T.R.N.C

NEAR EAST UNIVERSITY
FACULTY OF NURSING

BELIEFS TOWARDS MENTAL ILLNESS FOR THE UNDERGRADUATE TURKISH & NON TURKISH STUDENTS OF MEDICINE & NURSING FACULTIES IN THE FIRST AND LAST ACADEMIC YEARS

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Master Degree of Nursing (Mental Health & Disease Nursing)

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Prof. Dr. Fatma Oz

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Sağlık Bilimleri Enstitüsü Müdürlüğü'ne

Bu çalışma, jürimiz tarafından HEMŞİRELİK Programında Yüksek Lisans Tezi olarak kabul edilmiştir.

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Bu tez Yakın Doğu Üniversitesi Lisansüstü Eğitim-Öğretim ve Sınav Yönetmeliği'nin ilgili maddeleri uyarınca yukarıdaki jüri üyeleri tarafından uygun görülmüş ve Enstitü Yönetim kararıyla kabul edilmiştir.

Prof. Dr. K. Hüsnü Can BAŞER

Sağlık Bilimleri Enstitüsü Müdürü

DEDICATION

This dissertation is dedicated to all those who have helped me and given me the encouragement to do this research and write until the work is completed.

My deepest thanks to **Prof. Dr. Fatma Oz**, my supervisor, for her expertise, ongoing support and mentorship during my research.

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This dissertation is especially dedicated to the forgotten people who suffer alone from mental illness.

"The purpose of life is to contribute in some way to making things better."

Robert F. Kennedy

BELIEFS TOWARDS MENTAL ILLNESS FOR THE UNDERGRADUATE TURKISH & NON TURKISH STUDENTS OF MEDICINE & NURSING FACULTIES IN THE FIRST AND LAST ACADEMIC YEARS

ABSTRACT

Objective

Assess the beliefs toward mental illness for medical and nursing undergraduate students from the first and the last academic year for Turkish and non-Turkish students.

Methods

A cross sectional descriptive study was carried out among 300 students, responding rate was 97.3% with 292 students from the faculty of medicine and faculty of nursing in the first and last academic year, Turkish and non-Turkish students, medicine undergraduate students (n=132) and nursing undergraduate students (n=160) using Beliefs toward Mental Illness Scale (BMI) questionnaire with three subscales namely; Dangerousness, Incurability and poor interpersonal & social skills, Shameful. This was a 6-point BMI scale with 21 items to rate participants responses from completely disagree (0) to completely agree (5). The lower scores indicate positive beliefs toward mental illnesses and higher score indicate negative beliefs toward mental illnesses.

Results

Our findings revealed that 64.7% of medical students in the first academic year have a negative beliefs toward mental illnesses versus 56.8% of nursing students in the first academic year have negative beliefs toward mental illness. While medical students in the last academic year have better beliefs toward mental illnesses with 61.5% versus 53.6% of nursing students from the last academic year have positive beliefs toward mental illnesses.

Conclusion

It‟s an important proportion of medicine and nursing students have negative belief toward mental disorder. It is necessary to review and update the current curriculum to reinforce the positive belief of the future health care practitioners about patients with these types of illnesses.

Key words: mental Illnesses; beliefs; medicine students; nursing students; stigma.

List of Contents

List of Tables

List of Figures

List of Abbreviations

Items of Abbreviations	Context
BMI	Beliefs toward Mental Illness
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders IV
MHDs	Mental Health Diseases.
SMI	Sever Mental Illness

