THE FORMATION OF MEDICAL WORKERS' SUBJECTIVITY IN THE PATIENT CARE INSTITUTION ENVIRONMENT FROM A POSITION OF THE ECO-PSYCHOLOGICAL APPROACH

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Abstract:
The process of the medical worker's subjectivity development as the realization of the ability to be a subject of the optional activity in the shape of professional performance in the patient care institution environment is analysed. The medical worker is considered as a subject of an interaction with the patient care institution environment. This interaction analysis is executed by the ecological consciousness study, because the ecological consciousness type dictates types of subject's attitude to the environment (including the patient care institution environment) and interactions with its other subjects. From a position of the eco-psychological approach spatial and subject, activity (technological) and communicative components are described in the patient care institution environment structure.

Key words: the patient care institution environment, medical worker's subjectivity, ecological consciousness, eco-psychological interactions.

Introduction
Side by side with global problems connected with the ensuring of the population health and specific professional problems in socioeconomic development area, there are psychological problems of the patient care institution environment organization in health service. The patient care institution environment, on the one hand, provides conditions and possibilities for the needs satisfaction of the medical worker as a professional activity subject, on the other hand, a part of the medical worker's life, his socialization and individualization passes in this environment. In terms of psychology, the medical staff is a part of the patient care institution environment and its social component. That's why fundamental changes in the health service system without accounting of the patient care institution environment organization can lead to such result, that the medical worker turns out to be not ready to walk towards...
growing requirements to his activity results. All of this makes it necessary to search crucially new tools for increasing
the medical service quality and the medical staffs' satisfaction with their work.

In this paper, we understand the environment as «a conditions and influences complex providing a possibility of the
human vital needs satisfaction» (Panov V.I., Mdivani M.O., Kodess P.B. et al., 2012, c.27). In broad terms, it is
possible to say about the medical treatment facility environment as about a system including the whole medical
community, the health service and the medical education system of the country. In a narrower sense, we mean
conditions of the particular patient care institution.

In general terms, this research is carried out within the framework of ecological psychology (Gibson J., 1988; Pawlik
K., Stapf K., 1992; Derjabo S.D., Jasvin V.A., 1996 et al.), specifically, within the framework of the eco-
psychological approach to the psychics development. According to this approach, the «human – environment» system
is considered as an ontological subject of its components joint development (Panov V.I., 2006). Eco-psychological
interactions is considered as an aggregate of the person's interactions with the environment, which promote or prevent
the «human» and the «environment» combining into the «human - living environment» ontological formation (Panov
V.I., Mdivani M.O., Kodess P.B. et al., 2012).

In the course of the profession acquisition the medical worker gains the ability to be a subject of his professional
activity. Basing on the developed within the framework of the eco-psychological approach subjectity understanding
(Panov V.I., 2006), the medical worker's subjectity is regarded as his ability to be a subject of such optional activity
kind as the professional activity realizing into the medical treatment facility environment. It can appears in two
aspects: an attitude toward oneself as the activity subject and an attitude toward the patient as the interaction partner.
The medical worker's subjectity is determined, firstly, by the personality dispositions (perception of one's own actions
and the other people activity manifestations, the readiness to act in the certain way in a concrete situation), and
secondly, by the social situation of the professional activity (that is, a communicative component of the patient care
institution environment). At different levels of the medical worker's subjectity the interaction with the patient care
institution environment definite type is setting.

In psychological works different models of interactions between the medical worker and the patient are described
Investigations which is carrying out within the framework of the «environmental psychology» trend (Arneill A.B.,
Delvin A.S. 2002; Becker F., Douglass S.J. 2008; Moursched M., Zhao Y. 2012; Andrade C., Lima M.L., Fornara F.,
Bonaiuto M. 2012), focused their interest on the architectural design and spatio-ecological features of the medical treatment facility.

The eco-psychological approach to the studying of the medical treatment facility environment is based on the generally accepted notion about its structure (Panov V.I.), that includes following components: 1) a spatial and subject component (spatial conditions, architectural features: the furniture in hospital wards, medical treatment and examination rooms, doctors' lounges etc., and also facilities of the patient care institution environment); 2) an activity (technological) component includes the aggregate of medical staffs' interactions with the patient care institution environment situations (the content of this component is determined by the medical worker's duty regulation); 3) a communicative component (within the framework of the diagnostic and treatment process the medical worker sets up an interaction with all subjects of council environment. A communicative component is represented by the complex, multilevel system of interactions including both horizontal and vertical connections types).

