

## The Principles of The Ecological Approach in Education and Health Care

**Ruta Renigere, Ruta Bogdanova**

<sup>1</sup>*Institute of Education and Home Economics, Latvia University of Agriculture,* <sup>2</sup>*Riga Medical College of the University of Latvia (Latvia)*

<sup>1</sup>[rutareinigere@inbox.lv](mailto:rutareinigere@inbox.lv), <sup>2</sup>[ruta.bogdanova@inbox.lv](mailto:ruta.bogdanova@inbox.lv)

### **Abstract**

*The ecological approach in education and health care is a manifestation form of transformative education in an ecological environment that shapes and develops the criteria of the ecological consciousness of medical nurses for a transition from I – Ego to I- Eco in the processes of education and health care. The principles of the ecological approach expand professional ethics of medical nurses into a systemic perspective and on an ecosystem level. To integrate the principles of the ecological approach into nursing education and health care practices, it is of primary importance to ensure a paradigm shift – a transition from a mechanical paradigm to an ecological paradigm and from transmissive teaching and learning to transformative teaching and learning at all levels of professional education.*

*The code of professional ethics for medical nurses is dominated by deontology, which is a normative ethical position that judges the morality of an action based on the action's adherence to a rule or rules, in other words, it is professional "duty" or "obligation" or "rule"-based ethics. The principles of the ecological approach do not refer only to professional activities; they highlight and emphasize values-oriented lifestyle and systemic thinking in social, educational and health care environment.*

*The present research involved first, second and third year students of medical colleges who have also completed a course of The Ecological Approach in Patient Care. Respondents filled in a questionnaire and, on a ten-point scale, assessed the importance of the principles of the ecological approach, their observance and topicality in education and health care.*

### **1. Introduction**

The ecological approach in the education process of medical nurses and health care practice creates a multi-level interdisciplinary system. It is characterized by a universal, interdisciplinary, integral and socio-cultural context building a collection of integrative skills as a result of experience and creative activities. The interrelation of these systems gives an opportunity to define the relationship *person-environment-society*, shape professional conduct and raise the awareness of the importance of knowledge in solving ecological issues. Both education and health care is a process that is related to self-organisation, self-discipline, creativity and an ability deal with complicated unpredictable ecological situations in a multi-level environment.

The ecological approach in education and health care is a way how to implement education for sustainable development and sustainability in health care. The ecological approach means that learning/studying does not only mean acquiring knowledge. Learning/studying becomes a way to individual and collective self-determination and emancipation when individuals perceive learning as a systemic thinking process in the context of education and health care environment that is based on communication, exchange of opinions, mutual understanding, cooperation and respect for each other. In other words, it all takes place in line with what A.Einstein once said -*You cannot solve a problem from the same consciousness that created it. You must learn to see the world anew.* To rephrase it for the specific context of this research, it is important to *acquire education anew* getting rid of the impact of authoritarian and behavioral models and promoting an alliance and partnership among students, academic staff and practicing medical nurses.

### **2. The Ecological Approach**

The application and use of the concept *ecology* nowadays has considerably expanded and even undergone some changes. In the last decades of the previous century and in this century, there has been a number of research papers and publications that have been called ecological. They contain a variety of ecological recommendations and varied terminology. The word *ecology* is a relatively more common and widespread name of a science at the moment than any other. As a result of interaction among different sciences, quite a few ecology-related concepts and terms have appeared including

synonyms and dependent words. One of the latest ecology fields is political ecology that views environment issues not as a result of business mistakes, inappropriate technologies or overpopulation, but rather relate them to social causes [1].

The aim of the ecological approach in nursing education is not to reorganize educational institutions, but to transform them in a way that human relations and relations in society in general would be considerably adjusted and transformed by setting a goal of combining and implementing the best alternatives from different theories and practices with a holistic perspective in order to bring up and develop the unique potential of each and every student as the ecological approach has no definite ideology inherent. It is just an infinite open-ended effort to comprehend the complexity and integrity/wholeness of a human life.

The ecological approach in nursing education is related to social responsibility of students and educators that leads to developing a critical view of social, political and economic issues during the study process and linking them to the real world. From an ecological point of view, a viable democratic society should be simultaneously personally liberating and socially responsible.

