Professional Values and Educational Needs among Mental Health Specialists in Russia: Survey Results

Профессиональные ценности и потребности в образовании у специалистов сферы охраны психического здоровья: результаты опроса

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Original research

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ABSTRACT

BACKGROUND: Exploring the professional values and educational needs of future and practicing mental health specialists is required to develop effective measures aiming at improving their skills and interest in their work.

AIM: Our aim was to explore professional values and educational needs of mental health specialists in Russia.

METHODS: We conducted a survey that captured socio-demographic data, professional characteristics, professional values, and educational needs. Fisher’s exact test, logistic regression, and the k-means cluster analysis were used in our statistical analysis.

RESULTS: The survey included 133 participants, 71% of whom had completed their postgraduate education. The following items were mentioned as important professional values by the respondents: “Job opportunities”, “Stimulation of intellectual activity”, and “Work-life balance”. The most popular options for educational activities were English language (63.4%), the principles of evidence-based medicine (63.4%), and developing skills for conducting scientific research (59.4%). In comparison with practicing specialists, respondents who had not yet completed their postgraduate education were more interested in developing their curriculum vitae (39% vs. 60%, p=0.044) and communication skills (49% vs. 77%, p=0.0048). Compared to male respondents, female respondents were more interested in developing skills in conducting scientific research (47 vs. 70%, p=0.0165).

Editorial comment:

The article took part in the competition of scientific papers of early career psychiatrists.

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A cluster analysis showed that specialists who attached more importance to almost all professional values, in comparison to those who did not, were more interested in activities aimed at developing their research skills (64% vs. 41%, \(p=0.0287\)), learning about the principles of evidence-based medicine (70% vs. 41%, \(p=0.0063\)), and participating in journal clubs (39% vs. 11%, \(p=0.0193\)).

**CONCLUSION:** The present study suggests that job opportunities, intellectual stimulation, and work-life balance are the most important professional values for future and practicing mental health specialists. These findings might be used as a basis for developing educational activities for mental health specialists.

**INTRODUCTION**
The sustainable provision of high-quality mental health care depends on the efficiency of the policies for human resources for health, aiming to maintain an adequate number of mental health care providers and improve their well-being. It is well known that the number of human resources for mental health is limited in the majority of low- and middle-income countries [1].
For example, the Global Health Observatory reports that there were 8.5 psychiatrists per 100,000 people in Russia (an upper-middle-income country) in 2015 (https://apps.who.int/gho/data/view.main.HWF11v). Although this number is relatively close to the recommended ratio of 10 psychiatrists per 100,000 people, there is an issue of lack of interest in mental health among medical students [2].

Previous international studies have shown that less than 6% of medical university graduates choose a career in psychiatry [3–4]. This might have several reasons. Firstly, mental health problems and mental health services remain stigmatized in the medical community [5–6]. Secondly, a significant proportion of medical students describe interactions with psychiatric patients as disturbing, stressful, and emotionally challenging [7]. Lastly, although there have been suggestions that interest in psychiatry among medical students increases after clinical practice in psychiatric wards, the quality of mental health education still needs substantial improvement [8]. Considering that mental and addictive disorders are among the leading causes of mortality, morbidity, and disability worldwide [9–11], such low interest in a career in mental health among medical students may lead not only to staff shortages, but also to significant problems in the diagnosis and treatment of mental and behavioral disorders [12–13]. Taking into account this fact, the World Psychiatry Association (WPA) has included the education of specialists; strengthening of personnel resources; the development of international partnerships between mental health professional resources, health-related institutions and non-medical organizations; and the promotion of psychiatry as a medical specialty in clinical, academic, and research areas in the list of priorities in the current WPA Action Plan 2020–2023 [14].

Another important issue affecting the quality of mental health care is poor job-related well-being among mental health providers, including a high level of burnout and lack of job satisfaction. Poor job-related well-being has been associated with increased staff turnover and a decrease in the quality of the provided care [15]. Workloads, long working hours, stress, lack of support from family and friends, low salaries, and high expectations from society weigh negatively on the job-related well-being of mental health specialists, which, in turn, affects the quality of provided care [16]. Chumakov et al. showed that signs of professional burnout, which is an important aspect of job-related well-being, were observed in 118 (71.5%) out of the 165 surveyed early career psychiatrists in Russia [17].

Providing sufficient opportunities for professional development and improving the job-related well-being of mental health care providers are one of the key tasks of the Russian Society of Psychiatrists and the Early Career Psychiatrists’ Council of the Russian Society of Psychiatrists (RSP ECPC) (https://psychiatr.ru/about/ustav).