Interaction into the patient care institution environment are realized at the levels of the dyad («medical worker – medical worker», «medical worker – patient», «medical worker – patient's relation»), the specialists brigade (a visiting round, a consultation, an operating brigade), the hospital department (a council, a morning conference), the patient care institution in general. These hierarchy is represented at the figure 1.

Figure 1. The hierarchy of interactions into the patient care institution environment
Thus, the medical worker is considered as a subject of an interaction with the patient care institution environment. For this interaction analysis it is expedient to engage the notion of the ecological consciousness, because the ecological consciousness type dictates types of subject's attitude to the environment (including the patient care institution environment) and interactions with its other subjects. The ecological consciousness is the phenomenon acting as the psychics systemic feature, which is generated and develops in the person's concert with the environment (natural and social), and in the highest form of its development allows the individual to experience directly unity with his own and the environment nature (Panov V.I., 2006). Features of any kind of the profession play the role of a basis for the personality important characteristics formation. Researches prove that it is impossible to separate the professional development by itself from the personality evolution, and the personality activity acts as a development factor. That's why under dynamically changing conductions of modern reality specialists, which are able to decide on their own, to work actively, to response for their actions, that is, are characterized by a subject attitude to the profession (Bogdanovich N.V., 2004; Zeer Je.F., 2005; Mitina L.M., 2015). But features of the patient care institution environment don't always promote formation of specialists' active subject attitude. A contradiction between the medical worker subjectity declaring as an expert's compulsory feature and the type of the professional-educational environment, that doesn't always allow to achieve such personality development level as the subjectity, becomes apparent.

**Objects and methods of the research**

The next people groups took part in the study: nurses, medical undergraduates, high-grade medical students, and psychologist students. The total number was 326 people, from 17 to 50 years old. The study has performed at the following bases: The First Clinical Hospital of Belgorod City, also the Teacher Training High-School, the Medical College, and the Medical High-School (the recent three are the facilities into The Belgorod State National Research University).

The «Questionnaire of ecological consciousness» (V.I. Panov, M.O. Mdivani, Sh.R. Khisambeyev, E.V. Lidskaya) was used to evaluate the ecological consciousness rates. The «Test-questionnaire of self-relation» (V.V. Stolin, S.R. Pantileyev) was used to estimate some parameters of subjectness. The difference estimate has performed with $\chi^2$ Pirson criterion. The difference estimate performed with $\chi^2$ Pirson criterion.
Results and Discussion

The difference estimate has done in four groups, reflecting different level of respondents’ involvement in the medical treatment facility environment, subject to the varying forms of the recent during progressive professional setup of the medical worker.

The ecological consciousness study

Table 1: The rates of the ecological consciousness components in medical staffs and students.

<table>
<thead>
<tr>
<th>Ecological consciousness components</th>
<th>Groups, %</th>
<th>χ²</th>
<th>P</th>
<th>Significance value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychologist students</td>
<td>Nurses</td>
<td>Medical undergraduates</td>
<td>High-grade medical students</td>
</tr>
<tr>
<td>«Negative natural influence on the human»</td>
<td>39.13</td>
<td>44.37</td>
<td>40.32</td>
<td>35.39</td>
</tr>
<tr>
<td>«Unity with nature» - the integral indicator</td>
<td>19.31</td>
<td>19.58</td>
<td>19.74</td>
<td>22.09</td>
</tr>
<tr>
<td>«Ecological responsiveness» – the regional rate</td>
<td>2.67</td>
<td>2.58</td>
<td>2.36</td>
<td>2.63</td>
</tr>
<tr>
<td>«Ecological responsiveness» – the international rate</td>
<td>1.74</td>
<td>1.91</td>
<td>1.61</td>
<td>1.79</td>
</tr>
</tbody>
</table>

In the table above, we can see the highest parameter on the scale of «Negative natural influence on the man» has displayed in the nurses group (44.37), alternatively, the high-grade medical students group displayed the lowest parameter (35.39). In the groups of the medical undergraduates and psychologist students it were 40.32 and 39.13 respectively (χ²=8.5446, p<0.05). We try to interpret those facts in the following way: nurses often are faced to negative natural influence (such a disease) on a human during their professional work. On the other hand, high-grade medical students have rather theoretical representation of the subject. A suffering man is a part of personal life environment for nurses. It should be noted that medical undergraduates set up in-between nurses and high-grade medical students, so it is possible to explain with forming their professional role matrix.

