

Factors Affecting the Choice of Psychiatry as a Specialty in Psychiatry Residents in Iran

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Objective: The aim of this study was to investigate the current factors affecting the choice of psychiatry as a specialty and to detect the main factors in their choice.

Method: This descriptive study included 75 first year psychiatry residents in the academic year of 2014/2015. A Likert-type anonymous questionnaire consisting of academic and demographic data with 43 questions, which evaluated the reason for choosing psychiatry as a specialty, was given to the residents.

Results: The participants had a positive opinion about 28 items of the questionnaire, meaning that these items had a positive effect in choosing psychiatry as a specialty (questions with P value less than 0.05 and a positive mean). More than 80% of the residents had a positive opinion about six items of the questionnaire (amount of intellectual challenge, variety of knowledge fields relevant to psychiatry, emphasis on the patient as a whole person, the importance of treating mental illnesses in the future, work pressure and stress of the field during residency and coordinating with the person's life style). The participants had a negative opinion about two items of the questionnaire (questions with a P value less than 0.05 and a negative mean). They included experiencing mental illness personally through relatives or close friends as well as the income in psychiatry. Moreover, 36% of the residents with a more definite opinion mentioned that they chose psychiatry as a specialty because of the limitations in residency exam.

Conclusion: Assistants had a positive opinion about most of the questions and this positive attitude seemed to be an important factor in their specialty choice. However, attending to the preventing factors may increase the selection of psychiatry as a specialty.

Key words: Choice, Psychiatry, Resident, Specialty

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P psychiatry is facing a deficiency of specialists, named "recruitment crisis" (1). Many researchers in different countries witnessed negative attitudes of medical students toward psychiatry and the small number of medical students choose psychiatry as their future career (2). A number of medical students have no interaction with patients with mental illness before their presence in the psychiatry ward, and some of them believe that working in this field is stressful (3, 4).

Recently, many studies have been conducted on the factors affecting the selection of psychiatry as a specialty (5). Evidence shows that students consider psychiatry as an interesting medical discipline, whereas they believe this career has a low socioeconomic level among other specialties (6). Attitude toward psychiatry has an impact on individuals working in this field and treatment of mental patients (7).

There are a few researches on the perception of psychiatry residents and specialists (8-9).

In Iran, medical training lasts at least six years and medical students usually undertake a one-month

psychiatry clerkship in the fourth or fifth year of training as well as approximately 20 hours of theoretical course. In 2014, the number of psychiatrists was 1500-1700 in Iran, indicating a considerable deficiency in this area (10).

Previous studies reported a decline in interest of medical students about working in psychiatry (11). Some studies have shown a positive attitude toward psychiatry as a subject and choosing it as a career among preclinical medical students (12, 13). Some researchers believe that a better attitude would not necessarily lead to the choice of psychiatry as a specialty (2).

Medical education theorists have several justifications about psychiatric situation (14). They have linked the reluctance of medical students to psychiatry with various factors including biological emphasis of psychiatry in recent years, no economic justification for this field compared to other medical specialties and even unfair competition of social workers and psychologists with psychiatrists, inhibitor thoughts of colleagues and non-psychiatrist consultants (15, 16).

Approximately 3% of all medical students choose psychiatry as a career (17) and individuals with positive attitude to mental health who select psychiatry are about three times more (18). In this study, we aimed to investigate factors affecting the choice of psychiatry in psychiatry residents instead of medical students.

Materials and Method

An anonymous 43- item Likert-type questionnaire was prepared using the questionnaire of the Galeazzi et al. study (5). We added the following five items to the questionnaire: Work pressure and stress of field during residency; work pressure and stress of field after graduation; the legal complaint of psychiatry; coordination with the person's life style; and limitations in choosing specialty because of residency exam. The questionnaire also contained academic and demographic data and was translated into Farsi with forward/backward method.

Content validity was confirmed by five faculty members of the Department of Psychiatry at Imam Hossein Hospital, Tehran, Iran and by a pilot study on 10 cases of psychiatry residents. Using Cronbach alpha, reliability calculated to be 0.872, representing a high internal consistency.

