

The Attitude of Medical Students to Psychiatric Patients and Their Disorders and the Influence of Psychiatric Study Placements in Bringing About Changes in Attitude

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Abstract: The aim of this study was to determine the general attitude of final year medical students towards psychiatric patients and psychiatric disorders and to reveal the influence of psychiatric study experience in changing the behavior and perception of students. The study comprised 172 final year medical students undergoing a period of placement at the Ondokuz Mayıs University Medical School Department of Psychiatry who agreed to participate. They were asked to fill in the Opinions about Mental Illness Ideology Scale (OMI) the day before they commenced, on the last day of their placement and three months after completing it. The students reported the highest and lowest scores from the benevolence and social restrictiveness sub-dimensions of the OMI, respectively. The mean authoritarianism score was significantly higher in males than in females. The means of the OMI scores obtained over the three different periods were not statistically different. Medical school psychiatry departments need to develop new curricula to convey scientific information to students and play a pivotal role in developing, implementing and evaluating suitable programs leading to appropriate attitude development.

Considering their prevalence, their tendency to manifest high continuity and general difficulties in their treatment, mental disorders constitute a major public health problem. Today the global life-long prevalence for any given psychiatric disorder is reported to be as high as 48.0% (1). In other words, it is estimated that there are at least 450 million people in the world currently suffering from some kind of mental disorder, with 150 million affected by depression and 25 million by schizophrenia (2).

Of all factors affecting the quality of mental health care services, the attitude of society towards such patients is the most important (3). Society's attitude towards mental illnesses directly affects patients' awareness of the disorder in question, their search for a cure and medical care, communications with doctors and the whole process of therapy and rehabilitation (4, 5). Incomplete knowledge, misinformation and stigmatization have a direct negative impact on early diagnosis of the disorder and the commencement of therapy at an early stage (6), determination with regard to seeking proper medical

care and seeing a doctor (7), patients' acceptance of and following through with the therapy recommended (3), patients' consent to hospitalization (8), their participation in rehabilitation functions (9), social adaptation, coherence with society and regaining functionality (10). From this point of view, stigmatization of psychiatric diseases and psychiatric patients is a major obstacle to therapy and cure (11, 12).

Society is known to exhibit negative attitudes, opinions and behavior towards mental illnesses for a number of different reasons (13–16). In Turkey, although minor differences may be observed, the same general situation applies (17). Health-care providers need to make considerable efforts to deal with this stigmatization in order to be more effective in caring for mental illnesses, as well as to help society adopt a more positive attitude and thus provide social support and social inclusion for patients, which is a key element in therapeutic success. However, studies indicate that apart from those working in the field of psychiatry, health-care providers at all levels display

no interest in mental illnesses or associated problems (18, 19). It is impossible for medical school students to remain unaffected by the culture in which they live. The objective in medical training must not be merely the transmission of information but also the acquisition of appropriate forms of behavior by attaching due importance to information, ability and the application thereof. Medical training is an excellent environment in which proper and professional attitudes towards psychiatric patients can be acquired. For this reason, it is important to determine the attitudes of medical students toward psychiatric patients and psychiatric disorder, as well as to demonstrate the impact of proper medical education and psychiatric practice in bringing about a positive change.

In this study we explore the general attitudes of medical students toward psychiatric patients and disorders and the effect of psychiatric placements in changing medical students' behavior and perceptions.

Materials and Methods

Medical students in Turkey are obliged to undertake a one-month psychiatric rotation in the final term of their six-year course. The Ondokuz Mayıs University Medical Faculty has one psychiatry department, and all students undergo placements there, in rotation and in small groups. During this clinical experience medical students work at a psychiatry service or polyclinic, monitor patients and perform night shifts. Although students are given theoretical psychiatric training in the third and fifth years of their studies, their first encounters with psychiatric patients come in the sixth year, during this clinical experience.

Between September 1, 2004 and September 1, 2005, 189 final year students underwent psychiatric placements at the Ondokuz Mayıs University Medical Faculty. These students were given information about the study on the first day and asked whether or not they would participate. A total of 172 (91%) students who agreed to take part were enrolled. Since the socio-demographic characteristics of the 17 students who declined were unknown it was not possible to determine whether or not there was a difference between these and the students who

agreed to participate. The medical students were asked to fill in two forms, the Sociodemographic Characteristics Questionnaire (SDC) form developed by the authors of this study and the Opinions about Mental Illness Ideology Scale (OMI), on their first day on the placement, on the last day of their practice period and three months after completing it. All 172 students who agreed to take part completed the questionnaires before and immediately after the placement. The third point of measurement was three months after the work experience. Seventy-one of the students graduated within three months of completing the psychiatric placement and began working as physicians in various parts of Turkey. Since they had left the school and their new addresses were not available, these students were unable to complete the third part of the measurement procedure.