List of Appendixes

1. INTRODUCTION

1.1. Problem Definition

Mental illnesses are one of the most vulnerable populations as they frequently encounter stigma and discriminatory attitudes not only by the general population, but also by the health care providers (Hogberg et al., 2012), and the students who are willing to work as a health care professionals in the future, this negative attitude from the health care provider can effect negatively on the health care provider decisions. The Global Burden of Disease Study (GBD 2010) find that mental disorders, neurological and substance addiction disorders are counting for 10.4% of global disability, adjusted them life years (Whiteford et al., 2010). People with mental illnesses are facing health challenges yielding alarming higher morbidity rate (Mai et al., 2011; WHO, 2005), people with a mental illnesses have the higher mortality rates than those who do not complain from a mental illnesses (Sickel et al., 2014). For example, people who have been diagnosed with schizophrenia or another type of mental illnesses are dying on the average of 25 years earlier than those who do not have a mental illnesses, comorbidity with chronic illness, such as asthma, heart disease, cancer, or diabetes, is the cause of death for three out of five mentally ill patients (Sickel et al.,2014) .

Negative stereotypical perceptions of mental health are seen commonly among different healthcare personnel, including nursing students, medicine students and the health care providers (Gaebel,2014; Natan,2015), findings indicate medical and nursing students are not interested to choose a career in mental care, the medical students are describing the field of mental health care as “less of scientific foundations, depressed and non-effective, and need the high capacity to work with dangerous and crazy patients”(Natan,2015). Also the nursing students have the same attitude as a study was done in Australia examined the beliefs of nursing student‟s towards mental health nursing and they found that anxiety related to work with patients complaining from mental illnesses led to decrease the interest, and it has been suggested that this anxiety is coming from the negative stereotypes related to mental illnesses and from the way students are prepared in the nursing schools for the role of psychiatric nursing (Happell, Platania-Phung, Harris & Bradshaw,2014). Poor understanding of mental disorders by the health care Professionals may lead to weaknesses in psycho‐education specially by the doctors and nurses to the patients as well

as their caregivers, regarding the nature of mental illnesses, courses, prognosis, and treatment available thereby causing to failure in generate awareness and DE stigmatize mental disorders in the societies, when directly in contact with the effected population. (Aruna, 2016).

The perceptions, knowledge and beliefs toward mental illness among undergraduate of medicine and nursing faculties students is of enormous significance, as these students are the future health care provider who may be involved in the care of mental patients at some point in their career, either directly or indirectly (Thirunavukarasu et al., 2012). So it is very importance to understand the student‟s beliefs toward mental illness and the causes for the negative beliefs and take an action to change this negative beliefs. In this study the researcher will try to examine the students of Medicine & Nursing faculties‟ beliefs towards patients diagnosed as mentally ill by using the beliefs toward mental illnesses scale developed by researcher based on literatures of Hirai and Clum, 2000; Cam and Bilge, 2007.

1.2. Aim

The aim of the study is to determine the beliefs toward mental illness among Medicine & Nursing students in the first and last academic year. Study questions include followings:

• What are the medicine and nursing student‟s beliefs toward mental illnesses?

• Is there any differences between demographical characteristics and the student‟s beliefs toward mental illnesses?

2. BACKGROUND OF THE STUDY

2.1. The Prevalence of Mental Illnesses

Mental illnesses are one of the most common causes of the overall diseases burden worldwide (Vos, 2013), by changing in life styles, social and family dynamics mental illnesses are on the rise over the past few years, the mental illness is constitutes 14% of the global burden of disease (WHO, 2016), and mental illness effecting around 10% of the adult population at any given point of time (WHO, 2013). Mood and behavioral disorders are the most common of the psychiatric illnesses, effecting more than 25% of people in some time during them live (WHO, 2014). Worldwide, above three hundred millions people are complaining from depression and two hundred sixty millions are complaining from anxiety disorder (Natasha,2017). Mental illnesses can effect on 1 out of every 4 people during their live, by changing functioning, behaviors, and thinking pattern (Van der ham, 2011).

Worldwide; mental illnesses are one of the main causes of the overall burden diseases (Vos,2013), The World Health Organization (WHO) reported in 2001 that approximately 450 million people are suffer from some types of mental illnesses worldwide. 4 of the 10 leading causes of disabilities are Neuro-psychiatric illnesses, accounting about 31% of total disabilities and 12.3% of the total burden of diseases; this percentage is expected to rise to 15% by the year 2020.

