An Ecological Perspective on Healthy Nutrition as a Component of Health Attitude

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- Keywords: Health, Biopsychosocial Model, Ecological Model, Environment, Environmental Conditions, Health Attitude, Cognitive and Emotional Components of Health Attitude, Health Behaviour, Healthy Nutrition, Health Locus of Control, Self-Efficacy, Self-Regulation, Constructive Self-Assertiveness, Psychological Well-Being.
- Abstract: The aim of the present paper is to analyse an ecological perspective of health attitude in personality on the example of healthy nutrition. The significance of biopsychosocial and ecological approaches for comprehensive understanding of health and health attitude is emphasized. These approaches holistically explain health and health attitude as a result of complex interaction of biological, psychological and social factors at multiple levels and as an integral part of individual's physical, natural, social and cultural environment. The component structure of health attitude as briefly described in the frames of V. Myasishev's theory of attitudes. The relationship of health attitude and psychosocial characteristics in personality on the example of healthy nutrition is discussed. The research findings are considered in the course of general idea that the relationships between psychosocial characteristics and healthy nutrition as component of health attitude are complex. It is shown that high indicators of internal health locus of control, self-efficacy, self-regulation, constructive self-assertiveness, psychological well-being correlate to healthy nutrition in adults and teenagers.

1 INTRODUCTION

Health as a value has one of the important positions in the individual and social hierarchy of values. Even though there are more than hundred definitions of 'health' and 'illness' in the modern literature, the definition given by World Health Organization (WHO) in 1948 is still among popular: 'health is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity' - Babicz-Zielińsk, E (2006) - Barzegari, A, & et. al. (2012) - Bennet, P., & et. al. (1997) -Berezovskaya, R.A, & et. al. (2006). This definition underlines that health has not only biological peculiarities, but psychosocial, that health status is dependent on biological, psychological and social determinants. One of the main contributing factors for health state is attitude towards health in personality.

The present paper addresses the following objectives: 1) to give a general overview on biopsychosocial and ecological understanding of

health as fundamentals for analysis of attitude towards health; 2) to discuss research data on the relationship of health attitude and psychosocial characteristics in personality on the example of healthy nutrition.

2 LITERATURE REVIEW

Component encompasses person's feelings, emotions and emotional resources related to his/her health status. Behavioural component is defined by presence or absence of actions directed to support of one's own health or coping with illness conditions.

The modern understanding of health attitude is based on biopsychosocial model of health and illness and ecological paradigm towards health. The mentioned above WHO's definition of health is one of the examples of this model. The biomedical model of health and illness has been the dominant model for several centuries. Although this model has proven to be very effective in treating disease, it is limited because it disregards the fact that health and illness are the outcomes of an interaction of social, psychological and biological factors.

The biopsychosocial model holistically explains health as a result of complex interaction of biological,

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psychological and social factors at multiple levels. It shows ecological-systemic understanding of health. In modern publications, scientists prove the need to consider health as a dynamic system. The use of the concept of 'dynamics' emphasizes that the influence of biological, psychological, interpersonal and contextual factors on human health is not strictly fixed. For example, it is possible to investigate the mechanisms of influence of a teenager's peer group and his/her close friendships on the development of healthy habits.

According to the ecological paradigm of health a human being is understood as an integral part of his/her physical, natural, social and cultural environment. There are several key characteristics of health in ecological approach: 1) health is multidimensional phenomenon; 2) health is seen via dynamic balance and interaction of an individual with environment, which are holistic and integrated; 3) health is both a process of active adaptation of individual to changing conditions of environment and its result; 4) health is related to spiritual and emotional individual well-being as well with cultural lifestyles.

I. Kickbusch shows that ecological model is comprehensive because it is concerned with the whole individual in its environment. It considers all range of health determinants, takes into account cultural and personal meanings of health, aims to understand emotional and behavioural sides of health. This model allows to discuss primary health care, disease prevention and health promotion. For example, the ecological approach to health promotion includes both the need to conserve natural resources and to respond to the environmental factors (e.g., urbanization, technology) changing people's lives. In other words, the ecological understanding of health underlines the individual's position at the centre of complex interaction of social, cultural and physical environment.

The biopsychosocial and ecological models frame the social psychological theories of health attitude, health behaviour and their studies, health promotion programs and design for behaviour change interventions. According to these models health attitude is determined by various sets of factors such as socio-demographic (sex, age, education and social status), socio-economic and legislative (e.g. socioeconomic status, laws restricting the advertisement of alcohol), socio-cultural (e.g. dietary culture), socio-medical (e.g. health care provision, access to health care), psychosocial (e.g. social support, motivational factors).

In a broader context it is shown that the psychosocial impacts associated with environmental conditions. For example, the research by Crighton et al (2003) was devoted to the impact of environmental conditions on health in Karakalpakstan. It was found that residents of three Karalpak districts (Kungrad, Shumanay, Muynak) were more likely to report environmental concern if they had trouble keeping employment, perceived their health as fair or poor, were involved in more local activities; and the respondents were less likely to have environmental concerns if they had more close relatives and friends. This study indicated the positive relationship between psychosocial impacts and negative environmental perceptions (i.e. environmental awareness, perceived health impacts).

