# **Evaluating the Attitudes of High School Students Towards Mental Patients Through Training Movies**

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#### **ABSTRACT**

Stigma and discrimination against the mental patients lead to weakness and helplessness in patient's life as soon as it is diagnosed. In order to change attitudes in this regard, the effects of anti-stigma movie-based intervention on students' attitudes towards the mentally ill was measured. The movie "A Beautiful Mind" was used as anti-stigma movie in this study and students' attitudes were measured using the 27-item attribution questionnaire (AQ-27). The participants were first-year high school students. All the participants were women with the mean age of 15 years. Seventy one students participated in this study. After the intervention, the specific attitudes of student particularly anger, being dangerous, fear and isolation were recovered (p <0.05), but responsibility of students towards mentally ill people reduced (P <0.05). In addition, no significant changes happened towards the components of compassion, helping, obliging and avoidance attitudes of the students. Intervention movies significantly improved the overall attitude of people towards the mentally ill people.

Keywords: Mental illness, Stigma, Movie, Attitude

## INTRODUCTION

Stigma is an attribution or a condition that is considered undesirable by society. These attributions are so much important and distinctive that a person is defined only by that aspect such as "blind, crippled, crazy". Thus, the person is considered less valuable or worthless and this distorts his identity<sup>1,2</sup>. Discrimination and prejudice against the mentally ill is a destructive and wrong phenomenon that increases their social isolation and causes problems in their employment, insurance and the settlement3. Studies during the past four decades have conclusively shown that the people with mental disorders are stigmatized and discriminated in various dimensions by key people in social networks4. There is a lot of relationship between age and shame and avoidance of treatment. If a person feels embarrassed with mental illness, because of personal experiences, he is less likely to enter treatment<sup>5</sup>. Unlike physical diseases that social resources are mobilized for them, mentally ill is deprived of potential support and eventually poorer conditions are waiting more chronic psychiatric patients<sup>6</sup>. In the last two decades, and especially with the start of anti-stigma program of World Psychiatric Association, great attention is paid to the stigma of mental illness and its consequences. Many studies have been conducted to recognize factors and its components; the effects of stigma of mental illness, treatment-seeking behavior and reintegration and rehabilitation, as well as crosscultural differences and similarities in this field7. Due to the fact that many studies have stated the increase in familiarity with the mentally ill leads to a reduction in stigma to these patients<sup>8-13</sup>, many interventions have been done in this regard<sup>14-19</sup>.

In one study, patients' families, radio and television have been stated as a means to reduce the stigma. Thus, education through TV, either directly (scientific programs and forums) or indirectly (demonstration programs) play an important role in increasing correct recognition of the society from the patient and thus in reducing the stigma of mental illness<sup>20</sup>. Arikan believes that people who think there is no possibility of treatment of the mentally ill make the mentally ill more dangerous. For this reason, he sees informing society on the advancement of medical and psychological parts as something good in reducing stigma21. In a study conducted by Pezeshki and Bolhari in some villages in Northern Tehran on people over 15 years their attitudes toward the mentally ill were measured. A total of 8.67 percent had a positive attitude, and the reason of this high percentage is lack of negative stereotypes about mental illness in the subjects mentioned. People with higher education, younger and higher-level employees had a more positive attitude<sup>22</sup>.

If the person has a mental illness label, it causes internal consequences such as embarrassment, low self-confidence and external consequences such as isolation, negative attitudes and discrimination<sup>23</sup>. Even in developed countries, health insurance companies discriminate against the mentally ill, and research budget devoted to mental illness is limited24. In the study by Sadeghi et al. (2003) stigma and title associated with it, mental ill families with schizophrenia, major depressive disorder (MDD) and bipolar disorder are discussed. In this study, it was shown that 49% of patients with schizophrenia, 30% of MDD and 5.50% of BD were discriminated and ridiculed by others<sup>19</sup>. In the study by Ostman and Kjellin, it was shown that 80% of relatives of the mentally ill had sometimes thought it was better that their sick died and 10% have had suicidal thoughts. So, doing interventions to reduce the negative impact of psychological factors associated with the stigma of mental illness in relatives deemed necessary<sup>25</sup>.

In a study, Mann et al showed that the intensity and stigma of mental illness is different in different classes of the sickness. Especially in

patients with schizophrenia compared with the stigma of depression stigma was more. Therefore, it seems that in studying stigma associated with mental illness, it is better to check the stigma associated with mental illness stigma specifically and not study of mental illness in general (26). Medical staff including psychiatrists, are often important source of stigma. Studies have shown that patients and their families have had discriminatory experience practices by psychiatric staff. Interventions aimed at this target group may be less costly, more effective intervention in the general population<sup>27</sup>.

