Problems in the Current Psychiatry Residency Training Program in Croatia: Residents’ Perspective

Martina Rojnić Kuzman1, Nikola Jovanović1, Domagoj Vidović2, Branka Aukst Margetić3, Nina Mayer4, Sandra Blažević Zelić5, Davor Lasić6, Sanea Nadj7, Andreja Borovečki Simurina8, Marija Kudumija Slijepčeveli9, Marina Bolanča10, Milena Skočić10, Patricija Katić11, Tamara Šoškić10 and Silvana Pleština10

1 Department of Psychiatry, University Hospital Centre »Zagreb«, Zagreb, Croatia
2 Psychiatric Hospital »Vrapče«, Zagreb, Croatia
3 Psychiatric Hospital »Ivan Barbot«, Zagreb, Croatia
4 Psychiatric Hospital »Sveti Ivan«, Zagreb, Croatia
5 Department of Psychiatry, University Hospital Centre »Rijeka«, Rijeka, Croatia
6 Department of Psychiatry, University Hospital Centre »Split«, Split, Croatia
7 Department of Psychiatry, General Hospital »Virovitica«, Virovitica, Croatia
8 Department of Psychiatry, University Hospital »Dubrava«, Zagreb, Croatia
9 Department of Psychiatry, General Hospital »Bjelovar«, Bjelovar, Croatia
10 Department of Psychological Medicine, University Hospital Centre »Zagreb«, Zagreb, Croatia
11 Psychiatric Hospital »Rab«, Rab, Croatia

ABSTRACT

The aim of this study is to evaluate the quality of the current residency training in psychiatry in Croatia using parameters of professional achievements of residents and their subjective evaluations of the residency training that is being offered. 66 residents from 15 Croatian psychiatric hospitals, clinics and wards in general hospitals fulfilled the questionnaire constructed to obtain information about the profile of psychiatry residents in Croatia, parameters of educational quality and evaluation of offered residency training as seen by residents. We interviewed 89% of all residents that had a trainee status in September and October 2006 in Croatia (66 out of 74). Study results indicate that Croatian psychiatry residents are derived from a pool of very good medical students and the majority is engaged in postgraduate studies and research activities and shows high interest in specific psychiatric fields such as psychotherapy and clinical psychiatry. Most of participants are only partially satisfied with the residency training that is being offered and feel that most problems reside from the lack of practical psychotherapy, the inefficiency of the mentorship system and the lack of funding resources. The results of this study revealed the major problems of psychiatry residents in Croatia. Following those results, we will perform the study that would include mentors and supervisors from different Croatian psychiatric centers. That could enable the development of specific interventions with aim to improve current residency training in Croatia.

Key words: psychiatry, residency, Croatia, education

Introduction

The complexity of mental disorders resides in the interactions of biological, psychological and social influences. To adequately deal with mental health, one should be able to comprehend all bio-psycho-social aspects of mental disorders. Therefore, adequate approach to mental illnesses requires highly competent mental health care professionals. Adequate education during residency in psychiatry is essential for the formation of competent mental health care professionals1.

In Croatia, after the medical school and one year-internship, medical doctors obtain their license by passing the state exam. Residency training usually follows, but

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after an undefined period of time\textsuperscript{2–7}. While waiting for applications for a residency program, doctors usually work as general practitioners in specialized institutions as »secondary« doctors or in scientific projects as research fellows. Residency training follows the national program developed by the Ministry of Health and Welfare. The program lasts for four years containing several parts: introduction (6 months), clinical psychiatry (18 months), alcoholism and addictions (3 months), psychological medicine (9 months), community psychiatry (5 months), forensic psychiatry (2 months), child and adolescent psychiatry (3 months), neurology (3 months). According to the Croatian Institute of Public Health, there are currently 450 psychiatrists and 74 psychiatry trainees in Croatia.

Educational programs are very often influenced by social and political climate in a certain country. Part of the requirements set by the European Union, as a part of the process of approaching is the reform of Croatian educational system, including the reform of both university programs and residency training programs. In psychiatry, the requirements are set by the European Board of Psychiatry\textsuperscript{1}, but the current Croatian residency training does not entirely fulfill them, starting from the length of the training itself. In addition, significant differences of the training that is being offered with the training that is prescribed by the Croatian Ministry of Health and Welfare were noted\textsuperscript{8}.