On the scale of «Unity with nature» (the integral indicator) the highest level is detected in the high-grade medical students group – 22.09. Possibly, it may be connected with the higher information into the group about human organism acting and value of harmonization between body functions and the natural environment. This assumption is
stipulated of making student’s sight on the human like the organism evolving and being according to universal natural laws, that is formed through the studying of anatomy, physiology, biochemistry, histology and other courses. Besides that, high parameters in the high-grade medical students group can serve as the indicator of their need state, deficiency of communication with nature in conditions of limited time during studying. In the groups of medical undergraduates (19.74), nurses (19.58) and psychologist students (19.31) similar mean parameters have been detected ($\chi^2 = 26.2537, p<0.01$).

Intergroup comparison with the scale of «Ecological responsiveness» – the regional rate shows that psychologist students and high-grade medical students demonstrate higher indicators, 2.67 and 2.63 respectively. The lowest result is detected in the medical undergraduates group – 2.36. In the nurses group it was 2.58 ($\chi^2 = 24.0606, p<0.01$). Low parameters in the medical undergraduates group seem to be explain of their young age (mean is 17.5), absence of ecologically responsive behavioral skills. It is confirmed by results of intergroup comparison on the indicator of “Ecological responsiveness” – the international rate, where the nurses displayed the highest level – 1.91, and the medical undergraduates – the lowest level – 1.61. In the high-grade medical students group it was 1.79, in the psychologist students group – 1.74 ($\chi^2 = 10.9728, p<0.05$).

**Self-relative parameters study.** The initial setup of this study is examination of the medical worker and the medical treatment facility environment as a joint subject of common development.

Accordingly, human relation to the external environment (the medical treatment facility environment or the natural environment in a wide sense) is mediated by the self-relation.

**Table 2: The intensity of self-relative indicators in the medical stuff and students.**

<table>
<thead>
<tr>
<th>Self-relation indicators</th>
<th>Groups, %</th>
<th>$\chi^2$</th>
<th>Significance value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychologist students</td>
<td>Nurses</td>
<td>Medical undergraduates</td>
</tr>
<tr>
<td>Self-interest</td>
<td>9.74</td>
<td>9.91</td>
<td>9.62</td>
</tr>
<tr>
<td>Anticipated attitude of other people</td>
<td>6.31</td>
<td>6.01</td>
<td>6.81</td>
</tr>
</tbody>
</table>

Intergroup comparison with the scale of «Self-interest» shows significant differences on its rate. The highest indicator is detected in the high-grade medical student group (10.8). The lowest indicator is detected in the medical undergraduate group (9.62). The lowest indicator is detected in the medical undergraduate group (9.62). In the group
of the psychologist students it was 9.74, while in the group of the nurses it was 9.91 ($\chi^2=7.9276, p<0.05$). High level of the «Self-interest» indicator in the high-grade medical students group seems to be explained with higher level of the human physiologic knowledge as well as confidence in oneself interest for other people, peculiar egocentric orientation that is linked to significance of the professional path formulation.

On the scale of «Personal attitude of other people» the highest indicators is detected in the group of the medical undergraduates (6.81). The lowest indicators is detected in the group of the nurses (6.01). In the group of the psychologist students it was 6.31, while in the group of the high-grade medical students – 6.27 ($\chi^2=14.8996, p<0.01$).

It is possible to explain the contrast between these indicators in the active and further nurses groups with the positive human attitude expectation of the first group that is connected with the high prestige of the medical profession. At the same time, active nurses have often to face with the negative patients attitude.

**Conclusion**

Characteristics of the ecological consciousness is set up by the individual experience of relationships with the natural environment, including the medical treatment facility environment. Medical staffs and medical students as the medical treatment facility environment subjects watch on the environment conditions through their own safety prism. Because medical staffs have been regularly bringing together with negative environmental influence on a man displaying as diseases and suffering, they are accustomed to some ecological trouble accompanied all their life.

The medical worker presents as an individual subject into the medical treatment facility environment, and in the same time he is the product of the local environment, which becomes its part during his studying and further work. On the one hand, the medical treatment facility environment is a tool for the medical worker's development. On the other hand, during his evolution the medical worker becomes the most important tool of the medical treatment facility environment self-development.

Thus, the communicative environment component, including different types of relationship among subjects, acts as a motive force and indicator of the medical treatment facility environment self-development.

The most favorable medical treatment facility environment for the personality and professional evolution of the medical worker are those make it possible to decide on its own, to show initiative, to be responsible for one's own work and to be aware of its significance.

Those conditions are determined by the system of relationships between medical staffs into the medical treatment facility environment.
References


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