# The Value of Health and Healthy Lifestyle Among Russian Adolescents as a Bioinformatics Object

Lilya Rozhkova, Penza State University, Penza, Russia Svetlana Vlazneva, Penza State University, Penza, Russia Olga Salnikova, Penza State University, Penza, Russia

### **ABSTRACT**

Health is a qualitative prerequisite for the future self-fulfillment of young people, the ability to create a family and bear children, receive education and perform work, social, political, and creative activity. The attitude of young people to health is a system of personal, selective relations of individuals with various phenomena and social environment that contribute, or vice versa, threaten the health of the younger generation. It is also a certain self-assessment of the individual's physical and psychological condition. Bioinformatics technologies are implemented using methods that allow for collection, processing, and interpretation of data on biological objects. Considering a human and its subsystem, health as bioinformatics object, analysis of biological, social, intellectual, and mental states using materials and information technologies seems appropriate. Specialized software "Sociology," which allows working with research materials of various health indicators, was used for data processing. The article presents the values of health in the views of modern adolescents.

### **KEYWORDS**

Attitude to Health, Bioinformatics Object, Health, Russian Youth, Value Orientations, Values

### INTRODUCTION

In recent years, the problem of youth health preserving does not lose its relevance and occupies significant place in biomedical and psychological-pedagogical research. Bioinformatics technologies implement methods that allow administration of biological objects data. The main goal of bioinformatics - contribute to understanding of biological processes. It focuses on creating and applying intensive computational methods to achieve this goal.

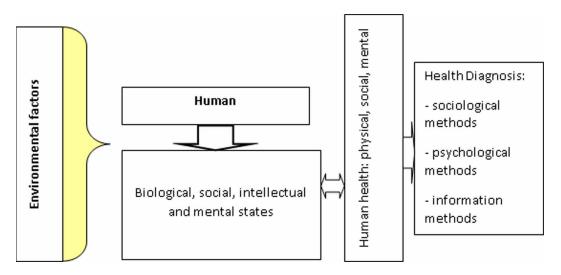
The man and his body, acting as biological object is open system in which there is highly organized system of perception, sorting, distribution information from environment. This ensures the organizational, structural and functional development of biological object, which can be viewed as complex structure of multistage hierarchical sequence of interacting systems and subsystems that are in close contact with the environment (Kelina, 2011, p. 164). Human health is formed in inextricable unity of biological, psychological, social and environmental factors. Figure 1 shows the graphical representation of health as bioinformatics object.

Behavioral, professional and other components of youth lifestyle are complex biosocial system. The definition of various states in description of body functional systems of people with different lifestyle features is an actual problem of bioinformatics (Bagnetova, 2012).

DOI: 10.4018/IJARB.2019010106

Copyright © 2019, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

Figure 1. Health as bioinformatics object



The relevance of the conscious attitude of young people to health is due to several reasons: first, the health of the younger generation is of medical and social nature, because in the future it will determine the quality of human and economic potential of the country and its defence potential. Secondly, the health of adolescents is crucial for the reproduction of the population and the health of future generations. Thirdly, an important characteristic of recent years is the health deterioration of younger generations.

The World Health Organization (WHO) defines "health" as a state of not only absence of disease and physical defects, but complete well-being: physical, social, spiritual. Health is "...a qualitative prerequisite for the future self-fulfilment of young people, the ability to create a family and childbearing, complex educational and professional work, social, political and creative activity" (Denisova, 2015: p. 67).

Health is the most important life value; longevity, youth preservation, self-fulfilment largely depend on it (Boyak, 2016: p. 142). The research of Kozyreva P. M., Nizamova A. E., and Smirnov A. I. show that health is closely correlated with a life of happiness. Thus, the share of happy people is 82% in the group of respondents with very good health and only 17% among respondents who assess their health as very bad (Kozyreva, 2016: p. 71).

The concept of "attitude to health" is complex. It includes several aspects: cognitive (ideas, opinions, beliefs and knowledge about health, healthy lifestyle), emotional (feelings and emotions related to health, health as a value), behavioural (actions and activities aimed at maintaining health or eliminating pain) (Moiseeva, 2018). Thus, a person's attitude to health is determined by objective and subjective factors and is manifested in actions verbally reflected in people's opinions and judgements on the factors affecting their physical and mental well-being. Self-assessment of physical and mental state acts as a real indicator of human health, as there is a high degree of compliance between self-assessment and objective health status.

It should be noted that the perception of health as a source of existence in modern socioeconomic conditions has two meanings. First, certain categories of respondents interpret health as physical capacity rather than the presence or absence of specific symptoms of a disease. Second, the research showed respondents' assessment of their health from the point of view of their psychological possibilities. Many Russians see health as a condition not preventing them from performing their everyday activities. American researchers highlight a similar perception of health and disease. That 9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <a href="https://www.igi-</a>

global.com/article/the-value-of-health-and-healthy-lifestyleamong-russian-adolescents-as-a-bioinformaticsobject/231592

# Related Content

# Search for Protein Sequence Homologues that Display Considerable Domain Length Variations

Eshita Mutt, Abhijit Mitraand R. Sowdhamini (2011). *International Journal of Knowledge Discovery in Bioinformatics (pp. 55-77).* 

www.irma-international.org/article/search-protein-sequence-homologues-display/62301

# Spatial Uncertainty Analysis in Ecological Biology

Stelios Zimerasand Yiannis Matsinos (2013). *International Journal of Systems Biology and Biomedical Technologies* (pp. 14-24).

www.irma-international.org/article/spatial-uncertainty-analysis-ecological-biology/78389

### Text Mining on Big and Complex Biomedical Literature

Boya Xie, Qin Dingand Di Wu (2015). *Big Data Analytics in Bioinformatics and Healthcare (pp. 21-45).* 

 $\underline{\text{www.irma-international.org/chapter/text-mining-on-big-and-complex-biomedical-literature/121451}$ 

# Multimodal Indexing and Information Retrieval in Medical Image Mammographies: Digital Learning Based on Gabor Filters Model

Sahbi Sidhom, Noureddine Bourkacheand Mourad Laghrouche (2016). *Biomedical Image Analysis and Mining Techniques for Improved Health Outcomes (pp. 222-243).*<a href="https://www.irma-international.org/chapter/multimodal-indexing-and-information-retrieval-in-medical-image-mammographies/140493">www.irma-international.org/chapter/multimodal-indexing-and-information-retrieval-in-medical-image-mammographies/140493</a>

# The Important Role of Lipids in Cognitive Impairment

Jia Yu, Zheng Chen, Jiangyang Lu, Tingting Liu, Liang Zhou, Xinying Liu, Miao Sun, Weizhong Xiao, Dongsheng Fanand Dehua Chui (2013). *Bioinformatics: Concepts, Methodologies, Tools, and Applications (pp. 268-272).* 

www.irma-international.org/chapter/important-role-lipids-cognitive-impairment/76067