In December 2005, Croatian residents (trainees) and young psychiatrist formed the Croatian Young Psychiatrists and Psychiatric Trainees Section, with the aim to promote educational activities for psychiatrists. As a part of the program, we undertook this survey with the aim to evaluate the quality of the currently offered residency training in Croatia. We tried to define the most important problems in the residency training that is currently being offered which might be nation specific, and therefore should be taken into consideration while performing the reform. In this study, We interviewed 89% of all residents that had a trainee status in September and October 2006 in Croatia (66 out of 74).

**Questionnaire**

The questionnaire was specifically designed for the purpose of the study and was reviewed by the consultant statistical specialist. Although the basic structure remained the same, the statistics’ expert helped us to formulate questions suitable for data analyses. The questionnaire consisted of three parts: 1. general/professional data (40 questions); 2. attitudes of participants toward current residency training (24 statements), which consisted of ranging statements from strongly disagree, partially disagree, don’t disagree/don’t agree, partially agree, strongly agree, don’t know; 3. this part included grading of each part of the residency training (introduction, clinical psychiatry, alcoholism and addictions, psychological medicine, community psychiatry, forensic psychiatry, child and adolescent psychiatry and neurology). The participants were asked to grade the quality and quantity of received knowledge, opportunities for practical work under supervision and the willingness of specialists to teach on a scale from 1 – insufficient to 5 – excellent.

**Statistical analysis**

Descriptive data analyses were performed using descriptive statistics. Afterwards, residents were divided into different dichotomous groups (into yes/no groups). The relationships of different groups of residents and other variables were studied by using $\chi^2$ tests, t-tests or analysis of variance, as appropriate. Where statistical differences between groups were observed, logistic regression was used to predict professional data from these variables. Analyses were carried out by SPSS 11.5 (SSPS inc., Chicago, IL, USA) statistical software package.

**Results**

**General data**

Among our participants, 17 were male and 49 female, mean age ± SD was 33.01 years ± 3.83. Their mean grade during medical school was 3.9 ± 0.47. The age of the beginning of residency training was 30.4 ± 3.97, and for the majority (58%) followed a period of 1.5 ± 1.25 years of work as doctors in the institution where future residency training would be performed.

**Academic and educational characteristics**

At the time of the interview, 1 participant had a doctoral degree (PhD), 10 participants had a master degree, whereas 23 were enrolled in doctoral studies. The majority (95%) spoke actively at least one foreign language (German, English), and passively two languages. The number of professional and scientific education courses (basic and clinically oriented courses) that the participants attended abroad is shown in Figure 1. Only one person attended professional education (visited a hospital abroad) for more than one month, and 5 participants for about a month. None of the participants attended scientific education for more than 1 month, and three participants for about a month. Only 29% of participants re-
ceived scholarships from various sources (Croatian Ministry of science, education and sport 7%, school of medicine 1%, hospital 6%, and pharmaceutical companies 2%, foreign 7%).

The data about the number of publications reported by residents are shown in Figure 2. Out of those who published at least one paper, the majority published in domestic journals: Socijalna psihiatrija (n=13), followed by Collegium Antropologicum (n=9), Croatian Medical Journals (n=8) and Psychiatria Danubina (n=6), whereas 12 participants published papers in a foreign journal.

When participants were divided in two groups, depending on whether they have published at least one paper or have never published a paper, we found significant differences in their enrollment in doctoral studies (73.9% of those who published papers were PhD students compared to 26.1% among those who didn’t publish papers, \( \chi^2 = 4.518, df = 1, p = 0.034 \)) and their affinity for neuroscience (87.5% of those who published papers showed high affinity to neuroscience compared to 12.5% among those who didn’t publish papers, \( \chi^2 = 8.447, df = 1, p = 0.004 \)). Also, those who published papers more often published papers in CC indexed journals as well compared to participants who have never published a paper (72.2%, vs. 27.8% \( \chi^2 = 30.59, df = 1, p < 0.001 \)). Logistic regression showed that enrollment in doctoral studies and obtainment of master degree were significant predictors of paper publishing (p = 0.004 and p = 0.026, respectively). When participants were divided in groups according to whether they received scholarships or not, we found significant differences in their enrollment in doctoral studies (81.1% of those who received a scholarship were PhD students compared to 18.9% among those who did not receive a scholarship, \( \chi^2 = 7.249, df = 1, p = 0.007 \)), their affinity for psychopharmacology (only 26.8% of those who received a scholarship did not show high affinity toward psychopharmacology compared to 76.2% among those who didn’t receive a scholarship, \( \chi^2 = 3.994, df = 1, p = 0.046 \)).

