychological concepts to health, illness, and health care is analyzed. The issues addressed concern the psychological factors in the development of illness, stress and coping, interventions to improve coping with stressful events, and models to promote communication skills in health care delivery.
<b>Teaching methods</b>	Lectures and discussions in small groups.
<b>Specific recommendations for teachers</b>	Active participation of students in discussions.
<b>Assessment of Students</b>	Short written examination.

## **PSYCHOLOGICAL FOUNDATIONS OF HEALTH SCIENCES**

**Sashka Popova**

### **Recent developments in the field**

In the twentieth century, theoretical and practical advances in psychology helped lay the foundation for contemporary important and interest areas in personality, social, clinical, and health psychology. As a microcosm of both psychology and the interdisciplinary endeavour of behavioural medicine, these developments have taken the position that biological, psychological, and social factors are implicated in all stages of health and illness, and the bio-psycho-social model is a guiding framework for the application of both psychological theory and research to health, illness, and health care.

Much of the strongest work involved provides theoretical and conceptual frameworks that constitute major contributions inasmuch as they are often lacking in traditional medicine and medical practice. In this context, it becomes essential to consider such distinct theoretical ideas and models as:

1. Psychodynamic conceptions.

Psychodynamic theories have gained widespread acceptance and are deeply entrenched in the public view of human behaviour. These conceptions of human nature commonly view human behaviour as motivated from within by various needs, drives, impulses, and instincts. Thought refers to acts of reasoning, reflection, imagining, and other personal activities. Psychological methods are evaluated in terms of their effectiveness in changing actual psychological functioning.

2. Trait theory.

Trait theorists are concerned with how dispositions generate behaviour, and motivate and guide it as well as with assessing personality traits and testing their predictive utility. Recent research developments suggest specific models of personality-disease relationships. Among these are the investigating role of Type A behaviour syndrome in the aetiology of coronary heart disease, and the potentially protective role of positive emotional states and coping styles in the development of illness.

3. Rotter's social learning theory.

The theory infers that behaviour is a function of expectancy and reinforcement value in a specific situation. Training in mature decision making, healthy behaviour, coping with stress and other life skills is of great importance.

4. Bandura's social cognitive theory.

The theory accords a central role to the mechanisms through which the individual operates: cognitive processes, motivational processes, affective processes, selection processes, and the power of forethought to override feedback control. Self-monitoring, self-regulation, including appropriate goal-setting, self-efficacy, and self-control mechanisms are described as effective and productive cognitive coping strategies.

5. Creativity in everyday life.

Recent research suggests that these individuals that use to understand and control events in their lives include the creation of new original ways to act upon the environment and their life conditions. They engage in the creative process as they construe their world, plan their activities, and regulate their behaviour within some reality constraints. Creativity involves awareness of context and the flexibility of thinking that can lead a person to the creation of multiple perspectives and new ways of looking at things.

Creative individuals take risks and have a willingness to try out new ideas. Attributes that are related to creativity are autonomy, seeking out information that leads to change, independence of judgment, willingness to take risks, self-confidence, and creative self-image (1).

### **Application of psychological theory and research to health, illness, and health care**

As a science and a field, health psychology is now so diverse and productive that it has made substantial contributions to the understanding of healthy behaviours and to the comprehension of the myriad factors that undermine health and often lead to illness. By the end of 1990s, the following definition of health psychology had regained wide acceptance. Health psychology is recognized as the “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 etiologic and diagnostic correlates of health, illness and related dysfunction, and health policy formation” (10).

Recent studies have gone beyond the simple relationships between psychological factors, health and illness to an attempt to specify the models and pathways whereby psychological factors can be integrated into the nature of health and illness. This trend is evidenced in research on health promotion, stress and illness, personality and disease, coping, social support, and the factors affecting patient’s recovery. These investigations have addressed theoretical and conceptual frameworks that elucidate:

#### 1. Life transitions and health.

The life course approach addresses critical periods in human development. That is, to a large extent, changes in psychosocial structures and processes that confront the person with the necessity to adapt and cope. Such life changes include a number of events as transition from primary to secondary school; leaving parental home; engagement; marriage; pregnancy; job insecurity or loss; loss of a spouse, family members or close friends, and others. Some life events and circumstances are specific to each transition point in the course of life and may result in disability. More over, common denominators in the cause of psychosocially induced ill health are the discrepancy between human needs and environmental possibilities for their satisfaction; the discrepancy between human capacity and environmental demands; and the discrepancy between human expectations and the situation perceived. Such discrepancies are common in times of environmental deprivation or excess, when there is conflict between social roles, or when social change is rapid and there are no generally accepted rules of conduct. Research on life- events from birth to death suggests that the experience of profound and loving human relationships builds a strong psychological resource for the person’s ability to cope with stressful events during the whole life course. High self-esteem and problem-solving abilities are valuable resources for coping throughout life, and especially with psychological changes associated with aging. More over, the elderly are subjected to multiple psychological stresses brought about by such factors as social isolation, grief over loss of loved ones, and fears of illness and death.