In the questionnaire, participants were asked to rate each of the 43 items attributed to psychiatry as a specialty on a 5-point Likert scale. The scale ranges from -2, indicating that the factor had a very negative effect on their choice, meaning that they felt that the aspect had led them away from choosing psychiatry as a specialty to +2, indicating that the quality of item attributed to the discipline exerted a very positive effect on their decision to choose postgraduate training in psychiatry. Completion of the questionnaire took approximately 20 minutes.

The sample size to estimate the average score given to the questionnaire items, with pooled standard deviation (SD) 0.67, precision 0.15, and Type I error 0.05 and power of the test 80% determined 75 persons. Considering 20% attrition, questionnaires were distributed to 90 residents studying in the first year of psychiatry. The questionnaire was anonymous, and its completion was voluntary; returning a completed questionnaire was considered as an informed consent.

Out of the 90 participants, 77 returned the questionnaires and two were excluded from the analysis due to missing data. Multi-stage sampling was conducted. The questionnaires were distributed to the participants by one of the authors at Shahid Beheshti University. In other centers, after coordination with a faculty member of the department of psychiatry, a professor delivered and collected the questionnaires after the residents completed them.

Mean, SD, frequency and percentage were used to describe the data. One- sample t- test was used to examine the role of the questions in choosing

psychiatry as a specialty. The mean of each question was compared to zero, and if the average of the relevant question was significantly different from zero, it meant that the question was involved in this selection. Mann-Whitney test was used to examine the role of gender on scores from each of the questions. Data were analyzed using the Statistical Package for the Social Sciences (SPSS) software version 20. The Ethics Committee of Shahid Beheshti University of Medical Sciences (SBUMS) approved this study.

Results

There were 30 (40%) respondents at Tehran universities including Tehran University of Medical Sciences (TUMS), Shahid Beheshti University of Medical Sciences (SBUMS), Iran University of Medical Sciences (IUMS), and University of Social Welfare and Rehabilitation Sciences (USWRS) as well as 45 (60%) respondents at Mashhad, Tabriz, Shiraz, and Isfahan universities.

The participants included 17.6% males and 82.4% females, of whom, 82.4 and 17.6% were married and single, respectively. The average (\pm SD) age of the residents was 30.3 (\pm 4.09) years (Table1). The mean (\pm SD) final score at the medical school was 16.38 (\pm 0.94) and the mean (\pm SD) score of residency exam was 321.11 (\pm 30.55) (Table1). The minimum times of taking the residency exam was one time and the maximum was five times; and the frequency was 46.4 and 4.3%, respectively.

Participants had a positive opinion about the 28 items of the questionnaire, which means that the above factors had a positive effect on choosing psychiatry as a specialty; i.e., questions with p value <0.05 and positive mean (Table 2). Six prominent features which persuaded residents to select psychiatry were as follows: Amount of intellectual challenge (N = 58); variety of knowledge fields relevant to psychiatry (N = 62); emphasis on the patient as a whole person (N = 62); importance of treating mental illnesses in the future (N = 65); work pressure and stress of the field during residency (N = 60); and coordination with the life style of the person (N = 63) (items 1, 3, 4, 36, 39, and 42).

The participants had a negative opinion about two items of the questionnaire, which indicates that these factors had a negative effect on their choice; i.e., questions with p value <0.05 and negative mean. These include experience of mental illness personally or by relatives or close friends (N = 35) and salary (N = 43) (items 7, 23). Moreover, 36% of the residents chose psychiatry due to limitations in their residency exam (item 43).

In terms of examining gender role in the response to each of the questionnaire items, female participants had a positive opinion about three items of the questionnaire [Questions with P value <0.05 and female median (IQR)> male median (IQR)].