In the study by Dembling et al, the median age of death in psychiatric patients was 66 years, while the control group was 76 years. This is a sign of discrimination against the mentally ill is the health care system<sup>28</sup>. In some Asian cultures, but not all of them, this is common. Therefore, to understand the origins and the consequences of stigma of mental patients, they should be studied in their cultural context<sup>29</sup>. When adult patients with neurotic disorders believe that no one can help them, they are less likely to seek treatment. This thought may originate from a bad feeling about mental health care and suggests the need for information or training about mental health community<sup>30</sup>.

The results showed that even after the symptoms of the mental illness and the performance of mental ill, the stigma still affects the lives of the people. Thus, mental health specialists should consider stigma as a separate and important factor in the life of their patients in order to maximize the well-being of patients<sup>31</sup>. Contact hypothesis proposed by Deshorges and colleagues suggests that communication and contact with the mentally ill reduces negative attitudes towards these people<sup>32</sup>. In a study by Pinfold and colleagues, it is observed that short-term workshops participants can have a positive attitude towards mental patients<sup>33</sup>. Despite the fact that several studies have investigated the stigma of psychiatric patients and their families and people's attitudes toward psychiatric patients8, 20, 34, interventional studies have not been done. Due to the radio and television as an important source of influence on the studies, in this study the effects of movie on attitudes toward psychiatric patients were evaluated20.

#### **MATERIALS AND METHODS**

In this study, which is of intervention type, a high school girls first grade students have been selected as population. One of the girls' high schools of Khorram-Abad (Lorestan, Iran) was randomly selected and from a total of four first-year classes, two were chosen with 87 students with a simple random method and entered the study. Sixteen students who completed the questionnaire in an incomplete way were excluded from the study.

Four type of attribution questionnaire that differ in the story of the first clause were randomly given to the participants<sup>8</sup>.

After reading the stories, all the participants in the study responded to the 27-item attribution questionnaire (AQ-27). Subjects determined their answer to each question on a nine-point Likert scale (1 = "not at all" to 9 = "very high"). To make the results comparable, the score related to each question component were added up together and divided by the number of these questions. Thus, for each subject in each component a score was obtained from 1 to 9 (8). Before seeing the movie, demographic questionnaire and AQ-27 were filled by the students.

After filling out the questionnaire, about 10 minutes talking about the suffering and oppression of mental patients and description of the cause of the disease, particularly biological causes was given, so that an approach is created that the behavior of these patients is not all resulting from their behavioral problems and if they are treated, like other physical illnesses they can recover. Then the movie was broadcast for them.

After finishing of the movie, completing the AQ-27 questionnaire again was given to students.

The tools used in this project are questionnaire and population mapping and AQ-27. Demographic questionnaire includes questions about age, gender, marital status, location, type of training, and education of middle-income families.

The AQ-27 begins with a short story about a mentally ill with schizophrenia.

The story has four forms: Form 1: creating risk by a person with mental illness was not mentioned. Form 2: creating risk by a person with mental illness was mentioned, but no information provided about its cause's being controllable. Form 3: In addition to referring to creating the risk by mental ill, some information was added, which showed that he did not control the disease and the cause of his mental illness was uncontrollable. Form 4: - In addition to the risk created by a person with mental illness, some information has been added showing that patients had control over his disease and disease was controllable.

After this story, there are 27 different cognitive, emotional, and behavioral structures including 1: belief to be responsible for a patient's diagnosis, 2: sympathy, 3: anger alarmed, 4: feeling afraid, 5: Feeling the danger, 6: Avoiding helping the person with mental illness, 7: Avoiding the person with mental illness, 8: Support for forcing treatment of people with mental illness, 9: Supporting the separation of a person with mental illness. Subject based on the degree of agreement with that sentence received a score between 1 and 9 in Lickert type scale. Cronbach's alpha was 0.427 and from 0.75 to 0.917 forced obliging<sup>8</sup>.

## **RESULTS**

Out of 87 students who participated in this study, 71 patients answered the questions fully and entered the study. All students were female and their average age was 15 years. In Table 1 participants' information such as marital status, place of residence and parents' education level are expressed.

Participants in the project, almost equally completed forms 1,2,3 and 4 of attributions questionnaire in this study (Table 2).

T test results of the groups related to story 1 show that regarding various components, although the means have had changes and in some areas after the movie the quality increases in the students in the face of a mental patient, no significant difference was created before and after the movie, so that at the significance level of 0.05, it has not been able to change attitudes to mental illness (Table 3).