A recent National Comorbidity Survey (NCS) examining lifetime prevalence rates for DSM-IV disorders found that around 50% of American‟s will meet the criteria for a mental illness in some point of their life. (Kessler et al.,2005). In USA 1 in every 25 (or 10 million) adults experience a serious mental illness (Natasha, 2017), and about 20% of total patients seen by the health care providers have one or more mental health disorders (WHO,2014).While in Turkey according to the ministry of health survey published on November 2017; between 2011 and 2016 the mental and psychological complaints jumped to 27.7% which exceeding 12.1 million people, and between 2012 and September 2017; 2.423 people attempted to commit suicide in prisons, with 286 of them killing themselves.

2.2. Beliefs toward Mental Illness

In the psychological literatures, beliefs is defined as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly & Shelly,2007). Which includes the evaluation of something and the response by positive or negative depend on the previous experiences with that topic, the people can also make the evaluation by depend on the feeling and emotion.

The exposure to good role modeling is developing a good beliefs, for example If the undergraduate health science students are exposing to the positive attitudes during their clinical practices and assisted them to understand that staffs who are working with mental ill patients make a difference and practice "real" care, they will learn that mental health care staffs are making a positive effect on the lives of the mental ill patients they are treating (Gerrity, 2012).

Globally, mental ill patients, mental care services and providers, and also some concepts of mental health, are subjected to the stereotypes and negative beliefs by the public (Mukherjee, et al.,2016), and this negative beliefs are coming without understanding the illness and also without knowing the mental ill patients. Negative responses include some concepts like fears, distrusts, dislikes, dangerous, and unpredictable (LópezIbor & Cuenca, 2000). Cultures, traditions, educations, are participated in shape of the beliefs toward mental diseases (Chion and Chiao,2012).

The general study have shown that the public has a very limited information about mental diseases and holding disfavor beliefs about the patient who complain from mental disease in different, cultures and nationalities (Angermeyer & Dietrich, 2006; Economou et.al.,2009). In 2009, peoples in 37 states were surveyed about them beliefs about mental disorders, by using "2007 Behavioral Risk Factor Surveillance System Mental Illness"; the result was 57% of people without mental illnesses thinned that people are not sympathetic with person have a mental diseases. These result forced both the necessity to improve the people‟s knowledge about how to help patients with mental disorder and the need to decrease limitation for those holding or getting treatment for mental disorder. New studies on the beliefs toward mental illness was shown that people‟s beliefs towards patients complain from depression or alcohol addiction have slightly changed during the last 25 years, while beliefs about persons complain from schizophrenia have worsened (Angermeyer et al.,2013; Schomerus et al.,2015).

2.3. Stigma

The concept of stigma is not new, dating back to Goffman's (1963) and it was defined as “experience of feeling stereotyped, labeled, or marginalized due to others' perceptions” (Allison, Paige & Scott, 2016). Since then, scholars have further explored the topic particularly as it relates to the stigma associated with mental health issues (Corrigan, 2004; Corrigan & Watson, 2002; Pescosolido, 2013). Stigmatization of mental illness has been conceptualized as it is the separation between “us” and “them” that leads to the negative emotional reactions and eventually, discrimination and devaluation of the person with mental illness (Link BG & Phelan, 2001).