However, before planning measures aiming at making mental health practice more attractive to medical students, or improving job satisfaction among practicing specialists, the most relevant professional values and educational needs should be determined. Professional values have been defined as the basis on which a person chooses, masters, and performs his/her working activity [18]. Educational needs, in turn, refer to the gaps in knowledge or skills on the part of specialists required to be filled in order to achieve the desired level of competence [19–20]. However, these domains have not been studied, to date, among Russian mental health care specialists.

Against this background, we conducted a pilot study aimed at exploring the professional values and educational needs of mental health specialists in Russia.

METHODS

Study design
This study adopted a cross-sectional study design. A voluntary confidential survey was administered to personnel and trainees providing care to people with mental health problems in Russia. The data was collected in-person as part of the VI School of St. Petersburg Early Career Psychiatrists and online using the Internet platform (https://docs.google.com/forms/), from May to December 2021. Invitations to participate were distributed in the profile groups of social networks that unite mental health specialists, as well as through the information platforms of the Early Career Psychiatrists’ Council of the Russian Society of Psychiatrists and the Young Scientists’ Council of the V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology.

Participants were eligible if they met the following criteria: 1) work or receiving training in the field of psychiatry, addiction psychiatry, psychotherapy, psychology, or other areas related to mental health; 2) over 18 years of age; and 3) possess sufficient...
knowledge of the Russian language to understand the questionnaire. The criterion for non-inclusion was refusal to participate in the study.

**Questionnaire**
The questionnaire was developed based on the existing literature, specifying the professional values and types of educational activities for mental health specialists [4, 16, 21–25], and it included three main sections (Supplement 1). We did not conduct a validation study for the questionnaire.

The first section was designed to capture socio-demographic data and the individual characteristics of the respondents and included the following sub-sections: a) demographic characteristics; b) work activities (position, mental health field, place of employment, educational and research activities at the time of completing the survey, work duration and availability of a curriculum vitae (CV); and c) education (completion of a professional education program and the number of years since the completion of the first professional education in mental health). In order to assess the alignment of educational programs with clinical practice, the following question was asked: “Does the content of the educational programs that you completed correspond to the cases that you are currently facing in clinical practice?”, with the following answer choices: “Yes” or “No”. If he/she chose “No” the respondent was asked to clarify their answer.

The second section was devoted to the professional values, which in the past studies [4, 16, 21] have been identified as the factors that drive professional interest in the mental health field. Participants were asked to evaluate the following professional values: “Intellectual stimulation”, “Short duration of training”, “Financial compensation”, “Work-life balance”, “Prestige”, “Research opportunities”, “Research supervisors on a topic of interest”, “Annual conferences”, and “Job opportunities” on a five-point Likert scale (from 1 — “Not at all important” to 5 — “Very important”).

The third section consisted of questions about future educational activities, including the intention to become a part of the RSP ECPC and participate in various educational events, such as “Developing a Curriculum Vitae (CV)”; “Developing skills for communication with patients and their families”; “Developing skills for conducting own research and publishing results”; “Developing the skills required for genetic counseling”; “Principles of evidence-based medicine”; “English language skills”; “Writing resumes, motivation letters”; “Journal club” and “Developing a grant application”. Such activities are considered to be the most popular among mental health specialists [19–20, 22–23, 26]. In addition, participants could freely express their wishes regarding the format and topics of the educational events.

Participants who did not complete the questionnaire in full were not excluded from the study. All the available data were included in the statistical analysis. Since the proportion of missing data was less than or about 10%, we did not use any missing data imputation methods. Such a decision was informed by the guidance of Bennett, which suggests that a statistical analysis is likely to be biased if more than 10% of the data is missing [27].

**Statistical analysis**
The obtained data was analyzed using the SAS JMP Statistical Discovery Pro 16.0 software package (SAS Institute Inc., USA). The distribution of the continuous variables was checked for normality using histograms and the Shapiro-Wilk test. Due to the fact that the continuous variables did not follow a normal distribution, the data was presented in the median and first and third quartile format (Me [Q1, Q3]). Ordinal variables are presented in the mean and standard deviation format (M [SD]). Fisher’s exact test was used to assess the differences in the frequencies of categorical variables between the groups. The logistic regression estimated the association between professional values and the choice of an educational activity. To facilitate the interpretation of regression model results, independent variables (values) were measured using a 5-point Likert scale and converted to dichotomous variables (score below median vs. score equal to median or above). The associations were considered statistically significant at a two-tailed p-value of less than 0.05. A k-means cluster analysis was used for sample clustering based on the professional values. The model using two clusters was regarded as the most appropriate, as it allowed for maximum homogeneity within the groups and optimal distance between the centers of the clusters.