Table1. Baseline Characteristics of Psychiatry Residents

Characteristic	Mean	SD, Range
Age (years)	30.3	4.09, 25-46
	N*	%
Sex		
Female	61	84.4
Male	13	17.6
Marital status		
Single	13	17.6
Married	61	84.4
Final score at medical school (Maximum 20)	16.38	0.94, 14.14- 18.70
Score at residency exam(Maximum 600)	321.11	30.55, 119-380

*Total does not equal 75 because data were missing for a respondent

Table2. Current Factors Affecting the Choice of Psychiatry as a Specialty in Psychiatry residents

Question	Mean*	95% CI	P value**
1 Amount of intellectual challenge	1.083	(0.87,1.29)	<0.001
2 Opportunity for cultivating interest in humanities	0.905	(0.62,1.2)	<0.001
3 Variety of knowledge fields relevant to psychiatry	1.213	(1.01,1.42)	<0.001
4 Emphasis on the patient as a whole person	1.333	(1.12,1.55)	<0.001
5 Original and unique themes encountered in psychiatry	1.12	(0.91,1.33)	<0.001
6 Curiosity about and attraction to the topic "madness"	0.365	(0.1,0.63)	0.008
7 Experience of mental illness personally or by relatives or close friends	-0.52	(-0.8,-0.24)	<0.001
8 Experience of psychological problems personally or by relatives or close friends	-0.162	(-0.46,0.14)	0.284
9 Opportunity to know unexplored aspects of self by working with patients	0.88	(0.63,1.13)	<0.001
10 Contact or close acquaintance with psychiatrists	0.28	(0,0.56)	0.052
11 Importance of social and relational issues in psychiatry	1.093	(0.9,1.29)	<0.001
12 Intensity or quality of emotional contact with psychiatric patients	0.176	(-0.01,0.36)	0.068
13 Importance of narratives and meanings more than significance of technology	0.351	(0.1,0.6)	0.006
14 Opportunity to practice psychotherapy	1	(0.76,1.24)	<0.001
15 Opportunity for long-term relationships with patients	0.093	(-0.14,0.33)	0.429
16 Contact with psychiatric patients during medical school	0.12	(-0.13,0.37)	0.343
17 Global quality of psychiatric teaching at medical school	0.56	(0.33,0.79)	<0.001
18 Teaching style and personality of professors of psychiatry	0.96	(0.72,1.2)	<0.001
19 Themes of psychiatric lectures	0.827	(0.63,1.02)	<0.001
20 Contact with psychiatric residents	0.427	(0.18,0.68)	0.001
21 Opportunity for complete use of medical training	0.253	(0.04,0.47)	0.021
22 Global opportunity for employment after specialty	-0.013	(-0.31,0.28)	0.928
23 Salary in psychiatry	-0.653	(-0.92,-0.38)	<0.001
24 Range of different employment opportunities after specialty	0.067	(-0.2,0.33)	0.619
25 Status of psychiatry among peers	-0.08	(-0.35,0.19)	0.552
26 Status of psychiatry within the medical faculty	-0.053	(-0.32,0.21)	0.686
27 Status of psychiatrists in society	-0.053	(-0.32,0.22)	0.695

Table2 (Continue). Current Factors Affecting the Choice of Psychiatry as a Specialty in Psychiatry residents

Question	Mean*	95% CI	P value**
28 Status of psychiatry among family and friends	-0.227	(-0.52,0.07)	0.129
29 Stigma of mental illness	-0.267	(-0.55,0.01)	0.061
30 Prestige of the department of psychiatry or the university chosen for training	0.533	(0.3,0.76)	<0.001
31 Pace of development in psychiatry as a field	0.893	(0.66,1.13)	<0.001
32 Progress in the biological study and treatment of mental illnesses	0.905	(0.68,1.13)	<0.001
33 Recent developments of psychiatry as a neuroscience	1	(0.79,1.21)	<0.001
34 Opportunities for research	0.8	(0.54,1.06)	<0.001
35 Level of evidence base of psychiatry	0.514	(0.3,0.72)	<0.001
36 Importance of treating mental illnesses in the future	1.307	(1.1,1.51)	<0.001
37 Efficacy of psychiatric treatments	0.76	(0.54,0.98)	<0.001
38 Range of psychiatric therapies	0.712	(0.48,0.95)	<0.001
39 the work pressure and stress of field during residency	1.187	(0.97,1.4)	<0.001
40 the work pressure and stress of field after graduation	1.067	(0.85,1.29)	<0.001
41 The legal complaint of psychiatry	0.419	(0.15,0.69)	0.003
42 Coordination with the person's life style	1.333	(1.14,1.53)	<0.001
43 Limitations in choosing specialty because of residency exam's score	-0.093	(-0.4,0.22)	0.55

* Responses were scored on a 5-point Likert scale ranging from -2 (very negative factor) to +2 (very positive factor).