Stigma can manifest in two common ways: (1) public stigma, which speaks to the general public's outlook on persons with mental illness or those with criminal behaviors, and (2) self-stigma, which can be perpetuated by the individual's outlook on himself or herself (Corrigan, 2004; Corrigan & Shapiro, 2010). Both of these types of stigma can be formed through a combination of stereotyping, prejudice, or discrimination. Stereotypes are the beliefs one holds about what it means to have a mental illness (e.g., someone with a mental illness is strange, weak, or dangerous), prejudice includes agreement with the stereotype which results in an emotional reaction of some kind (e.g., fear, disgust), while discrimination is the behavior that is associated with the emotional reaction (e.g., avoiding the person due to the belief that the person is strange, weak, or dangerous) (Allison, Paige & Scott, 2016). Example on the stereotypes attitude as people with schizophrenia are dangerous, unpredictable, irresponsible, incompetent, can‟t take care of themselves or fully recover from the illness, the emotional stigma with stereotypes can develops a reaction showing a prejudice for Example: “yes, the patients with schizophrenia are dangerous and I‟m afraid of them” (Corrign,2001). Stereotyping is making categorical statements about groups of people. Stigma can cause suffering that is needless, excluding people who are stigmatized from participating in daily activities or seeking medical treatment for other issues.

The most common stigma beliefs include that the people with mental illness are dangerous, will not be fully recover, and that their mental illness is their own mistake. The stereotype exists that those who are mentally ill are responsible for mass shootings and other heinous crimes; thus, the scrutiny exists. Despite this scrutiny, in crimes committed by persons with mental disorders, only 7.5% were directly related to the symptoms of their illness.

According to research reported by the American Psychological Association, the vast majority of those who are mentally ill are not violent, not criminal, and not dangerous (Peterson, Skeam, Kenealy, Bray, and Zvonkovic, 2014). In a public survey done in 2010 by the Office of National Statistics (UK), a) 39% of those who responded felt that those with mental illnesses are dangerous, b) 67% believed that "asylums" are appropriate facilities for the treatment of the mentally ill, and c) 19% believed that those with mental illnesses are different from those with other types of illness and that mentally ill people had weak personalities that contributed to their illness (Lois K, 2017). These types of beliefs can result in an assortment of negative consequences for those with mental illness such as low employment rates, poor and unsafe housing, as well as a reduction in the utilization of mental health care.

Studies have shown that people with severe mental illness (SMI) are indeed stigmatized. They have difficulty finding gainful employment or finding suitable places to live (Whitely & Campbell, 2014). Further, we know that those who hold negative stigma beliefs may also have negative outcomes including the avoidance and delay of treatment and this delay in treatment is not limited to treatment for mental illness (Sickel, Secat & Nabors, 2015). This reign of ignorance and stigma prevails either because psychiatric disorders are not understood by most people or are surrounded by preconceived biases. Negative attitudes toward psychiatric disorders lead to deep‐seated prejudices toward mentally ill persons, which may manifest in the form of fear or intolerance. This has an impact on the lives of not only the psychiatric patients, but also their families and treating psychiatrists. This stigma can hinder the provision of adequate and appropriate services to persons with psychiatric disorders (Kishore et al.,2011; Trivedi & Dhyani, 2007).

These stigmatizing attitudes may vary according to different socio-demographic characteristics such as gender (Angermeyer and Dietrich, 2006), ethnicity (Silton et al., 2011) and knowing someone or having a personal experience of mental illness (Corrigan et al., 2003).Earlier studies have suggested that developing countries exhibit greater fear, shame, and stigma directed towards mental illness than do developed countries. Shame and fear lead to social distance, which, in turn, results in social isolation, self-stigma, lack of employment opportunity and self-determination, avoidance of help-seeking, poor adherence to treatment and overall poor health in the stigmatized (Cheon and Chiao, 2012; Linz and Sturm, 2013; Rüsch et al., 2014).

Often, since mental health patients are stigmatized, there is an associative stigma for those who are working or willing to work closely with them (Gouthro, 2009), Globally, psychiatry as a subject, psychiatrists as professionals, and patients with psychiatric disorders are subjected to cultural stereotypes and negative attitude by the general population. What is of alarming concern is that these prejudices exist within the medical community as well (Aruna et al., 2016).