The Ondokuz Mayıs University Medical Faculty Psychiatry Department has four members of its academic staff. One or another of them is responsible for the department each month.

The OMI questionnaire was developed by Cohen and Struening and modified by Struening and Cohen; it consists of 51 items, which are scored on a Likert scale, yielding five opinion scores (20, 21). The method relies on the assumption that opinions and attitudes toward patients with mental disorders are multi-dimensional, and definitions should thus be based on a multi-factor analysis. The sub-dimensions or attitude factors can be defined as:

Authoritarianism: This factor stresses the difference and inferiority of mental health patients to normal, healthy individuals. In this respect, it involves negative stereotyping, as in the case of ethnic and political minorities. It may include handling such patients in a coercive fashion. One example of a relevant item is, "There is something about mental patients that makes it easy to tell them apart from normal people."

Benevolence: This factor measures pro-mental attitudes, reflecting a kindly, paternalistic view of seemingly unlucky and weak mental health patients. This attitude arises from a moral point of view, a humanitarian, religious kindness towards the patients, and is not considered scientific or professional. An example of one such statement is,

“Even though patients in mental hospitals behave in odd ways, it is wrong to laugh at them.”

Mental Hygiene Ideology: This factor reflects the philosophy of mental health care professionals that “Mental illness is an illness like any other.” Patients are considered as capable of change, and as needing proper treatment. An example of such an item is, “Mental illness is an illness like any other.”

Social Restrictiveness: This factor emphasizes the need to restrict the freedom of mental health patients, during treatment and hospitalization, as well as upon their discharge, in order to protect their families and society at large from them. The need for such restriction stems from the opinion that mental health patients are dangerous. An example is, “Young children of patients in mental hospitals should not be allowed to visit them.”

Interpersonal Etiology: This factor displays a belief that mental illness arises from deprivation of parental love and attention during childhood. Thus the occurrence or onset of the disease is not solely due to the patient himself but is also due to his environment and family circle. An example is, “Mental patients come from homes where the parents took little interest in their children.”

Every factor in the scale can be scored on a six-point Likert scale ranging from “strongly disagree” to “strongly agree.” The scoring range for the factors is as follows: Authoritarianism 1–56, Benevolence 1–71, Mental Hygiene Ideology 1–46, Social Restrictiveness 1–51 and Interpersonal Etiology 1–36.

The OMI has several important strengths that have undoubtedly contributed to its extensive use for such a long time and in so many different cultural settings (22). One such strength becomes apparent when its items are closely scrutinized and compared with items in other scales in this area of research. The items tend to have a poignancy and complexity aimed at supplying a stimulus that affects the respondent and provides something potent to react to. A second advantage of the OMI is its breadth of coverage of salient issues. A third, as yet unrealized, advantage of this measure is its long history and thus the possibility of assessing changes in attitudes over time (22).

Arikan translated the scale into Turkish, validity and reliability tests were performed and the Turkish

version was shown to be compatible with the original.

The number of criteria established to measure attitudes towards psychiatric patients in Turkey or those that have acquired validity and reliability in practice is limited. There are many criteria established for this purpose globally, but the majority of these have not yet been implemented in Turkey (22). The OMI is one criterion whose validity has been established and is frequently employed in Turkey, and is one with a long history. However, because of its conceptual framework and the fact that it is a tested criterion employed a great many times in Turkey we think that it is still of value in the present day. The fact that the number of criteria that have been used in international studies whose validity and reliability have been established and that we could use in Turkey is limited, the fact that it has frequently been employed in previous studies in Turkey and researchers' confidence in this criterion led to its use in the present study.

Within the context of the study, the demographic, social, cultural and economic diversities of the cities of origin of the participants were considered and regional mapping was performed. For this reason, a five-region classification (West, South, Central, North and East), previously employed by the Turkish Population and Health Investigations 2003, combining the conventional regional division with the Turkish State Planning Association — State Institute of Statistics Nomenclature of Territorial Units for Statistics (NTUS) classification was utilized (23).

The data obtained from the participants were analyzed using the “SPSS for Windows 6.0” statistical package program. Data obtained following this analysis are shown as mean average \pm standard deviation. In comparing numerical variants of double groups, the t-test and Mann Whitney U test were used, and when more than two groups were compared variance analysis and the Kruskal-Wallis test were employed. Comparison of numerical variants obtained from repetitive measurements was done using variance analysis and Friedman variance analysis.