When communicating in a social, education and health care environment, it is important for medical nurses to perceive their fellow men not only as *Homo sapiens*, but also as spiritual beings. To avoid confusion during the transition to the ecological approach in the education process of medical nurses and health care practice, there are several important prerequisites to be considered:

1. during the education process, medical nurses should receive theory based professional knowledge about the ongoing changes in the society and their professional field to promote motivation, responsibility and avoid disappointment in the chosen profession and field of studies;
2. the theoretical knowledge acquired during the study courses and health care practice should be developed and built up as a cohesive mutually complementary whole of nursing education and health care practice in such a way that educational goals of the transition period would not create a gap between the theory and practice;
3. in the education process and the environment of health care practice, an open dialogue should be established among educators, practice managers and students giving an opportunity to express and analyse the diversity of views on the transition period, thus developing purposeful co-thinking and co-experience to avoid indifference and apathy to the ongoing change processes in the society and health care environment;
4. in the education process and the environment of health care practice, medical nurses should be encouraged to see and understand the living connection among the ongoing processes in a multi-dimensional environment as the ecological approach in nursing education is characteristics of personality quality based on systems integration; it is an ability to substantiate various issues, tasks and life situations with individual traits; it is values, motives and knowledge related to the habits and needs of sustainable education and life experience. Everybody should acquire problem-solving and action-oriented knowledge about sustainable and non-sustainable development processes.

### **3. The Principles of The Ecological Approach**

The principles and characteristics of the ecological approach is in line with the criteria of formation and development of the ecological consciousness, that is, I-Ego transformation into I-Eco in life activities, education process and health care practice. The ecological consciousness together with transformative learning and teaching characterizes an ability to include survival, critical assessment and creation thinking of these components as simultaneous ongoing processes [2].

The ecocentric ecological consciousness of a medical nurse is formed, shaped and developed by their inner motivation to learn/acquire knowledge, systemic thinking and a behavioural and performance imperative rooted in ecological knowledge, critical thinking, reflection and attitude.

The principles of the ecological approach complementary supplement the Code of Ethics of medical nurses and integrate the criteria of the ecological consciousness into a global systemic perspective as a development process of a spiritual harmonious being in an ecosystem.

The principles of the ecological approach in education and health care have been developed on three basic building blocks:

1. U.Bronfenbrenner's Ecology of Human Development theory [ 3.];
2. the five pillars of education for sustainable development (ESD) - *learning to know, learning to be, learning to live together, learning to do, and learning to transform oneself and society* with an aim to reach learning outcomes and sustainable development in the future [4.];
3. Naes' ideas and insights into deep ecology or ecosophy [5. 6.].

Structurally, the principles of the ecological approach have been developed in line with the *process-person-context-time* system of the bioecological theory of human development:

- *a process* – learning/ studying and health care;
- *a person* – a student, medical nurse, educator, clinical practice manager, client/patient, family and relatives, health care team and society;
- *context* – social, educational, and health care environment;
- *time* – human life cycles [7.].

#### 4. Methodology of Research and Results

The aim of this research is to determine the importance of the principles of the ecological approach in education and health care.

The respondents are 115 (a hundred and fifteen) first, second and third year students in the study years of 2012/2013, 2013/2014, 2014/2015. All respondents are students of study programmes in *Nursing and Medicine* of different medical colleges who have taken the study course of *The Ecological Approach in Health Care*.

Here is a summary and conclusion of the research on the importance and functioning of the principles of the ecological approach on a scale from 1 to 10:

- *Developing the ability to think and performance and experience growth* – by making independent decisions to build an awareness of oneself as a developing spiritual being in an ecosystem; to experience satisfaction from the knowledge gained during the process of cognition and studying; to stimulate the ability to think, reflection and critical thinking; to expand experience through applying knowledge based abilities and skills in life activities and health care processes.

2nd year – ten-point score 98%

3rd year - ten-point score 93%

1st year - ten-point score 75%

Conclusion: the difference in the assessment of this principle leads to the conclusion that first year students straight after the secondary school have not fully developed their ability to think and have not built up their experience in social environment. Several first-year students pointed out in their essays that during the education process at school their ability to think, which is the ability to learn how to learn, was not stimulated enough.