Common approaches to addressing mental illness stigma are contact (interactions with individuals with mental illness who tell their stories of challenges and successes) and education (contrasting myths and facts about mental illness). Meta-analyses of studies with the general public suggest that contact seems to be the most effective, followed by education, and that in vivo or face-to-face interactions with people with mental illness are more effective than video-based interventions (Corrigan et al., 2012; Pettigrew & Tropp, 2006). Yamaguchi et al. completed a literature review of interventions to reduce stigma among college students, concluding that social contact interventions were most effective in improving attitudes towards individuals with mental illness and reducing desired social distance with this population (Yamaguchi et al., 2013).

2.4. Health Care Professional Beliefs toward Mental Illness

Stigma originates from those in the general societies as well as practitioners who are working in the health care field (Crowe & Averett, 2015). Worldwide; a lot of people with mental disorders report that health practitioners, providing the mental and physical health care, are the important source of stigma and discrimination in many countries (O‟Reilly, Bell & Chen, 2010; Rong Y et al., 2011), some studies found that health-care professional, including psychiatric doctors, family doctors and Nurses report more negative beliefs toward patients with mental disorder than the general people (Lasalvia et al., 2013; Schulze B, 2007), and as per World Health Organization, positive beliefs for health care practitioners about mental disorders is prerequisite for the provision of quality of care (WHO,2007). On the other hand; patients with mental disorder and them families are expecting health care practitioners to treat them as a unique individuals without prejudice or discrimination (Pelzang,2010).

Research has been suggested that some health care professional decisions may worsen health results. Compared to patients not complain from mental disorders, research also has shown health professional are less likely to refer patients with mental disorders for mammogram (Koroukian et al.,2012), inpatient admission after diabetic crisis (Sullivan et al., 2006), or catheterization (Druss et al., 2000). Nash in 2014; performed a descriptive qualitative study describing mental health service users‟ experiences of diabetes care, a semi structured phone interview was used in data collection from the seven participated in this study. Stigma was a common participant complain, one of the study participated people said: “Part of my thinking at that time was well you‟ve kind of overlooked this because you know I have mental health problems, you‟ve just sort of thought well he‟s kind of making this up and because I wasn‟t clear about what I was feeling”(Nash, 2014, p.719). Along with stigma, Nash (2014) found that 6 from the 7 participants said that they are having complications, which is related to the bad treatment-seeking behaviors exacerbated by stigma. However, stigma can causes so many individuals to avoid the treatment (Corrigan, Druss & Perlick, 2014). A systematic review on limitations and facilitators to help seeking in mental ill young patients found that the number one of limitations was a stigma (Gulliver, Griffiths & Christensen, 2010), professional stigma might be one effect on these health care decisions for patients with mental disorder (Jones et al., 2008; Thornicroft et al., 2007).

Some of focus group studies have found that when service users were asked about their stigma experience and about potential groups for targeted anti-stigma interventions, family doctors were the group are frequently mentioned (Pinfold, Byrne & Toumlin, 2005), this service users said that health-care professional are treating them disrespectfully, they have to wait longer than other patients and that their physical complaints are not taken seriously (Schulze & Angermeyer,2003). Despite the high percentages of physical diseases and mortality rate among them (Phelan, Stradins & Morrison, 2001).

About the mental health services, scholars have founded that there is a high percentage (70% worldwide) who do not engage in help seeking for mental health problems (Thornicroft, 2007). Often referred to as the treatment gap, a disparity exists between those who need assistance, and those who actually receive this assistant (Dua, Barbui, Clark, Fleischmann, & Poznyak, 2011). Reasons for why this treatment gap exist are varied and include a lack of awareness about mental disorders symptoms and/or available services, negative beliefs about mental disorders, and expectations of discrimination once being diagnosed with a mental disorder (Henderson, Evans-Lacko, & Thornicroft, 2013).