The research on gender factors is another good example of ecological understanding of health attitude and health behaviour. The idea that the differences between men and women in their health outcomes are the consequences of behaviours had been raised in the mid-1970s. Many studies demonstrate strong evidence that fewer healthpromoting practices and greater risk taking among men contribute to their increased risk of serious chronic disease, injury and death. They show that women are more likely than men to engage in a variety of health-enhancing practices and to have healthier lifestyle patterns. Men, in contrast, are more likely than women to engage in health-impairing behaviour. Men are also less likely than women to engage in a variety of preventive and self-care techniques and the failure to do so is a major contributor to men's shorter lives and increased health risks.

It is shown that beliefs about manhood are associated with increased risk for health. Men who adopt stereotypic beliefs about masculinity have greater health risks than their peers with less traditional beliefs. More prominent masculine features in individuals are associated with better selfassessed health status for both women and men.

Psychosocial factors also play an important role in understanding person's healthy nutrition in the frames of the ecological paradigm. The literature review shows that the considerable body of studies on the psychosocial correlates of healthy nutrition can be divided into several research directions:

• the first research direction focuses on knowledge of what constitutes a healthy diet, i.e. on beliefs about nutrition and food;

• the second research direction primarily investigates an influence of psychological factors on food choice;

• the third research direction pays attention to possible relationship of eating habits and psychosocial mediators such as social and family influence, age, gender;

 the fourth research direction attempts to find associations between eating and dietary habits and self-attitudes, including self-esteem, 'self-silencing', self-regulation;

• the fifth research direction analyses how different motivational and emotional characteristics

such as perceived behavioural control, locus of control, self-efficacy may possibly influence person's eating behaviours and dietary habits.

Based on the mentioned above the article presents some empirical data on the relationship between psychosocial factors (health locus of control, selfefficacy, self-regulation, psychological well-being) and nutrition.

Table 1. Means and Standard Deviations in Groups with External and Internal Locus of Control (N=122, adults)

| Components of | Participants with | Participants with Internal Locus of | Student's test, p<0.05 |
|------------------------------------|-------------------|-------------------------------------|------------------------|
| Health Behaviour External Locus of | | Control (N=69) | |
| | Control (N=53) | | |
| | М | SD | М |
| Nutrition | 1.16 | 1.10 | 1.84 |

Table 2: Bivariate Correlations of Healthy Nutrition, Self-Efficacy and Indicators of Self-Regulation (N=200, teenagers)

| Variables | Self- Efficacy | Constructive Self- Assertiveness | Self- Regulation: | Self- Regulation: | Self- Regulation: | Self- Regulation | Nutrition |
|----------------------------|-------------------|-------------------------------------|----------------------|----------------------|----------------------|---------------------|-----------|
| | Efficacy | Assentiveness | Planning | Modelling | Programming | : Results' | |
| | | | Flaming | widdennig | riogramming | Evaluation | |
| | | | | | | Evaluation | |
| Correlation Coefficient | .306** | .215** | .142* | .182** | .127 | .144* | .206** |
| S | | | | | | | |

p<0.05 (*), p<0.01 ()**

Table 3. Bivariate Correlations of Healthy Nutrition and Personality's Psychological Well-Being (N=122, adults)

| Positive | Autonomy | Environmental | Self- | General | Nutrition |
|-----------|-----------|---------------|-------------------|------------------------------|---|
| Relations | d tec | Mastery | acceptance | Psychological | -IONS |
| | | / | | Well-Being | |
| .248** | .128 | .266** | .238** | .188* | |
| | | | | | |
| | | | | | |
| | | | | | |
| 1 | Relations | Relations | Relations Mastery | Relations Mastery acceptance | Relations Mastery acceptance Psychological Well-Being |

Note: *p < 0.05, **p < 0.01

3 METHODOLOGY

The participants (adults' sample of 122 females and males, teenagers' sample of 200 girls and boys) were asked to indicate how well the specific health actions described his/her typical behaviour and to answer psychological questionnaires. Also, they were asked to define the notion of 'healthy life style' which allowed to conduct a content analysis of social representations of respondents.

Health practices in the sphere of nutrition were studied with the help of list of items which compose healthy nutrition (e.g. 'Eat sensibly', 'Avoid eating fast food', 'Have a balanced diet'). Motivational characteristics of adults were evaluated using Multidimensional Health Locus of Control (by Wallston et al, 1978), Self-Efficacy Scale (R.Schwarzer, M. Jerusalem), psychological wellbeing – The Ryff Scale of Psychological Well-Being. Motivational features of teenagers were studied using Self-Efficacy Scale (R.Schwarzer, M. Jerusalem), Self-Regulation Style Questionnaire (V.I.Morosanova), Self-assertion Scale for Teenagers.

Data analysis was performed by the SPSS 23.0 software. Descriptive, inferential statistics (Independent Samples Student's Test or Mann-Whitney Test depending on normality of distribution) and correlation analysis (Spearman's Rank Correlation Coefficient) were used.