** P value based on one sample t-test

They included importance of social and relational issues in psychiatry, work pressure and stress of the field during residency, coordination with the person's life style (items 11, 39 and 42).

The median in the female and male groups was 1 vs. 0.5 in question 11, 2 vs. 0 in question 39 and 2 vs. 0 in question 42, respectively.

Discussion

This study was the first type in its kind in Iran, which tried to determine the current factors affecting the choice of psychiatry as a specialty in psychiatric residents to detect the factors affecting recruitment into psychiatry as a medical specialty.

According to the results in this study, 82.4% of the participants were female; this rate was 75% in an Italian study (5), 80% in Romania (19) and 68.3% in Turkey (34). In our study, 36% of the residents with more definite view mentioned that they chose psychiatry as a specialty due to limitations in the score of residency exam. However, Voinescu et al. reported that the majority of junior doctors in psychiatry (71%, n = 44) believed that many trainees who had not been able to obtain a position in other specialties eventually entered psychiatry (19).

In our study, participants had a positive opinion about 28 items of questionnaire, which was more than other studies (5, 34). Some studies named psychiatry as a stressful career leading the students not to choose psychiatry as a specialty (20). However, in our

study, the majority of the residents had a positive opinion about the work pressure and stress of the field during residency and after graduation.

In previous studies, psychiatrists' discontent due to low income and negative attitude of the society to psychiatry adopted the attitude of medical students to psychiatry and made their decision about specialty selection (15, 21-25). Some of the researchers believe that the economic situation of the students play an important role in their decision to choose a specialty (26), and choosing a field may be affected by some factors such as income (27, 34). In this study, salary in psychiatry had a negative effect in participants' choice. In Ozer et al. study, teaching style and personality of professors of psychiatry were the most positively rated items affecting the choice of psychiatry (34) in contrast to the findings of Italian study (5); therefore, this point should be considered by educators who do not believe in the impact of their actions on student's perceptions (Factor 18).

Our analysis showed that the main motivation for choosing psychiatry as a specialty in these residents seemed to be the curiosity distributed across the different levels of the field: Interest in the utility of the relational and affective interaction with patients (Factors 4 and 5); fascination with the mystery of mental illness (factor 6); obvious desire for knowledge (Factor 1) and various aspects of psychiatry such as psychotherapy; and the narrative perspective of the discipline and a variety of specific interventions

(Factors 3, 13, and 38). Galeazzi et al. (5) showed that future psychiatrists might have a greater desire for a deep emotional contact with patients (Factor 12); however, this was not significant in our study.

Amini et al. (28) found that psychiatric internship cannot persuade more students to choose psychiatry as a possible career and it seems that psychiatric training in Iran does not positively affect students' attitude to psychiatry. However, in our study, the global quality of psychiatric education at medical school (Item 17) as well as teaching style and personality of professors of psychiatry (Item 18) had a positive influence on participant's choice.

Limitations

This study had some limitations. One limitation was related to the nature of the questions. Although the questionnaire was translated consistent with scientific principles, the level of understanding the questions in the participants might have been different as an inevitable human error.

The second limitation was that the participants' response might have been affected by a few months of residency. Another limitation was that psychiatry residents are only a small part of the individuals who have chosen the field of psychiatry. Some of them were not admitted at all and some had been accepted in other fields.

Therefore, our results cannot be generalized to the entire medical students who have selected this career. We did not monitor changes in attitudes during residency; however, some studies report the modification of medical students' attitudes during medical education (29-33). Furthermore, the participants were psychiatry residents, not first-year or midcourse medical students, who are less certain about their future training choices.

Conclusion

The findings of this study revealed that psychiatry residents had a positive opinion about most of the questions and this positive attitude seemed to be the important factor in their choice of specialty. However, attending to the preventing factors may increase the selection of psychiatry as a specialty.

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Conflict of interest

The authors declare no conflict of interest.

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