2.5. Research Studies Medicine & Nursing Undergraduates Students Beliefs toward Mental Illness.

The negative beliefs about mental illnesses were reported to be prevalence in the all section of public (Jugul et al., 2007). When the negative beliefs about mental illnesses had been reported to be prevalent in all parts of public (Jugul et al.,2007), it is not surprising that medicine & Nursing students holding with them these stereotypes when they come to the health community (Malhi et al.,2003). It was borne in them mind, and also, the medicine and nursing students are part of this public, and them beliefs are effected by the beliefs of the cultures they come from. However, if these beliefs are not changed during the classes of health education, it may appear in the long run (Aruna et al.,2016). A cohort study in England demonstrated that while 28% of medicines student beliefs that patients with mental illnesses are not „easy to like", after 2 years, when the students had become health care provider, the percentage was increased to 56 % (Byrne,2009).

Some studies found that young doctors are having a good attitude about psychiatric as a branch. Medicine students are viewing the psychiatric branch as imprecise, unscientific and ineffective (Jugul et al., 2007; Mukherjee, Kishore & Jiloha, 2006). Moreover, medicine students see psychiatric branch as a non-attractive branch during selecting them specialization and they feel disinteresting to work in this field, the stigma surround it, which is unaccepted in our countries where there are existing a shortage of mental health care practitioners (Aruna et al., 2016). Also there is some studies had shown that the beliefs of these practitioners about mental disorders and about patients with mental illnesses effect on the level of care provided by them (Linden & Kavanagh, 2012; Robson, Haddad, Gray& Gournay, 2013). Gaebel, Zaske, Cleveland, Samjeske, Stuart and Sartorious (2014); find that medicine students do not like to select working in psychiatric field. Medicine students described the mental care field as "lacking scientific foundations, depressing and ineffective, and requiring the capacity to work with dangerous and crazy people" (Natan, Drori, & Hochman, 2015, p. 388).

Similarly, nursing students described mental care nursing as the "least worthy" profession (Natan, Drori, & Hochman, 2015, p. 389). Other studies also find that mental care nursing is classified as an inferior nursing or is not real nursing (Halter, 2008; Happell, 2008; Ross & Goldner, 2009).

Negative attitudes are frequently following the nurses who select to the mental health specialization. In comparison to nurses who are working in other specialists, mental care nurses are describing as “skilled, logical, dynamic and respected” (Halter, 2008, p. 24).

Additionally, Halter in 2008 posited that it is very important to recognize the reasons of negative attitudes, and stigma toward mental care nursing by nurses educator, nursing students, other healthcare practitioners, and the society. Stigmatizing beliefs about mental disease and mental care nursing may prohibit students from selecting the mental care field because of the associative stigma, and may causes poor health care and also stigma for mentally ill patients (Ross & Goldner, 2009). Numerous studies from indicate that negative beliefs among medicine (Totic et al., 2012) and nursing (Emrich, Thompson & Moore, 2003) undergraduates students. These negative beliefs about mental disease and psychiatric may be guide to various results such as shortage of mental health practitioners (Happell, 2008). It is also believed that beliefs toward mental diseases are affected by knowledge, familiarity, culturs, and media stories about mental diseases (Wahl, 2003).

The understanding of beliefs toward patients with mental disorders from undergraduate‟s students is a basic step in changing the negative beliefs which was seen in the previous studies (Link et al., 2007). Poor of knowledge about mental disorders reinforce prejudice and stigmatization, as it has been seen that awareness of and proximity to mentally patients can increase the positive beliefs about some disorders (Bjorkman, Angelman, & Jonsson, 2008). The cross-sectional studies were shown that people from the society who have more information about mental disorders are having less stigmatizing beliefs." universities are the best place to apply a comprehensive mental health program, because the beliefs and values of universities-going students tend to improve public beliefs (Mahto et al., 2009). A lot of studies have founded that studying related material on mental disorders /care improved the beliefs of students about the people with mental illnesses (Happell, 2009; Watson et al., 2004).

