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**INVESTIGATING THE EFFECT OF YEARS OF THE PSYCHIATRY RESIDENCY  
ON THE DEVELOPING PHYSICIAN-PATIENT EMPATHY**

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**ABSTRACT**

Empathy is one of the three key skills for psychiatrists. A psychiatrist cannot collect useful information about patients without empathy. In addition, the psychiatrist cannot properly communicate with the patient to encourage him/her to cooperate during the course of treatment. Despite the importance of this issue, empathy has almost no place in educational system.

To determine the effect of years of the Psychiatry residency on the developing empathy. This study was ex post facto research. Sampling strategy was purposive. Because of limitation on population inevitably the whole population was included in the sampling that was consisted of 84 psychiatry residents from the medical universities of Tehran, Iran. Developing empathy in during residency was assessed using the Jefferson Scale of Physician Empathy (JSPE) with 20 Likert-type items.

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According to the results, development of empathy was not significant during residency. There was no significant difference between male and female residents in terms of empathy level. Moreover, marital status had no effect on the empathy level of psychiatry residents. Also there is no relation between empathy with year of residence, gender and marriage.

Empathy is a concept and a basic skill that enables psychiatrists to gain basic information about patients. In addition, empathy provides a trusted environment in which patients will cooperate during the treatment process. The present study tries to examine the role of current educational system in developing empathy in psychiatric residents.

**Keywords: Psychiatry Residency, Physician--Patient, Developing, Empathy**

## INTRODUCTION

Empathy is the exact perception form of mental framework of others together with the emotional and conceptual aspects related to it, in the same way that the other person has experienced it. Without it will be forgotten it is only a state of "as if", therefore, empathy refers to feeling the suffering and pleasure of others as well as understanding its reason, without forgetting as if this thing has happened in real [1, 2]. Empathy after specialization is the second important measure in a psychiatric interview [3]. For the first time in 1918 Sathard raised the importance of empathy in clinical, prognosis and diagnosis of diseases.

Empathy is a core element of patient-centred communication [4, 5, 6]. It has been shown to enhance outcomes [7, 8], increase patient satisfaction [9, 10], improve patients symptoms [6], reduce anxiety [11], enhance patient enablement [12], reduce time and expense [13] and improve compliance [14,

10]. Furthermore patients are reported as wanting professionals to be empathic as well as knowledgeable and proficient [15, 16].

With all its importance, still psychiatrists doesn't have a single definition of the reason this topic is important in treatment, the impact of empathy in treatment and relationship with referenced, sources of producing empathy in human and especially teaching empathy to psychiatrists. And more importantly, almost we can say that there is no absolute training program for enhancement of empathy. traditional and common teaching in high psychiatry residency programs are based on improving specialized skills of psychiatrists and final evaluation for confirmation of their qualifications to become a Psychiatrist is mainly on the basis of these specialized skills.

Based on what Atmer says, three main skill should be available in Therapists (3) one of these skills is specialized knowledge that is based on having specialized information and knowledge of diseases. Other two skills are the skill of having authority that considering different factors that are influential on the relationship between a psychiatrist and patients referring to him, social - economic - cultural level of most of the psychiatrists can be mentioned and the belief that no matter what they are having better and more mental knowledge and information, the location and environment of the meeting place in which the psychiatrist is sitting authoritative in front of the patient and on the other hand, lower economic - cultural status of most of the patients who are referring to the psychiatrist and on top of that their poor mental state that have placed them in a needy situation together contribute in most of the times to put the psychiatrist in a superior and higher authority in the relationship between psychiatrist and the patient. Hence, there not so much need for teaching enhancement of authority skill.

Therefore, the only skill in the three main skills of psychiatrist that not only social - cultural and economic variables will contribute to it as in authority skill, and there are multiple factors that even from before can prevent the establishment of a

proper and needed empathy between the therapist and the person referring to him/her, such as educational background of the therapist, his previous experiment in his personal life, negative impacts of those who are referring to therapists in recognition and remembers past negative memories are among factors that rather to a great extent not only are a function of personal experiences but are a function of economic - social and cultural factors of the Habitat status of therapists and in a way are dependent on the culture of every country [6] and therefore, this study can to an extent presents a oriental model of the empathy rate and level in therapists which gives it a special importance [1].