The results of t test related to the groups of story (2) show that showing the movie has led to a positive attitude towards the mentally ill in 4 cognitive components (decreasing anger, danger, fear and isolation) with a significance level of 0.05

Table 1: Population-based data mapping

Variable	Frequency	Percent
Marital status		
Single	66	93
Married	2	8.2
Engaged	3	2.4
Location		
City	66	93
Village	5	7
Father's level of education		
Illiterate	7	8.9
Less than diploma	32	1.45
Diploma and higher	32	1.45
Mother's level of education		
Illiterate	12	9.16
Less than diploma	36	7.50
Diploma and higher	23	3.32

Table 2: The number of participants in each story

Type of story	Frequency	Percent
1	20	16.28
2	19	76.26
3	17	94.23
4	15	13.21

percent, but on the other hand has increased avoidance of the mentally ill with a significance level of 0.05 percent (Table 4).

T-test results related to the group of story (3) show that showing the movie has led to a positive attitude towards the mentally ill in 2 cognitive factors (reducing being dangerousness and separation) with a significance level of 0.05 percent (Table 5). In story number 4, although after showing the movie the quality of some components in students enhanced facing a mentally ill, no significant difference is created before and after the movie. So this story at a significance level of 0.05 has not changed students' attitudes towards mental illness (Table 6).

Comparing the stories before and after showing gives the conclusion that the students' attitude towards the mentally ill in the four cognitive components (decreasing anger, being dangerousness, fear and isolation) with a significance level of 0.05% has improved, but the responsibility with the significant level of 0.05% has fallen. Though some changes were seen in the average of other factors before and after the movie, the average change was not significant (Table 7).

The aim of this study was to see whether the movie could reduce the stigma-based attitudes of students towards the mentally ill. Therefore, even though every story had its unique information regarding the characteristics of the story, what cover our study are the 4 stories and comparison of attitude before and after the movie. In total, the

Table 3: The story # 1

Variable	Mean		t	df	P- value
	Pre Test	Post Test			
Responsibility	15.6667	14.5238	0.763	20	0.454
Sympathy	18.4762	19.3810	-0.725	20	0.477
Anger	9.5238	9.5714	-0.026	20	0.979
Being Dangerous	10.7143	11.9524	-0.657	20	0.518
Fear	11.5238	10.6667	0.515	20	0.612
Helping	17.9524	19.1429	-0.980	20	0.339
Obliging	15.4762	16.2857	-0.523	20	0.607
Separating	12.9048	14.7143	-0.953	20	0.352
Avoidance	16.1429	19.5714	-0.825	20	0.419

movies effect on the improvement of students' attitudes towards mental illness in 4 cognitive factors (anger, dangerousness, fear, and isolation). In contrast, the students' attitude towards the mentally ill on the components of responsibility has become worse compared to other components (compassion, helping, obliging and avoiding (no significant difference). With all these, we can say that the movie can be an important factor in reducing the stigma of mental illness about some elements. Given that many studies have shown that familiarity with mental illness leads to reduced stigma of this disease, interventions in this area were conducted<sup>8-12</sup>.

Many interventional studies have been conducted in recent years. These interventions include movie<sup>14-16</sup> where in all three of these interventions, such as studies before showing the

movie, it had been talked about the mentally ill to the participants. Three strategies of education, contact and protest<sup>17</sup> and also computer programs<sup>18</sup> and role-play as psychopath<sup>19</sup>, each of which have used more limited cognitive components to measure participants' attitude compared to our study.

About the components of accountability and helping, the attitude of the participants in our study compared to the first component got worse and compared to the second component no significant difference is created. While in other studies using movies, the participants' attitudes toward both these components were improved 16. Perhaps this lack of compliance is due to the difference of content and structure of the movie. With a description that the used movie in the mentioned study has been about schizophrenia,

Table 4: The story # 2

Variable -	Mean		t	df	P- value
	Pre Test	Post Test			
Responsibility	16.4000	22.4500	1.598	19	0.126
Sympathy	21.7000	22.4500	-0.784	19	0.443
Anger	12.9500	7.9000	2.335	19	0.031
Being Dangerous	16.2000	7.6000	5.003	19	0.000
Fear	14.4500	8.2500	3.479	19	0.003
Helping	18.9500	21.0000	-1.306	19	0.207
Obliging	17.1500	9.9000	1.731	19	0.100
Separating	17.3500	9.9000	4.932	19	0.000
Avoidance	12.7000	14.6000	-2.104	19	0.049