Age, sex, age of starting of residency training, the hospital of employment, the period of work as «secondary» doctors prior to residency training, the knowledge of foreign languages and whether psychiatry was their first choice or not, were not associated with any of the mentioned academic or educational characteristic.

**Interests and problems**

About 53% of the participants felt that psychiatry was theirs first choice as a residency program, and for the majority the choice was made prior to (42%) or after finishing (36%) the school of medicine. For others, pediatrics, neurology or internal medicine were among the first choices. The majority of participants showed high interest in psychotherapy, clinical psychiatry and child and adolescent psychiatry (Figure 3). Participants’ interest in psychotherapy was also evident in the high number of participants (n=43) who were engaged in various psychotherapeutic trainings, lead by group analytic psychotherapy (n=12), cognitive behavioral therapy (n=12), psychoanalytic psychotherapy (n=12) and family psychotherapy (n=12). Some of the residents were engaged in more than one form of psychotherapy. When participants were divided according to their enrollment in psychotherapy, statistical differences were observed in their affinity to psychopharmacology (only 33.3% of those who were engaged in psychotherapy showed affinity toward psychopharmacology compared to 66.7% of those who weren’t engaged in psychotherapy, \( \chi^2 = 4, df=1, p=0.046 \)), and psychotherapy (68.4 % of those who were engaged in psychotherapy showed affinity toward it compared to 31.4% of those who weren’t engaged, \( \chi^2 = 4.339, df = 1, p = 0.037 \)).
About a third of participants were partially satisfied with the training that is prescribed in Croatia by the Ministry of Health and Welfare (26%), and its application in practice (the training that is being offered) (26%), whereas about a third of participants were unsatisfied with it (27% and 30%, respectively). The participants identified three major problems during residency training: lack of practical work in psychotherapy, inadequate functioning of the mentorship system and the lack of funding resources (Figure 4). Those problems were defined as being of most relative importance – of all the other problems how a particular factor/problem stands out. When the quality and quantity of received knowledge, opportunities for practical work under supervision and the willingness of specialists to teach was graded on different parts of the residency training, forensics, clinical psychiatry and daily hospitals received the best average grades (forensics 4.45, 4.19, 4.55, respectively, clinical psychiatry 4.13, 4.01 and 4.24, respectively and daily hospitals 3.95, 3.73, 3.96, respectively).

Age, sex, age of starting of residency training, hospital of employment, the period of work as «secondary» doctors prior to residency training, the knowledge of foreign languages and whether psychiatry was their first choice or not were not associated with any of interest of engagement in psychotherapy training.

**Attitudes**

Attitudes of the participants are shown in Table 1. To make the results easier to read, only 12 positive statements divided into three groups – disagree, don’t disagree/don’t agree, agree, are shown. Those residents who published papers in higher percent did not believe they received most knowledge on duties compared to trainees who never published a paper (73.9 % vs. 26.1, $\chi^2 = 4.518$, df = 1, $p = 0.034$). Age, sex, age of starting of residency training, the hospital of employment, the period of work as «secondary» doctors prior to residency training, the knowledge of foreign languages and whether psychiatry was their first choice or not were not associated with attitudes.

**Discussion**

Since the majority of Croatian psychiatry residents were included in the study, we believe a representative sample was achieved, which enables us to draw relevant conclusion about the situation on currently offered residency training in Croatia.
Psychiatrists in training in Croatia are mostly females and the majority is satisfied with psychiatry as their career choice. Psychiatry residents seem to be chosen from the pool of average medical students, achieving the mean average grades similar to average grades of all medical students. However, the mean age of their beginning of residency training is 30.4 (SD = ± 3.97), which makes the period from their graduation to enrollment in the residency training about 6 years. Compared to Western and other European countries, this seems a very long period which produces unnecessary delay in forming a competent specialist. Major sociopolitical changes in Croatia, such as transitional changes and the recent war history, might provide an explanation for the observed slowness of educational processes. However, that fact cannot be explained solely by historical events. Although the majority of participants (65%) have worked for a mean of 1.5 ± 1.25 years as general practitioners in the institution where future residency would be performed, this work is excluded from the normal residency training. Since in Croatia the residency program lasts for four years, which is somewhat shorter than in Western countries, working period in the institution prior to residency training could provide the additional one or two years of training for the majority of participants. However, it is unacceptable that this work is not formally acknowledged and that the program is not equal for all residents. That probably might partly explain the fact that the majority of participants feel those four years of residency training is adequate.