on the other hand, not only in Iran but in most of the countries in teaching High levels of psychiatric there is no special program for teaching empathy and almost all the teachings are based on specialized teaching [7]. As it has been assumed that empathy is inherent and spontaneously exists or learnt and hence doesn't need a special education. Especially in Iran that residency is merely through written tests and though evaluation of specialized knowledge of test givers and considering the variables influential on empathy, including attachment pattern and metal-cognitive capabilities , none of these can be evaluated

through this written test and therefore residents which any level of empathy are admitted in this course [7, 8]. And based on these facts, first the relationship empathy has with other variables that are related to social, cultural and educational model and second, educational style of residency in psychiatry course the researcher decided to study the effect of this educational style in psychiatry residents of the most prominent medical universities of Iran that educate almost 70% of Psychiatry residents, so that this can be used by other researchers as a criterion for comparison. And at the same time will be a document emphasizing on the need to re-evaluate the current educational system of residency and providing new educational methods with less shortcomings. Hence in the present study we intent to explore the effects of traditional training in psychiatry courses in main universities of medical sciences in Iran in the course of psychiatry on the growth rate of psychiatrist residents during their 4 years of residency and whether this rate of empathy skills changes consistently with the number of years of residency course and whether it improves or no. at the same time, we explore that empathy is related to which of the factors including gender, marital status and years of clinical experience and work.

## PATIENTS AND METHODS

The samples were selected from willing psychiatric residents of medical universities of Tehran, Iran using the purposive sampling method. Because of limitation on population inevitably the whole population was included in the sampling that was consisted of 84 psychiatry residents from the medical universities of Tehran, Iran. Some of questionnaires were not complete so we could not use them.

- 1) A researcher-made questionnaire was used to collect the demographic data including gender, age, marital status, educational level and years of clinical practice.
- 2) The Jefferson Scale of Physician Empathy (JSPE)

The questionnaire was prepared at Thomas Jefferson University in 2000 to assess empathy in physicians. JSPE includes 20 questions with a score of 1 to 7 for each question. A score of 1 indicates disagreement while a score of 7 represents total agreement. A higher score means higher agreement. Of 20 questions, 10 are negative and 10 questions are positive [20].

There are two versions of JSPE including the S- and Hp-versions. The S-version is used to assess the degree of empathy in medical students, while the Hp-version is used to evaluate empathy in physicians. There are

very few differences between these two versions. Thus, the Hp-version is used to collect data.

The minimum and maximum scores are 20 and 140 respectively. To examine the reliability of the questionnaire, JSPE and IRI (Interpersonal Reactivity Index, degree of empathy in general population) were used to evaluate empathy in 93 first-year internal residents at Thomas Jefferson Hospital (2005). A statistically significant correlation ( $P < 1\%$ ) was found between the empathy scores obtained by the two questionnaires. This study supports the reliability of JSPE [20]. Moreover, the simultaneous validity of the questionnaire was confirmed [21]. In another study on 704 physicians graduated from the Philadelphia University, the re-test reliability and the Cronbach's alpha were obtained to be 65% and 81% respectively (2002) [20]. Keikhavani obtained a Cronbach's alpha coefficient of 79% in a study on 405 physicians (2006). Keikhavani examined 20 residents and obtained a Cronbach's alpha coefficient of 88%. The retest was performed on 20 residents with an interval of two weeks and a retest reliability of 94% [22].

A Cronbach's alpha coefficient of 75% was obtained in the recent study. The data was analyzed using SPSS and results were extracted. Descriptive statistics including

frequency distribution, frequency percent, mean, standard deviation. The inferential statistics including one-way analysis of variance (ANOVA) were used also Along with independent sample t- test. All respondents initially became familiar with the research design and participated in the study after providing a written consent. To protect the confidentiality of personal information, all questionnaires were labeled anonymous and are identified only by codes.

## RESULTS

**Tables 1** show the demographic data. As shown in these tables, the mean ages of married male and female residents were about 35 and 31 years old respectively. These mean values are higher than that of single male and female residents. As shown in **Table 1**, 46 residents were married and 33 were single. The information about age was not complete.

**The Primary Hypothesis:** years of the residency effect on the empathy Psychiatrist. According to the results of Kolmogorov-Smirnov test for normality the distribution empathy score is normal ( $Z=0.102$ ,  $DF=75$ ,  $P=0.051$ ). Based on result of Levine's Test we can say that Equality of Variance is exist ( $F(2, 77) = 2.494$ ,  $P=0.09$ ), so the One-way analysis of variance (ANOVA) can be used to test the primary hypothesis. As results in **Table 2** show there is no any difference between three groups ( $F(2, 77) = 0.354$ ,

P=0.703, Eta=0.010). The physician-patient empathy score means for the first, second and third-year residents is 112.12, 116.58 and 113, respectively.

**Second Hypothesis:** There is a difference between married and single residents and psychiatrists in terms of empathy development. Based on the results presented in **Table 3**, there is no significant difference

between the married and single residents in terms of empathy level ( $p > 0/05$ ).

**Third Hypothesis:** There is a difference between male and female residents in terms of empathy development. Based on the results shown in **Table 4**, there is no significant difference between the male and female psychiatric residents in terms of their mean empathy score.

