

M. P. Grebnyak, S. A. Shchudro

MEDICAL ECOLOGY
IN TERMS, SCHEMES, TABLES AND TESTS

*Recommended by Ministry of Education
and Science of Ukraine as a textbook for students
of Higher Medical Educational Institutions*

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Medical Ecology in terms, schemes, tables and tests: Textbook /

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Textbook is focused on the main challenges of science and practice in the modern medical environment. The textbook is structured into the following sections: "Medical ecology in terms," "Medical Ecology in the schemes", "Medical Ecology in the tables", "Medical Ecology in the tests."

Priorities of medical ecology as medical and biological discipline and medical knowledge aimed at maintaining and promoting health through environmental protection. Much attention is paid to optimizing the physical factors of the environment, geopathic zones, state of the biosphere and Endoecology. Medical Ecology should be focused on a vital importance of the numerous environmental factors in the trofological branch of science. It had been determined scientific approaches to providing medical population in ecologically altered environment.

Textbook is recommended for students of the higher educational institutions III-IV level of accreditation and doctors.

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Fedorchenko R.A., Golovkova T.A.,
Hryhorenko L.V., Pushina O.S., 2017

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Abbreviations

BOD _{5,20}	- biochemical oxygen demand for 5, 20 days
VD	- vascular dystonia
GE	- genotoxic effect
PHS	- public health standards
PZS	- protective sanitary zone
SIR	- source of ionizing radiation
CFU	- Colony Forming Units
LEC	- lactose E.coli
ME	- mutagenic effects
ML	- maximum load
MCN	- maximum nonperforming concentration
ADR	- absorbed dose rate
RSSU	- Radiation Safety Standards of Ukraine
ARVI	- acute respiratory viral infections
MAP	- maximum allowable pollution
MPC	- maximum permissible concentration
MPD	- maximum permissible discharge
RCMPL	- Remote control of the maximum permissible level
PChBs	- polychlorinated biphenyls
pH	- pH value
SanRaN	- sanitary rules and norms
SGM	- sociohygienic monitoring
CVS	- cardiovascular system
HTS	- highly toxic substances
EMF	- electromagnetic field

Introduction

In the solution of the priority problem of preserving and strengthening of the population health in the modern period, it is very important to create favorable environmental conditions. From the preventive medicine standpoint, the requirements to ensure the functioning of the organism in an ecologically changed environment, dictate the need for medical workers to realize their professional attitude to the formation of health.

This manual is designed in accordance with the educational qualification characteristics and educational and professional programs in the field of knowledge "Medicine".

The main objective of the discipline "Medical Ecology" is to teach medical students the organization of preventive measures among the population that lives in different environmental conditions. This is especially true for people suffering from diseases due to reduction in their adaptation and compensatory possibilities of the organism.

Current global trends in education have shifted the vector of education to the practice-oriented approach, aimed to improve its overall effectiveness. The priority role in this play interactive form of education, the essence of which is to optimize the interaction of the subjects of the educational process (students and teachers).

This manual is made based on the information (training and systematization of a significant amount of training and professional information), diagnostic (professional, psychological and socio-cultural aspects of development, which are necessary to form) and goal-setting (the ability to set goals and objectives, planning activities) functions. The intensification of the activities of the students with the help of the proposed benefits provide not only gaining of knowledge, skills, professional activities, but also improvement of competence (the ability to perform specific work functions well or effectively).

The manual consists of the most commonly used in medical ecology concepts, various charts and tables, systematized on the major environmental factors and which are necessary to perform the practical part of the training.

The manual can be used as a base for interactive learning, the dominant features of which are the subjects of education stay in the

same semantic space and sharing immersion in the problem field, i.e., inclusion in a single creative space.

Into the interactive teaching methods assessment of portfolio (systematic collection of documents) and case (classification, system analysis, modeling and problem approaches) are integrated. The portfolio is assessed work of students in terms of compliance with the curriculum or student progress, as well as the formation of professional reflection, professional and general cultural competence. In the case method classification skills, systems analysis, simulation and reporting issues underlying the situation are estimated.

The authors hope for friendly attitude to the textbook and are grateful for the constructive suggestions to improve its content.