Results

A total of 64.5% (111) of the participating students were male and 35.5% (61) female, with an average

age of 24.19 ± 1.88 . Male students' average age was 24.58 ± 2.13 and that of the female students 23.47 ± 0.95 .

The students' average scores on the OMI scale are presented in Table 1.

The minimum and maximum scores attainable in the OMI attitude factors vary. In order to facilitate comparison, attitude factor scoring was standardized as Minimum 1 and Maximum 100 points. Distribution of average attitude factor scores on the OMI scale according to gender is shown in Table 1. This indicates that both male and female students recorded the highest and the lowest scores on the benevolence and social restrictiveness sub-dimensions of the OMI, respectively.

There was no sociodemographic difference be-

tween students administered the scale twice and those to whom it was applied three times ($p > 0.05$). There was no statistically significant difference between the first and second measurement scores of those who completed the scale three times and those who did so twice ($p > 0.05$).

When the scores obtained by male and female final year medical students in different OMI sub-dimensions were compared, the authoritarian score average of males was higher than that of females, and this was also statistically significant ($t = 2.25$, $p < 0.05$). For all other sub-dimensions, there was no statistically significant difference ($p > 0.05$).

Distribution of the participating final year students according to the educational level of their parents is shown in Table 2.

Table 1. *Distribution of average attitude factor scores on the OMI scale*

Attitude factor (Sub-dimension)	Before placement n=172	After placement n=172	3 months later n=103	F	p
Authoritarianism	27.50 ± 6.27	27.56 ± 6.23	26.33 ± 6.19	1.59	> 0.05
Benevolence	51.38 ± 5.99	51.22 ± 6.90	51.48 ± 6.08	0.14	> 0.05
Mental Hygiene Ideology	31.07 ± 4.56	31.66 ± 4.47	31.88 ± 4.41	0.62	> 0.05
Social Restrictiveness	24.13 ± 5.30	23.68 ± 6.55	23.69 ± 5.83	1.29	> 0.05
Interpersonal Etiology	20.66 ± 4.93	20.23 ± 5.58	19.83 ± 5.58	2.65	> 0.05

Figure 1: Distribution of average attitude factor scores on the OMI scale according to gender

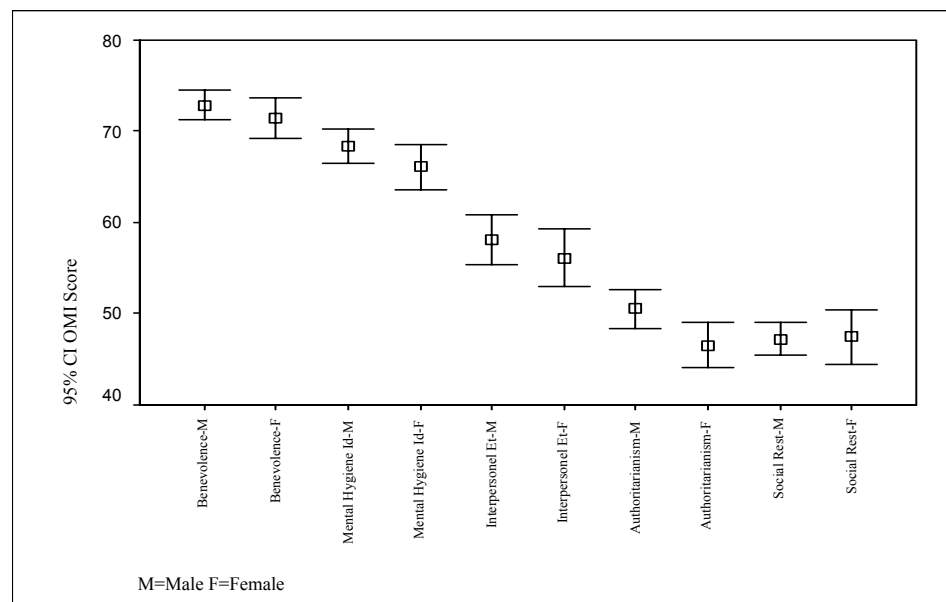


Table 2. *Distribution of educational level of parents of medical students participating in the study*

Educational Level	Mother		Father	
	Number	%	Number	%
Illiterate	18	10.5	3	1.7
Literate	19	11.0	7	4.0
Primary school	57	33.1	37	21.5
Middle school	12	7.0	13	7.6
High school	35	20.4	45	26.2
University	31	18.0	67	39.0
TOTAL	172	100.0	172	100.0

The educational level of the students' parents made no statistically significant contribution to the OMI sub-dimension scores of the participants ($p>0.05$).