Our participants showed a high interest in science observed through their enrollments in doctoral studies, and by the fact that about a third had already published scientific papers. Those participants who are more prone to publish papers show higher affinity toward neuroscience, and are enrolled in doctoral studies, which might indicate a subgroup of residents with special interest in an academic career. Similar results were observed in Hoer’s and Linesman’s study (2004), who found that 30% of postdoctoral fellows have published papers during residency training. The question arises whether this result reflects the more and more demanding requirements to a gain a doctoral degree or a general trend of physicians to become a professional-scientist.

According to our results, human mobility factor in Croatia is lacking, considering that the majority of participants have never attended any kind of professional (about 55%) and scientific (about 70%) course. Of those who had, the majority (>85%) went abroad for a week, and had no funding. Since the majority has gone for professional education for about a week, we can assume that it was a congress or symposium, which might therefore explain that most funding was received from hospitals or pharmaceutical companies.

Moreover, exchange possibilities are perceived as lacking and the problem as an important one. Those who received funding are more often enrolled in doctoral studies. This might be in concordance with the observation that human mobility is correlated with higher academic achievements. However, the observations that participants who show higher affinity toward psychopharmacology more often receives scholarship might indirectly indicate that most participants are unaware of funding sources other than pharmaceutical companies. Since the participants seem motivated to go abroad, we believe that the majority of them are not sufficiently aware of the current exchange possibilities and funding options. However, it should be mentioned that the current legislation on residency trainings in Croatia is too strict and does not recognize the possibility of attending a part of residency training in other countries. We believe that the ongoing process of harmonization of educational systems in EU could help ameliorate these obstacles. Considering that human mobility is highly correlated with future academic achievements, we believe that one of the most important results of this study is the recognition of this problem.

Our participants showed a high interest in psychotherapy, followed by clinical psychiatry and psychopharmacology, whereas only a few showed interest in epidemiology, addiction, psychotraumatology and mental health. The participants who were engaged in psychotherapy showed higher affinity towards psychotherapy and lower interest in pharmacotherapy compared to those who weren’t engaged in psychotherapy, which might appear as that there is a clear division between those two subgroups of residents – biologically and psychodynamically oriented. However, considering a large portion of those who are enrolled in psychotherapy (>65%) the results probably show the participants’ awareness of the unnatural dichotomy between psychological and biological approach in the treatment of psychiatric patients and the need for reunion of psychotherapy and pharmacotherapy, whereas only a minority of very biologically oriented residents do not show affinity towards psychotherapy. Very little interest for the field of addiction and mental health is a trend observed as well in counties that have undergone transitional changes, and is opposed to the modern approach in psychiatry. Greater investment in the educational resources in the field of mental health is certainly needed in Croatian residency training. The strikingly low interest for psychotraumatology, in the country with a recent war history, and with a large number of traumatized individuals where psychiatrists specialized in psychotraumatology are needed, looks like a paradox. However, the discussion on this issue exceeds by far the topic of educational problems.

About a third of participants were only partially satisfied with the training that is prescribed in Croatia by the Ministry of health and Welfare, and its application in practice (the training that is being offered), and another third was completely unsatisfied with it. This problem was already noticed in the study by Strkalj Ivezic et al, 2003, where the authors also identified problems in the practical performance of the obligatory residency training. In this study, the participants identified three major problems during residency training: lack of practical work in psychotherapy, inadequate functioning of the
mentorship system and the lack of funding resources. All identified problems were ranged as being of great importance, with the addition of lack of practical work in pharmacotherapy. The majority of participants felt that they do not have the opportunity to improve their knowledge and learn through active work in the field of psychotherapy and pharmacotherapy with patients. This might explain why residents believed that they received the most knowledge on duties, considering that duties are a form of practical work under supervision. This is again consistent with the study results obtained by Strkalj Ivezic et al., (2003), where the authors also identified inadequate functioning of the mentorship system. Our current results indicate that the problems are still persistent and certainly need more active approach. The passivity of the educational system during residency training is also evident when comparing the average grades of each part of the residency training obtained from both studied – our results were very similar compared to Strkalj Ivezic et al., (2003).