#### 2. Cultural profile and health.

Cultural profile is very important factor in the successful implementation of health education for culturally different individuals. Key variables of the cultural profile may

influence health care beliefs and practices of individuals. Certain cultural components are present in every social group. Assessing cultural background and gathering data have significant meaning to the development of a culturally appropriate health care.

Research provides a framework for pursuing culturally sensitive health care (5).

Important cultural components are:

- cultural identity - including patient's own cultural values, beliefs, and priorities;
- value orientation - the nature of people's relationships to one another, the main purpose of life, the value of time in the culture, the relationship between individuals and nature, cultural values regarding human nature;
- communication style – as examples must be noted: language and dialect preference of the individual; non verbal behaviours: body language, facial expresses, and the use of personal space; community customs: specific health care beliefs and practices;
- learning styles – informal and formal ways of education; often health educational programmes are too traditional in their approach, giving individuals information on health issues but failing to use imaginative, interactive ways of providing training;
- religion – preferences, beliefs, rituals, and taboos;
- health beliefs – attitudes to the alternative health care; response to pain; crisis and illness beliefs
- family relationships – family roles, lifestyles, decision making and living arrangements.

### 3. High-risk psychosocial situations.

Four general categories of these situations were identified by Levi (8):

- uprooting – in the sense of depriving individuals and groups from experiences that provide emotional support, sense of belonging, and purpose in life;
- dehumanization of health care institutions - in the sense that needed services are provided impersonally and mechanically ignoring patients, and treating them as passive recipients of health care;
- psychosocial side-effect of the spread of innovations - in the sense that a given technology may change the behaviour of people in an unexpected and hazardous manner. Examples are the increasing anonymity and mechanization;
- psychosocial factors as constraints on health programmes and activities – in the sense that important measures meet obstacles arising out of cultural and behavioural patterns of the population. Included here are, for instance, the stigma attached to certain health conditions, communication difficulties, clashes of values arising from cultural diversity.

### 4. Life-style factors.

The role of behavioural factors in development of disorders and chronic diseases is increasingly clear. The practice of health behaviours has been recognized as one key to the success of primary, secondary, and tertiary prevention, as well as of health promotion. Each health habit has a complex pattern of aetiology, maintenance, change, and relapse. Much recent attention has been focused on how best to combine the advantages of the individualized approaches and mass-media appeals to change some targeted health habits - they may produce only modest behaviour changes but they affect many different groups of people, and are low-cost intervention methods (4). Such

methods have great impact on personal behaviour. However, they are very expensive, and affect a small portion of the population.

5. Cognitive factors in health and illness.

People's psychological attributions and beliefs, and the representations that people hold regarding their health conditions are involved in the experience of health and illness. For example, a significant number of patients' complaints made to doctors are psychological in nature and have no significant physical counterpart. If the psychological problem is resolved all symptoms disappear. Headaches, or weakness without physical explanation, are such examples. These symptoms may result purely from interpersonal tension. In the clinical practice people's adherence, uptake and preparation for medical procedures are of great importance as well (9).

6. Personality and disease.

Recent research on personality and disease has identified at least two major psychological factors that play a part in the precipitation of disease. The first involves personality and coping style. The second major factor involves stress stemming from life events. Until recently, research focuses on:

- the direct impact of stress and other psychological states on physiological processes;
- the impact of psychological factors on risky health practices;
- the impact of psychological factors on people's response to potential illness conditions.

Research has succeeded in identifying certain broad principle of behaviour. For example, the importance of feelings of personal control when people practice particular health behaviours, and experience stress, as well as whether their pain control efforts are successful, and how they adapt to chronic disease and disability.

Other important developments include advances in the conceptualization and measurement of the high-risk psycho-physiological processes in the organism. Such pathogenic mechanisms are:

- subjective reactions and health – the occurrence of anxiety or depression in response to a great variety of environmental stresses in our everyday experience;
- behavioural reactions and health – dependence on alcohol, psychoactive drugs and nicotine;
- physiological reactions and health – sympatho-adrenomedullary reactions, adrenal cortical reactions, thyroid reactions, endocrine reactions, bodily function, and health (2).

Different models of psychosocial factors highlighted the view on how best to structure influences, and create belief systems and personal competencies. These models suggest that the personal activity in a given situation depends on inherited characteristics, previous experience, and socialization over the life course.

7. Stress and illness.

Stress is a concept that has been defined in many different ways by researchers. Commonly the definition considers stress to be the state of an organism when reacting to new circumstances. Lazarus and his associates identified psychological appraisal

as a crucial mediating process in the experience of stress. Events are judged to be positive, negative, or neutral in their implications, and if judged negative, they are further evaluated as to whether they are harmful, threatening, or challenging.