**Table 1: Age In Terms of Marital Status and Gender**

Marital status	Gender	Frequency	SD	Mean
Single	Female	21	1.632	30.48
	Male	12	2.985	32.00
Married	Female	22	3.011	31.75
	Male	24	5.19	35.45

**Table 2: The ANOVA results for the physician-patient empathy scores in three groups**

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig	Partial Eta Squared
Inter-group	71.520	2	35.760	.354	.703	.01
Intra-group	7269.600	77	100.967			

**Table 3: The results of independent t-test for mean empathy scores of married and single psychiatric residents**

Marital status	Number	Mean	SD	t- value	DF	Sig
Married	48	115.13	12.69	- 0.918	78	0.361
Single	32	112.38	13.76			

**Table 4: The results of independent t-test for mean empathy score of male and female psychiatric residents**

Gender	Number	Mean	SD	t- value	DF	Sig
Male	35	114.11	15.81	- 0.53	78	0.96
Female	45	113.96	10.75			

## DISCUSSION

This study in its own right is one of the first rate studies that has explored the growth of empathy rate only in psychiatrist residents. Most of the studies in this regard have been conducted on medical students and residents of all courses.

In this study, the average of empathy score in residents in first year is 112.12, in second year it is 116.58 and in third years it is 113.5 and the results of variance analysis indicate that there is no significant difference statistically between physician empathy and patients in psychiatrist residents in different years of their residency and the growth rate

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in empathy during residency years is small and insignificant and this indicate that psychiatrist residents during their educational course are not going through a skill teaching system of empathy and in fact are not being educated with regards to one of the main and most important skills of psychiatry. Although, in studies of educational program of residency also teaching empathy doesn't have codified status like what we see regarding specialized education. However, in multiple studies that have been conducted in Psychiatry residents their empathy has been higher than the residents in other specializations. Among these studies we can refer to a study that has obtained an average score of empathy in psychiatry residents equal to 114.2 that is almost close to the score obtained in the present study, while the score obtained for empathy in other courses are less and has a significant difference with that of psychiatry residents [22]. In another study conducted in 2009 by Shariat and colleagues on specialized residents in the 4th years, the average score is 104 and the minimum empathy in residents in 2nd year is equal to 98.3 that no significant difference has been seen between empathy and different educational years (20).

In yet two other studies conducted by Chen et al., in 2007, it has been shown that not only empathy hasn't increased with study in medical university but also it has reduced [20].

Contrary to these two studies, two articles have been published in 2008, the results of which indicate to the effect of increased empathy level after participating in a 25 hour workshop with regard to communicational and empathy skills that indicate to the fact that with a little bit of objective and goal-oriented planning empathy skill in residents can be increased. This study rejects those theories that emphasize that empathy is inherent and therefore cannot be changed [15], although in the present articles we don't have the opportunity to discuss the differences of these two theories, but in general, empathy should be considered as a skill that although it doesn't increase with increasing the level of knowledge but can be enhanced with an approach of skill-teaching and practical educations. Increasing sources of different studies have documented the effect and impact of practical educations on increasing empathy level in medical students [16, 17]. The impact of marital status on the empathy level of residents was investigated in another study. Based on the results presented in Table 4, the mean empathy

scores of married and single residents were 115.13 and 112.38 respectively. Accordingly, there is no significant difference between single and married residents in terms of empathy score. However, it seems that marriage and serious emotional engagement may enhance empathy in married residents. Hence, the role of marital status was also investigated and according to the results, marriage did not change the empathy level. According to Shariat, the mean empathy scores of single and married residents were 101 and 100.7 respectively. The differences were not statistically significant as was seen in the present study [22].

The impact of gender on the empathy scores of residents was also investigated. Based on the results shown in Table 5, the mean empathy scores of male and female residents were 114.11 and 113.96 respectively while the difference was not significant and in most studies, the mean empathy scores of women were higher than men [20, 27, 28, 29, 30, 14]. found no significant difference between males and females in terms of empathy score.

## CONCLUSION

Recent research has found that physicians who exhibit empathy have patients with better outcomes and improved physician-patient relationships [31-34]. Yet,

over the past few years, numerous studies have realized a decrease in empathy starting in medical school and continuing throughout residency [35, 20]. This decreasing trend in empathy during medical school and residency is suggestive of the fact that it may continue as new physicians enter their practices as attendings. The data that is presented here may provide impetus for both medical schools and hospitals to consider implementing programs on understanding empathy and learning to develop an empathetic approach when dealing with patients. Although there are no clearly defined methods for teaching empathy, it has been suggested that students should be educated in a setting where they themselves feel empathically supported by role model clinicians and without the stressors, stigmas and stereotypes that are often encountered in medicine [12, 36].

According to the findings of this study, empathy- as one of the most important skills expected from psychiatrists- is not enhanced during the current residency training periods. Given the skills that psychiatry residents need in the future, the educational authorities must completely revise the educational program of the field of psychiatry.

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