The geographical distribution of the interns was: 41.8% from the north of Turkey, 29.1% from the center, 12.1% from the west, 10.3% from the south and 6.7% from the east. There was no statistically significant difference between the average OMI sub-dimension scores of the participants ($p>0.05$) in terms of region of origin.

Of the medical students, 9.3% (16) stated that they themselves had used a psychiatric drug either in the past or at the present time, and 27.9% (48) stated that members of their families had done so. Of the 48 participants who reported medication use in the past or currently by a family member, 29.1 (14) identified their mother, 12.5% (6), their father, 14.6% (7), and at least one sibling. The type of medication was requested, and 52.1% (25) cited an antidepressant and 14.6% (7) named an antipsychotic. The Authoritarian and Social Restrictiveness scores of participants with at least one family member using medication were statistically significantly lower in comparison with those of other participants ($A t=2.08$, $SR t=2.75$, $p<0.05$). For all other sub-dimensions, there was no statistically significant difference ($p>0.05$) in terms of use of medication.

Participating final year medical students responded to the questionnaire three times, prior to, right after finishing and three months after the end of the psychiatric placement. Comparing the OMI

sub-dimension scores for these three periods yielded no statistically significant differences ($p>0.05$) (Table1).

No statistically significant difference in the OMI sub-dimension scores for these three periods was observed between male and female participants ($p>0.05$).

During the course of this one-year study, four different instructors assumed overall responsibility for the department, being primarily responsible for the training of the students. OMI sub-dimension scoring for all three periods was also performed on these department heads, although no statistically significant differences were determined ($p>0.05$).

Discussion

When the sub-dimensions scores of final year medical students on the OMI scale were analyzed (Figure 1), benevolence predominated in their attitude towards psychiatric patients and psychiatric disorders. The mental health sub-dimension was that with the second highest average score. This sub-dimension is expressed in terms of "mental health patients are the same as any other patients, for which reason they should not be regarded as a very different category." We hoped that this dimension would predominate among medical students. However, the mental health ideology dimension lagged behind restrictiveness expressed with a paternalistic conception and non-professional perspective, which is a most noteworthy finding. This result is significant in suggesting that final year medical students have not developed a professional attitude towards psychiatric patients.

The fact that no statistically significant difference in pre- and post-placement attitudes was determined may be ascribed to such clinical experience being insufficient to alter attitudes or to the measurement being insensitive to change. OMI was used with the aim of measuring attitudes before and after various programs in different groups, and changes in various sub-dimensions in these measures were determined. No statistical differences being determined pre- and post-placement stems, in our view, from such placements lacking the structure necessary for bringing about changes in attitudes.

Studies in Turkey have demonstrated strong so-

cially excluding behavior of society towards patients with mental illnesses (4, 5, 24). The finding that social restrictiveness scores for our sample group were the lowest is an important indicator of the effect of education, correct information and proper knowledge in reducing social exclusion of mental health patients. It has been reported that education influences attitudes towards mental health patients, with better educated individuals exhibiting a more positive attitude (25). Studies have demonstrated that as the level of education increases, not only does the level of being correctly informed about a given disease increase, but individuals also exhibit a more scientific and a more humanitarian approach towards both the patient and the illness itself (4, 8, 26, 27). One study conducted in Athens has shown that a public mental health intervention program lead to a decrease in social exclusion within years and to more positive attitudes towards the social integration of the mentally ill (28).

This study shows that an authoritarian attitude towards psychiatric patients and psychiatric disorders is more common among male final year medical students. There are numerous studies which indicate that females exhibit a generally more positive attitude towards mental illnesses, that their perception of such disorders is more tolerant, humanitarian and flexible, and they more often express the opinion that patients with mental health problems differ only slightly from normal patients or individuals (6, 10, 24, 29). In a study by Angermayer and Matschinger on schizophrenia and depression, it was reported that for both illnesses females expressed higher levels of fear and sympathy and lower levels of anger compared to males (30). In the light of the results of this study, it can be said that females have a more positive attitude towards psychiatric patients and disorders than males.

The educational level of the parents of the medical students and their geographical region of origin were surprisingly seen to have no effect on students' attitudes towards psychiatric patients and disorders. Studies have shown cultural background and social class to be two important factors in determining the direction and intensity of all attitudes towards psychiatric patients and psychiatric disorders (31). Two separate studies have reported that a comparison of two sample groups from different cultural back-

grounds indicated a significant difference in attitudes, reflecting the influence of cultural background (32, 33). However, it is also known that specializing in a certain field of study can lead to a similarity in the attitudes of individuals regardless of their cultural background and socio-demographic factors. Thus, despite their differing social classes and geographic region of origin, it is not particularly surprising to see a common attitude among final year medical students who have studied together for six years and shared the same cultural and geographic environment throughout this period.