8. Coping strategies.

Coping as defined by Lazarus is the process of managing external or internal demands that are perceived as taxing or exceeding a person's resources. Coping may consist of behaviours and psychic responses designed to overcome, reduce, or tolerate these demands. Coping mechanisms can take three forms:

- psychological resources – they represent the abilities that people have. They are personality characteristics upon which people draw from within themselves to help them deal with threats imposed by the environment. Examples are self-esteem (the positive attitudes people have toward themselves), feelings of mastery and competence, and the feelings of control people have over their lives;
- social resources - they represent support that people have. They are aspects of peoples' interpersonal networks. They involve the social support available from family, friends, fellow workers, neighbourhood. It is usually equated with emotional support but it may also involve tangible resources such as information and cooperation;
- specific coping responses – they represent the things that people do. In another words, they represent their concrete efforts to deal with specific strains of life. These specific coping responses may be influenced by both, the psychological resources of the person and social resources. Specific coping responses concern behavioural mechanisms and include techniques such as the relaxation response, biofeedback, running. Coping techniques involve cognitive mechanisms that involve efforts of controlling meaning, that is, specific interpretations made to neutralize the effect of the stressful life event or interpreting the event as a challenge (7).

### **Application of psychological skills to health care delivery**

The World Health Organization "Health for All Policy for the twenty-first century" emphasizes the importance of the basic psychological determinants and prerequisites for health. Educational and intervention strategies aim at improving the life skills and psychosocial wellbeing of people, helping them to manage life situations and make healthy choices. People should have an increased ability to cope with stressful life events. They should be enabled to develop and use their own potential in order to lead socially, economically and mentally fulfilling lives. Health professionals should help people at all ages to gain a sense of coherence, build and maintain social relations, and cope with stressful situations and events (3).

The last two decades show an increasing sense that health psychology issues are well integrated into the health enterprise. On the research side, the emphasis on cost-containment draws researchers heavily into primary prevention activities designed to keep people healthy with the goal of reducing the use of health care services. By identifying risk behaviours and by developing programmes that best help people to achieve a healthy lifestyle psychology contributes to the larger endeavour that attempts to keep people healthy. On the clinical side, psychology increasingly identifies the benefits, and liabilities of self-help groups, peer counselling, self-management programmes and other educational ways to provide service delivery that integrate more effective psychological approaches.

Individuals who are identified early as at risk for particular disorders need to be trained in how to change any modifiable risk-related behaviours as well as in how to cope psychologically with their risk status. Increasingly, the psychological approaches will be called to address concerns of aging, including the problems of living with chronic disability and disease. There is now extensive literature demonstrating the success of psychology in analyzing life-skills. Life-skills are defined as those personal, social, cognitive and physical skills, which enable people to control and direct their lives and to develop the capacity to live with and produce change in their environment (6).

Successful self-management programme could be achieved with careful attention to two areas. These are the learning programmes, which provides appropriate knowledge, skills, attitudes, beliefs, and perceptions that determine the extent to which any person develops and maintains an appropriate self-management regime. Education must therefore be a continuous component of long-term clinical care. Therefore, health professionals have to undergo some training in educational methods. Health care team should give patients and their families enough psychological support to enable them to pass through the psychological crisis that follows diagnosis and to accept a new concept of life. Attention should be focussed on the handicapped. There is a need for appropriate services because they are not available to many handicapped that are particularly vulnerable to acute and prolonged psychological and emotional distress.

It would be extraordinarily useful if health professionals teach people how to communicate more effectively in health care. The key issue is sensitivity. People have to learn to be more sensitive to their own feelings, to others so that, when they do make themselves vulnerable, that vulnerability to be treated with care and respect. The recent years have witnessed an interest in the self-concept phenomena. Among the main components that influence health communication, none is more central and pervasive than the self-concept. It is central element of communication, which is build from the values the person holds; his or her beliefs, attitudes and perceptions of the world and of those who inhabit it. The self-concept once created, is not a static entity. It can change, as beliefs, values and perceptions of the world change. The self-concept also creates the way in which a person presents him or herself to the world. More recently, there is a great number of research evidence for pro-active, competence motivation in people. This means motives urging people to ignore safety and security, and to take on new, difficult, and challenging tasks. In this context, the patient is the active and curative agent in the therapeutic relationship.

Health education strategies are called on to increase individual and collective responsibility for behaviour and life-styles that threaten people's health or wellbeing. Health programmes tend to concentrate on giving people the knowledge and skills needed to overcome the barriers to successful and healthy lives so that more people to have a wider and easier range of healthy choice.

## **Exercise**

### **Task 1:**

Carefully read the contents of the module.

### **Task 2:**

Discuss with other students theoretical and conceptual frameworks of psychological foundations of health sciences.

### **Task 3:**

Give special attention to application of psychological skills to health care delivery.

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## **Recommended readings**

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