**Ethical approval**
Ethical approval was not obtained for the purposes of this study. The survey was confidential, and no identifying information was collected. All participants provided
voluntary, informed consent to participate in the survey. During the active survey phase, no reports about any potential harm related to the survey were received.

RESULTS
Sample characteristics
A total of 133 people participated in the survey, of which the majority were females (54%, n=72). The median age was 28 years [Q1=25, Q3=33] (119 answers, 89.5% of total sample). Most respondents were employed in psychiatry (58.6%, n=78), psychotherapy (21.1%, n=28), psychology (10.5%, n=14), and addiction psychiatry (11.3%, n=15). The majority of the respondents (71%, n=95) had completed professional education, and 91% (n=121) were employed in the field of adult patients care. The most common places of employment for the respondents were public hospitals (47.4%, n=63) and outpatient departments in private clinics (27.1%, n=36). About half of the respondents were engaged in educational (49.6%, n=66) and scientific activities (37.6%, n=50).

The results of the current study will be presented in three parts. Firstly, we will present the results on professional values and educational needs among mental health specialists. In the second part, discovered associations between professional values and preferences for educational activities will be reported. This will be followed by a discussion of the cluster analysis results.

Professional values
All participants answered questions about the professional values except for one missed answer for the “Job opportunities” (99.2%, n=132 answers). On a 5-point Likert scale, the most important professional values for the respondents were “Job opportunities” (4.6 [0.78]), “Intellectual stimulation” (4.5 [0.78]), and “Work-life balance” (4.4 [0.90]). Factors such as “Short duration of training” (3.3 [1.05]), “Prestige” (3.6 [1.14]), and “Research opportunities” (3.8 [1.17]) were found to be the least important to this sample of respondents.

Educational activities and preferences for their options
According to the majority of respondents (76.7%, n=102), the content of the currently available educational programs is relevant to their daily clinical practice. The majority of participants (92.5%, n=123) also answered questions about their preferences regarding the choice of topics and options for educational activities. The most popular options were “English language skills”, “Principles of evidence-based medicine”, and “Developing skills for conducting own research and publishing results”. The least popular were the “Developing skills required for genetic counseling”, “Journal club” and “Developing a grant application” (Table 1).

The results of the Fisher’s two-tailed exact test showed that preferences in the choice of topics and options for educational activities differed according to socio-demographic and professional backgrounds. In comparison with the respondents who had already graduated, those who are still studying were more interested in educational activities aimed at developing a CV (39% vs. 60%, p=0.044, n=123) and communication skills (49% vs. 77%, p=0.0048, n=123).

<table>
<thead>
<tr>
<th>Educational activities</th>
<th>N of positive answers (% of overall N of answers)</th>
<th>Overall N of answers (% of total sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of evidence-based medicine</td>
<td>78 (63.4%)</td>
<td>123 (92.5%)</td>
</tr>
<tr>
<td>English language skills</td>
<td>78 (63.4%)</td>
<td>123 (92.5%)</td>
</tr>
<tr>
<td>Developing skills for conducting own research and publishing results</td>
<td>73 (59.4%)</td>
<td>123 (92.5%)</td>
</tr>
<tr>
<td>Developing skills for communication with patients and their families</td>
<td>70 (56.9%)</td>
<td>123 (92.5%)</td>
</tr>
<tr>
<td>Developing a CV</td>
<td>55 (44.7%)</td>
<td>123 (92.5%)</td>
</tr>
<tr>
<td>Writing resumes, motivation letters</td>
<td>46 (37.7%)</td>
<td>122 (91.7%)</td>
</tr>
<tr>
<td>Developing a grant application</td>
<td>41 (33.3%)</td>
<td>123 (92.5%)</td>
</tr>
<tr>
<td>Journal club</td>
<td>40 (32.5%)</td>
<td>123 (92.5%)</td>
</tr>
<tr>
<td>Developing the skills required for genetic counseling</td>
<td>39 (31.7%)</td>
<td>123 (92.5%)</td>
</tr>
</tbody>
</table>
Consequently, older age turned out to be a factor associated with a lesser preference for these activities (B=-0.09, p=0.034 for developing a CV and B=-0.13, p=0.0015 for communication skills).