Table 5: The story #3

Variable		Mean	t	df	P- value
	Pre Test	Post Test			
Responsibility	16.0588	14.4706	0.873	17	0.396
Sympathy	20.8824	21.4118	-0.509	17	0.618
Anger	12.5294	9.2941	1.198	17	0.248
Being dangerous	15.2941	9.4118	2.334	17	0.033
Fear	13.7647	9.7059	1.788	17	0.093
Helping	18.8824	19.1176	-0.104	17	0.918
Obliging	15.9412	15.7059	0.150	17	0.882
Separating	16.2353	10.8824	3.366	17	0.004
Avoidance	12.5882	14.7059	-1.811	17	0.089

and due to its documentary nature, has pictured the reality of mental patients, the reason for this difference in attitude may be due to differences in age, sex and educational level of people in the study.

In two studies, both of which used the movie as anti-stigma interventions, in one of them (the documentary was shown around stigma and discrimination of mental patients), the people's attitude towards being dangerous improved and avoidance has improved¹⁴, but in the other (in which a documentary about schizophrenia was used) people's attitude towards both components had worsen¹⁶.

Meanwhile, in the first study mentioned, the participants were medical students who were

more aware of mentally ill and older than the participants in the second study. The students' attitude in our study was not significantly different about sympathy component, whereas in case of intervention by means of education and compassion were reported back better attitude component<sup>17</sup> and the difference of attitudes toward these components can be due to differences in the type of intervention.

Two other anti-stigma interventions treatment in one of which computer programs<sup>18</sup> and in the other role play of the mentally ill by the participants<sup>19</sup> were used to assess anti-stigma attitudes of people towards avoidance factors. In the first intervention mentioned, people's attitude towards avoidance components had become better, but in the second intervention mentioned like our

Table 6: The story # 4

Variable	Mean		t	df	P- value
	Pre Test	Post Test			
Responsibility	14.8462	11.5385	-0.065	15	0.949
Sympathy	12.3077	14.1538	1.437	15	0.176
Anger	11.9231	11.0769	-0.752	15	0.466
Being dangerous	13.1538	12.6923	0.385	15	0.707
Fear	11.0769	13.8462	0.210	15	0.837
Helping	11.6923	14.0000	-1.181	15	0.261
Obliging		11.6154	-0.847	15	0.414
Separating		12.6923	0.826	15	0.425
Avoidance		13.4615	0.229	15	0.823

Table 7: Studying the total four stories

Variable	Mean		t	df	P- value
	Pre Test	Post Test			
Responsibility	15.8169	13.8169	2.360	71	0.021
Sympathy	18.8310	19.7746	-1.403	71	0.165
Anger	11.6479	9.3099	2.097	71	0.040
Being dangerous	13.8028	10.2535	3.152	71	0.002
Fear	12.8028	10.2535	2.373	71	0.020
Helping	17.3099	18.7183	-1.541	71	0.128
Obliging	15.7183	14.9577	0.943	71	0.349
Separating	15.0141	12.0704	2.940	71	0.004
Avoidance	13.5915	15.8873	-1.708	71	0.092

study, no significant differences in attitude was created.

In general, intervention studies listed, 5 cognitive components were considered as a measure of attitude, all of which were discussed above. No change in students' attitudes towards obliging component may be due to lack of knowledge of students about mental illness because of the failure of the movie in showing this component.

The intervening study, which was to reduce stigma attitudes of individuals, using the movie "A Beautiful Mind" as a comprehensive movie about the mentally ill, has been able to make a positive impact on people's attitudes. However, the movie, has just worked on some cognitive factors, and cannot cover them all.

This study is conducted on only a limited population in terms of age and education then the results cannot be generalized to the entire community. In the original plan, it was noted that students who have a history of mental illness in

their family member will be excluded from the study, but they were not excluded from the statistical analysis of the study were excluded. Due to lack of cooperation of boys' High School, conducting the projects on male students and comparison of their attitudes toward the mentally ill as a result of with female students failed.

With wider use of movies on psychiatric patients, especially movies that depict the suffering and oppression of psychopath better and include more cognitive components, one can make a positive impact on the attitude of the people through the mass media.

Given that in a study, it is shown that medical staff, including psychologist are often more important resource for stigma, patients and their families often experience stigma and discriminatory actions on their part, and as it has also been noted that interventions aimed at this target group may be less cost-effective than intervention to general population<sup>27</sup>. Therefore, it can be suggested that the use of movie in this group can make a better attitude among the people.

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