- *Responsibility* – by functioning/ performing and integrating in social, educational and health care multi-dimensional environment, get to know oneself and act consistently taking full responsibility.

2nd year – ten-point score 100%

3rd year - ten-point score 93%

1st year - ten-point score 79%

Conclusion: the assessment given by the second and third year students attests to the ability of students to assess the acquired knowledge and skills in the course of clinical procedure standards and transfer them to the environment of health care practice. First year student assessment of this principle reflects the feeling of personal responsibility in a social environment that is not related to the chosen profession.

- *Transformation-* by making a conscious choice of the existence or absence of *I and We* in line with the situation, achieve the highest possible potential in developing I –Freedom.

2nd year – ten-point score 100%

3rd year - ten-point score 100%

1st year - ten-point score 56%

Conclusion: 100 % highest ten-point score of this principle among the second and third year students points to the necessity of shaping, forming and developing the criteria of the ecological consciousness in social, educational and health care environment to encourage the transition from I-Ego to I-Eco.

- *Awareness of cause and effect principle, safety advocacy, and promoting wellness* – by being aware of the global ecological crisis as a human-induced threat to the wellness of the future generations of humans

2nd year – ten-point score 100%

3rd year - ten-point score 93%

1st year - ten-point score 83%

Conclusion: the high assessment of this principle among students of different years points to the topicality of these issues in modern society, as well as the acquired knowledge in the course.

- *Unity and wholeness of the core values in education and health care –*  
by getting actively involved in promoting society wellness and maintaining environmental sustainability, align one's personal perceptions to the core values in the processes of education and health care.

2nd year – ten-point score 100%

3rd year - ten-point score 93%

1st year - ten-point score 83%

Conclusion: transformative learning/ studying promotes personality development in an ecological environment, contributes to the development of systemic thinking and highlights the wellness dimensions in social processes and health care.

## 5. Conclusions

1. The findings of the research show that the respondents give a very high assessment of the principles of the ecological approach in education and health care on a ten-point scale and see their importance in sustainable development of sustainable education and sustainability of health care.
2. To integrate the principles of the ecological approach in nursing education and health care practice, a transition from a mechanical paradigm to an ecological paradigm, from transmissive learning to transformative learning is of very high importance at all levels of professional education.
3. The study course *The Ecological Approach in Health Care* and the integration of the ecological approach in the education process are relevant to implement the pillar of education for sustainable development (ESD) – *learn to transform oneself and society*.
4. The principles of the ecological approach expand the essence and meaning of the content of professional ethics of medical nurses and promote the transformation and transition from deontology to a holistic health care model.
5. The substantiation of the principles of the ecological approach and the formation and development process of the ecological competence follow from the formation criteria of the ecological consciousness of nurses.
6. The principles of the ecological approach explain the inner motivation to learn and take responsibility for the ongoing processes in an ecosystem.

## References

- [1] Cornelius Mayer-Tasch, P. (1999). Politische Ökologie, Eine Einführung. (Lehrtexte Politik)
- [2] O' Sullivan, E. (1999). Transformative Learning – Educational Vision for the 21<sup>st</sup> Century. London: ISE/UT/Zed Books.
- [3] Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, M.A.: Harvard University Press.
- [4] UNESCO Education for Sustainable Development 2005 – 2014. Retrieved, December 15, 2014 [http://menntuntilsjalfbaerni.weebly.com/uploads/6/2/6/2/6262718/unesco\\_5\\_pillars\\_for\\_esd.pdf](http://menntuntilsjalfbaerni.weebly.com/uploads/6/2/6/2/6262718/unesco_5_pillars_for_esd.pdf)
- [5] Naess, A. (1995) *Ecosophy and gestalt ontology*. In *Deep ecology for the twenty-first century* (pp. 240-245). Boston: Shambhala Publications.
- [6] Naess, A. (1973). *The shallow and the deep, long-range ecology movement*. Volume 16, Issue 1-4 Inquiry: An Interdisciplinary University of Oslo, Published online: 29 Aug 2008 pp. 95-100.
- [7] Bronfenbrenner, U. (Ed.). (2005). *Making human beings human: Bioecological perspectives on human development* (pp. 3-15). Thousand Oaks, C.A.: Sage Publications Ltd..