The activities related to the development of skills for conducting one's own research and publishing their results were more often preferred by respondents who were already engaged in scientific activities (72% vs. 52%, \( p=0.0375 \)) and respondents who reported having an up-to-date CV (71% vs. 52%, \( p=0.039 \)), compared to those who did not. It is also worth noting that females were significantly more interested in this type of educational activities, in comparison with males (70% vs. 47%, \( p=0.0165 \)). Respondents already involved in research, compared to those who were not, were also significantly more interested in participating in journal clubs (21% vs. 52%, \( p=0.0013 \)) and grant application development seminars (25% vs. 48%, \( p=0.0105 \)).

**Association between professional values and preferences for educational activities**

Using Fisher's two-tailed exact test, it was established that preference for a particular educational activity depended on the subjective importance of certain professional values. In this analysis, all values-related variables were dichotomized by the median. For example, the activities related to the skills for conducting one's own research and publishing the results were more often preferred by respondents who more valued (i.e. score for the value was equal to median or above) research opportunities [Me=4] and the availability of research supervisors on their topic of interest [Me=4] compared to those who scored below the median (72% vs. 25%, \( p=0.0005 \) and 66% vs. 38%, \( p=0.0095 \), respectively). Interest in learning the principles of evidence-based medicine was associated with the professional importance of annual conferences (71% among those who had a score at the median or above [Me=4] vs. 42% among those with a score below the median, \( p=0.0053 \)). Grant writing events turned out to be more interesting to respondents for whom research opportunities had a more important professional value (42% among those who had a score equal to the median or above vs. 18% among those with a score below the median, \( p=0.0055 \)).

**Cluster analysis results**

Our sample was clustered using professional values as variables (Table 2). Participants in the larger cluster number 2 attached more importance to almost all of the presented professional values, with the exception of the short duration of training. The most pronounced differences were noticed in values such as prestige, research opportunities, research supervisors on a topic of interest, as well as annual conferences. It should be noted that cluster number 2 contained a significantly higher proportion of women in comparison with cluster number 1 (59% vs. 37%, \( p=0.0324 \)).

Respondents also differed in their preferences for educational activities between the two clusters. Thus, respondents in cluster number 2, compared to respondents in cluster number 1, were more likely to prefer activities that aimed at developing skills for conducting research and publishing results (64% vs. 41%, \( p=0.0287 \)), learning the principles of evidence-based medicine (70% vs. 41%, \( p=0.0063 \)), and joining journal clubs (39% vs. 11%, \( p=0.0193 \)).

**Table 2. Mean scores of professional values variables in the clusters**

<table>
<thead>
<tr>
<th>Professional values</th>
<th>Cluster 1, ( n=30 )</th>
<th>Cluster 2, ( n=102 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual stimulation</td>
<td>3.7</td>
<td>4.7</td>
</tr>
<tr>
<td>Short duration of training</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Financial compensation</td>
<td>3.5</td>
<td>4.1</td>
</tr>
<tr>
<td>Work-life balance</td>
<td>3.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Prestige</td>
<td>2.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Research opportunities</td>
<td>2.7</td>
<td>4.2</td>
</tr>
<tr>
<td>Research supervisors on a topic of interest</td>
<td>2.8</td>
<td>4.4</td>
</tr>
<tr>
<td>Annual conferences</td>
<td>2.9</td>
<td>4.4</td>
</tr>
<tr>
<td>Work opportunities</td>
<td>4.0</td>
<td>4.7</td>
</tr>
</tbody>
</table>
DISCUSSION

Main findings
To our knowledge, ours was the first study to analyze professional values, preferences and educational needs among mental health specialists in Russia. Based on our survey data analysis, the main findings were as follows:
1. The most important professional values for mental health specialists are job opportunities, intellectual stimulation, and work-life balance.
2. Mental health specialists have the greatest need for educational activities aimed at developing their English language skills, learning the principles of evidence-based medicine, and developing the skills for conducting research and publishing their results.
3. Compared to those who have completed formal education, younger specialists who are still in training show greater interest in educational activities that focus on developing CV and communication skills.
4. Female specialists appear more interested in educational activities that focus on developing skills for conducting research and publishing their results.
5. Specialists who place greater importance on professional values are more interested in educational activities focused on developing research skills, learning the principles of evidence-based medicine, and attending journal clubs.

Strengths and limitations
The main strength of this study is that the assessment of the professional values and educational needs was conducted not only among already working specialists, but also among those who are still in training. This approach allowed us to capture diverse perspectives. This study adds to the growing body of literature on the issues of career initiation and retention among mental health specialists.