4 **RESULTS AND DISCUSSIONS**

Cognitive component of health attitude

The idea of importance of healthy nutrition for health state is reflected in people's social representations of 'healthy life style'. In other words, cognitive component of health attitude encompasses people's understanding of their health and life style. The content-analysis of adult's and teenagers' (Karamyan, M. 2018) social representations was conducted in the frames of final year research projects. It was found that 'nutrition' takes the third place among actions which adults (16,3%) and teenagers (12%) consider to be health practices. 'Healthy food', 'right nutrition', 'useful food', 'eat what it is useful for you', 'fresh products', 'diet', 'regular eating', 'you are what you eat' are the examples of answers related to healthy nutrition. The results of these studies show that adults and teenagers relate healthy life style with healthy nutrition including choice and intake of safe food, appropriate eating behaviour and dietary habits.

Behavioural component of health attitude and motivational correlates

Healthy nutrition as health-related behaviour can be governed by specific characteristics of human being motivational sphere such as locus of control and selfefficacy.

The locus of control concept could be defined as person's belief that he/she has control over their health, including healthy nutrition. It was shown that people with internal health locus of control more likely find information on health, follow healthy diet and physical activity. Self-efficacy is seen as sense which concerned with perceived capabilities to produce effects and personal influence. It has been found that self-confident people more often that nonconfident ones perform health practices, e.g. people with high self-efficacy were less likely to relapse to their previous unhealthy diet.

These data are confirmed by correlational analysis which revealed statistically significant positive correlation between healthy nutrition and internality (rs=0.259, p<0.01) and self-efficacy (rs=0.226, p<0.05). It allows to conclude that individual's belief in his/her own capacities and disposition to rely on oneself determines high behavioural activity in the sphere of healthy nutrition and physical activity.

Table 2 shows statistically significant positive correlations between healthy nutrition scale and self-efficacy (rs=0.306, p<0.01), constructive self-assertiveness (rs=0.215, p<0.01), self-regulation (rs=0.142, p<0.05), planning (rs=0.182, p<0.01), programming (rs=0.144, p<0.05), results' evaluation

(rs=0.206, p<0.01) in the teenagers sample. In other words, those teenagers who are characterized by high self-efficacy, flexible and adequate reactions to environment, independence, conscious and realistic planning of activity, are more confident in their choice of healthy nutrition and performance of healthy eating.

Behavioural component of health attitude and psychological well-being. Psychological well-being is multidimensional concept consisting of person's self-acceptance, skills to establish quality ties to others, sense of autonomy, ability to manage complex environments to suit personal values, to develop as a person. It has been explored that success of weight loss program and improvement of nutrition behaviours are related to the development of psychological well-being in individuals with the help of Kripalu yoga.

The results of correlational analysis between health behaviour components and indicators of psychological well-being are given in Table 3. The analysis of the relationship between total healthy nutrition score and psychological well-being showed that there are positive dimensions correlations of adequate nutritional practices and general indicator of psychological well-being (rs=0.188, p<0.05), positive relations with others (rs=0.248, environmental p<0.01), mastery self-acceptance (rs=0.238, p<0.01), (rs=0.266, p<0.01).

Although these correlations are not strong, they may reflect the specific dynamics in the personal response to healthy nutrition as behaviour. They demonstrate that there is a variety in explanation of relationship between psychological well-being and healthy nutrition. For instance, person's high level of life satisfaction, his/her positive affective emotions explain his/her activity in relation to choose and following to healthy nutrition. If people are characterized by warm, satisfying, trusting relations with others, are concerned about their welfare and are capable of strong empathy and intimacy, then they have enough power to follow healthy life style in general and healthy nutrition in particular. Also if one possesses a positive attitude toward his/herself, feels positive about past life and acknowledges different parts of his/her life and personality, then he/she is more successful in performing healthy nutrition.

The results of these studies demonstrate that there are different psychosocial factors contributing to person's healthy nutrition including choice of safe food, its intake, eating and dietary habits. These data show that according to ecological paradigm the modification of behaviour related to healthy nutrition assumes not changing only social, political, economic conditions but also careful consideration of individual's role in producing and performing the health practices. However, this article does not claim that one or other of the generalisations made are more right. The most important point is to look not only at the statistical significance of results but also at their practical significance..

5 CONCLUSIONS

There is a growing body of evidence suggesting that ecological understanding of health attitude and the healthy nutrition as its part gives many practical applications for effective development of health care, health education and health promotion. It is especially significant because one's nutrition play a key role in prevention of food- and life style-related diseases and improvement of his/her health.

What people eat and how much and how often are behavioural processes, which lead researchers and health promotion specialists to consideration of psychosocial factors as determinants of food choice, its intake and nutritional habits.

The effective promotion of healthy nutrition among people is only possible with development of their own responsibility for health, life style and environment. In other words, an ecological perspective allows to consider an individual and his/her psychosocial peculiarities (including health locus of control, selfefficacy, self-regulation, constructive selfassertiveness, psychological well-being) in the environmental and cultural context..

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