Problems in the functioning of the mentorship system have been observed in Western countries as well. The consequences of its inadequate functioning can be observed as lack of practical work under supervision, which might be particularly important in the field of psychotherapy but also in scientific work. As the majority of participants expressed the lack of help from their mentors on their masters or doctoral thesis. Proper functioning of the mentorship system is of great importance for the formation of competent specialists. Therefore, we plan to undertake another study, which shall be performed among mentors with the aim of identifying problems and pitfalls in the mentorship system.

The problems of inadequate funding pertain to insufficient funding of psychotherapy training, doctoral studies and scholarships for professional or scientific educational courses. Since the lack of psychotherapy training during residency is apparent, and the majority of participants feel that residency training should provide more educational opportunities in the field of psychotherapy, the majority of participants engage privately in psychotherapy trainings. As the motivation appears to be high among residents, partial funding of various psychotherapeutic techniques or introducing more practical psychotherapeutic work under supervision during residency training might contribute to even greater involvement of residents in certain psychotherapeutic schools and lead to more competent psychiatrists.

The cost of doctoral studies (rated as too high compared to salary); along with the lack of scholarships for professional or scientific courses present a significant obstacle for a subgroup of residents who want to fill up the expectation of being a physician scientist. As scientific achievements are crucial for the advancement of clinical practice as well, the reform of the residency training should include some solutions to identified problems.

Several limitations should be acknowledged. External variables non-related to residency training, such as socioeconomic status, martial status, etc. might have influenced current results, at least in some items. Therefore, follow-up studies on quality of residency training are necessary.

## Conclusion

Overall, the main findings of this study were:

- Croatian residents show high interest and engagement in clinical psychiatry, psychotherapy and scientific work and aim to become competent mental health care professionals. There might be a difference in affinity toward scientific work and academic career among residents reflected by their enrollment in doctoral studies.

- The major problems during residency training are lack of practical psychotherapy, inadequate functioning of the mentorship system and lack of funding resources. Since those problems are persistent and reduce the quality of the Croatian residency training, more active approach is needed. The reform should include concrete measures to allow further development of scientific and clinical work. Therefore, we plan to undertake another study, which shall be performed among mentors with the aim of identifying problems and pitfalls in the mentorship system.

## References


M. Rojnić-Kuzman

Department of Psychiatry, Zagreb University Hospital Centre, Kišpatičeva 12, 10000 Zagreb, Croatia
e-mail: mrojnic@gmail.com

PROBLEMI SPECIJALISTIČKOG USAVRŠAVANJA IZ PSIHIJATRIJE U HRVATSKOJ: PERSPEKTIVA SPECIJALIZANATA

SAŽETAK

Cilj studije je procijeniti kvalitetu trenutnog programa specijalističkog usavršavanja iz psihijatrije u Hrvatskoj koristeći objektivne pokazatelje akademskog postignuća specijalizanata i njihovu subjektivnu procjenu formalnog programa specijalizacije i provedbu istog u praksi iz perspektive specijalizanata psihijatrije. Pomoću upitnika smo ispitali 66 specijalizanata iz 15 psihijatrijskih ustanova, klinika i psihijatrijskih odjela u općim bolnicama u Hrvatskoj. Upitnik sadrži pitanja o općem profilu specijalizanata psihijatrije u Hrvatskoj, o objektivnim pokazateljima akademskog postignuća psihijatara, te ocjenu postojećeg programa specijalizacije. Ispitali smo 89% svih specijalizanata koji su u rujnu i listopadu 2006. godine imali taj status u Republici Hrvatskoj (66 od ukupno 74 specijalizanata). Dobiveni rezultati ukazuju da su specijalizanti psihijatrije bili vrlo dobri studenti tijekom školovanja na medicinskom fakultetu, te da je većina njih nastavila poslijediplomsko školovanje. Dio specijalizanata pokazuje velik interes za znanstveni rad i kliničku psihijatriju, a većina je uključena u psihoterapijsku edukaciju izvan redovitog specijalističkog usavršavanja. Većina ispitanika je tek djelomično zadovoljna provedbom programa specijalizacije, te smatra da su glavni nedostaci vezani uz nedostatak financijskih sredstava. Rezultati otkrivaju glavne probleme specijalističkog usavršavanja iz psihijatrije u Hrvatskoj. Slijedeći navedene rezultate provest ćemo istraživanje među mentorima, što će omogućiti daljnje sagledavanje problema i razvoj specifičnih mjera u svrhu poboljšanja edukacije iz psihijatrije u Hrvatskoj.