It was observed that students with a family member using a psychiatric medication exhibit lower average authoritarianism and social restrictiveness scores. It is known that individuals with mental illness in their family may sometimes be more authoritarian towards psychiatric patients and illnesses than those without, and sometimes less (34, 35). A second factor determining attitude is the type of psychopathology exhibited by the affected relative (13, 31, 36). Patients who do not respond to treatment, who have lost or minimized contact with the rest of society, are prone to provoke more negative attitudes. In our study group, examining the type of medication(s) used by the family member(s) diagnosed with a mental health problem, more than half were taking relatively mild medications which do not lead to loss of social and/or emotional contact with other family members or the rest of society. For that reason, the low authoritarianism and social restrictiveness of those with a family history of psychiatric medication use is a predictable result. Despite their being in different groups and different questionnaires being applied, there are studies reporting that a worsening of patients' clinical situations has a negative effect on attitudes (9, 30).

No statistically significant change in attitudes among final year medical students was observed prior to participation in psychiatric work placements, nor after them or three months later. Gender was also observed to have no statistically significant influence on bringing about change. In Turkey, there are some studies which indicate no change (37) and others indicating a significant change in attitude with psychiatric placements (38). In many cases it has been reported that clinical exposure leads to an improvement in the attitude of medical students

(39), that having contact and correct information reduces stigmatization (40), that anti-stigma programs, together with psychiatric clinical experience, lead to positive changes in attitudes (41), that hands-on work in hospital is more effective in bringing about positive change in comparison to theoretical teaching in the classroom (42), and that medical training in general has a positive influence on improving attitudes towards psychiatric patients and psychiatric disorders (43). One study among medical students demonstrated a positive change in attitude among female students upon completion of training, whereas no such change was observed in male students (44). Studies among nursing school students have also indicated attitude changes upon completing a psychiatric training program (45, 46). The studies that indicate that psychiatric work experience is ineffective in bringing about any changes in attitude may be explained by the general fact that medical students already exhibit an optimal attitude before such placements, the result of six years' medical training, the structure and the short duration of the psychiatric placements concerned and the large numbers of participants involved.

In addition to theoretical knowledge, medical training does provide a practical learning environment which leads to a positive change in students' attitudes towards both patients and diseases. Since we had no data for our sample final medical student population reflecting the attitudes of the participants towards psychiatric patients and psychiatric disorders prior to their six-year medical training, it was not possible to assess the (positive) effect of this term, although it is highly probable that such an impact exists (47). However, a more important issue is whether the attitudes displayed by final year medical students towards psychiatric patients and psychiatric disorders are at the level to be expected from health care professionals and whether psychiatric placement makes any positive contribution to this. We observed that the students comprising our sample group did not exactly reflect such a profile, but require a change in attitude. In order to obtain the desired attitude changes, it is possible that additional teaching programs are required in addition to psychiatric placements.

Although studies demonstrate a general positivity in the attitudes of health care professionals

at all levels, many still tend to stigmatize mental health patients, refrain from developing contacts with them and apply social exclusion (47–50). Sartorius indicates that health care professionals contribute substantially to stigmatization of mental health patients and all initiatives aimed at overcoming stigmatization should primarily target health care professionals (51). In this context, medical schools and especially psychiatry departments should play a fundamental role in providing proper education and information so as to lead health care professionals to develop appropriate scientific attitudes towards psychiatric patients and their disorders.

Our study is important since it clearly reflects the inadequacy of the current psychiatric placements in providing final year students with sufficient experience in a psychiatric department and in bringing about change in their attitudes towards psychiatric patients and disorders in a positive, professionally desirable direction on a scientific basis. Information is one main determinant of individuals (50). Medical students may receive sufficient and positive information, leading to attitude changes. However, this change is not at an adequate, professionally desirable level. A psychiatric study rotation should not be restricted to receiving information, gaining insight into diseases and patients and experiencing physical contact with them. It is also important to note that an attitude change will also be affected by the general conditions in the hospital concerned, the predominating attitudes in that hospital, and the attitudes of the educators themselves (52). Psychiatry departments in medical schools should develop new curricula to convey scientific information to students and play a pivotal role in developing, implementing and evaluating suitable programs which lead to appropriate attitude development.

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