This study has a number of limitations. Firstly, the participants’ responses were gathered via self-reports, which leaves open the possibility for potential methodological biases (e.g., the social desirability effect or informational biases). Secondly, due to the relatively small number of respondents employed in the field of mental health, aside from psychiatry, we were not able to compare professional values and educational needs between specialists with different profiles. Thirdly, the survey did not take into account many socio-demographic factors (e.g., marital status, social support), and job characteristics (e.g., number of hours worked, wages, presence/absence of administrative support, multidisciplinary medical team characteristics, work conflict resolution processes) that may have influenced the interest in mental health care. Finally, some respondents did not complete the questionnaire in full, which may have had a slight impact on our results regarding the preferences in education activities.

Comparison with the existing literature
Our findings suggest that organizational measures may need to focus not only on improving work-life balance and creating more job opportunities, but also on building an environment that stimulates intellectual activity. These findings are consistent with the results of a study from Switzerland that demonstrates the importance of intellectual stimulation in maintaining a high level of job satisfaction among Swiss physicians [21].

Our results also showed the “scientific orientation” of early career specialists, which is undoubtedly a positive trend, because the translation of science into clinical practice is one of the most important ways to improve quality [22]. Therefore, to stimulate the interest of mental health specialists in their work and improve the quality of the care they provide, these activities should be considered when developing educational strategies in the field of mental health. A promising approach would be to conduct scientific and educational activities such as journal clubs in English. This educational format was well received by medical students in Russia, as it allows them to improve their English language skills, learn the principles of evidence-based medicine, and develop the skills needed to conduct research and publish the results in international peer-reviewed journals [23].

Our results also revealed the demand for seminars on developing a CV among early career specialists still in training. On the one hand, interest in CV development among specialists who are not yet employed can indicate a high level of professional ambition and deep interest in their future field of choice, which is a positive trend. On the other hand, interest in this topic may reflect the intention of early career specialists to seek a job abroad, since using CVs is neither key nor particularly useful for finding a job in Russia. This explanation is consistent with the results of previous studies showing the migration trends of trained specialists to higher income countries [24].

The strong interest of future specialists in developing their communication skills reflects positive changes in
the field of mental health. Until recently, the problem of communication between doctors and patients in psychiatry had received almost no attention, even though communication skills are key in achieving compliance and for effective treatment [25]. There is evidence that good communication skills can improve patients’ subjective perception of the treatment process, which improves the quality of delivered care [26]. Therefore, it is necessary to plan and provide theoretical and practical educational activities aiming at developing communication skills. Currently, one of the possible directions for the development of this area is teaching communication skills using simulation models, in which specialists simultaneously acquire both clinical and nonclinical skills [28].

It is important to note that female respondents in our study were more interested in developing the skills needed to conduct their own research. This finding reflects the global trend towards the narrowing of the gender gap in science: despite the fact that women are still underrepresented in academia in most countries, the proportion of women active in research is on a steady increase [29].

Our findings indicate that specialists whose attitude towards their work is largely determined by professional values are more interested in “scientifically oriented” educational activities. Previous studies have shown that the “scientific orientation” of physicians can be associated with higher perceived professionalism and prestige [30–31], meaning that modern training programs should include modules with a focus on research in order to increase interest in psychiatry among students. Nevertheless, to our knowledge, our study is the first to report an association between professional values and a “scientifically oriented approach” among mental health specialists.

Implications for future research and practice
Based on the findings of the current study, the following suggestion can be put forth. Future research in this field may need to include non-medical specialists (e.g. clinical psychologists or social workers) and nursing staff in their sample of interest. Our results also highlight the need for inclusion of research activities as a component of mental health program curricula. Furthermore, educational resources should be made available to support the research activities of current and future care providers.

CONCLUSION
The present study suggests that job opportunities, intellectual stimulation, and work-life balance are the most important professional values for mental health specialists. The results we obtained could allow to identify the most important areas for the future educational activities which are necessary for improving specialists’ qualifications and job satisfaction. This will lead to an increase in the quality of the care provided to people with mental disorders.

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Methodology was developed by E.M. Chumakov, N.N. Petrova, M.V. Vetrova; E.M. Chumakov, M.Y. Sorokin, M.V. Vetrova collected the data; A.A. Kibitov, E.M. Chumakov, A.I. Nechaeva, M.Y. Sorokin were involved in Statistical Analysis and Interpretation of Results; M.V. Vetrova. A.A. Kibitov, A.I. Nechaeva, M.V. Vetrova wrote the first draft of the manuscript, which has been revised by A.A. Kibitov, E.M. Chumakov, A.I. Nechaeva, M.Y. Sorokin, N.N. Petrova, M.V. Vetrova.

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