Research done by Mann and Himelein in 2008 was shown that the participants who contact with people with a mental health disorders had better beliefs about mental illness. Similarly, Markstrom et al. in 2009 did another study with the same results; the students shown lowest level of stigmatization about mental disorders after clinical practice, especially these authors found that the practical part of university programs can, to some extent, have a de-stigmatizing effect on beliefs.

3. METHODOLOGY

3.1. Aim of Study

To determine the beliefs toward mental illness among Medicine & Nursing students in the first and last academic year for Turkish and Non Turkish Students.

3.2. Research Questions

Study questions include followings:

- What are the medicine and nursing student‟s beliefs toward mental illnesses?
- Are there any differences between Demographical characteristics and the student‟s beliefs toward mental illnesses?

3.3. Study Design

This study was carried out as a Descriptive Design.

3.4. Study Setting

The study was conducted at the Near East University in the first and last academic year for students studying at Faculty of Medicine & Faculty of Nursing.

3.5. Sample Selection

The study was performed by Stratification method\proportional to the population sizes, cross- sectional sample from the under graduate students who are in the first academic year and the students who are in the last academic year from the faculty of medicine & faculty of nursing. And agreed to participate in the study, students who are complaining from psychiatric disorder were excluded from the study.

-The sample was calculated for the classes in each department / faculty.

Total number of students in the first and the last academic year in the mentioned faculties are 926 students as the list:

- The number of Turkish speaker students in the 1st academic year: 437
- The number of English Speaker students in the 1st academic year: 229
- The number of Turkish speaker students in the last academic year: 150
- The number of English speaker students in the last academic year: 110

Table 3.1: The Distribution of the Students among Faculties

	1st academic year Turkish	1st academic year English	last academic year Turkish	last academic year English	Total
Medicine	**207**	**169**	**0**	**40 available**	**416**
Nursing	**230**	**60**	**150**	**70**	**510**
Total	**437**	**229**	**150**	**110**	**926**

The sample was involved 300, for Confidence Interval Rate 2.5% as per sample size calculation sas program, to have more accurate result. 8 students were excluded from the research because they did not fully respond to the data collection tool and the research was carry out with 292 students/

- The number of the students was selected from the different faculties by the following calculation method: (n \ total #of students * 300)
  - The first academic year Turkish Students 437\926*300= 141 Students
  - The first academic year English Students 229\926*300= 74 Students
  - The last academic year Turkish Students 150\926*300 = 49 Students
  - The last academic year English Students 110\926 *300 = 36 Student
- The disturbance of students on the academic years:
  - The number of students from the first academic year = 215 students
  - The number of students from the last academic year = 85 students

Table 3.2: The number of the participated students which was selected from each faculty.

	1st academic year Turkish	1s academic year English	last academic year Turkish	last academic year English	Total
Medicine	**67**	**55**	**0**	**13**	**135**
Nursing	**74**	**19**	**49**	**23**	**165**
Total	**141**	**74**	**49**	**36**	**300**

4. DATA COLLECTION

4.1. Data Collection Tool

The research data was gathered with the descriptive form created by the researcher and the Beliefs toward Mental Illness Assessment Scale. (Turkish and English version) (Bilge and Çam 2007,Hirai and Clum 2000).

The descriptive form that was developed by the researchers on the basis of the literature (Hirai and Clum, 2000; Cam and Bilge, 2007).

Beliefs toward Mental Illness Scale (BMIS) the original BMIS was created by Hirai and Clum in 1998, and the validity and reliability study of it in Turkey were conducted by Bilge and Çam in 2008.

The form, regarding for demographics characteristics are included 10 questions.

- Beliefs toward Mental Illness Scale (English Version) developed by Hirai and Clum (2000), with total Cronbach Alpha coefficient was found to be 0.91. This scale will be applied for English speaker (African, Arab & Asian…. etc.) students. (Appendix I)

- Turkish Version reliability and validity study of the same scale developed by Bilge and Çam (2007), with total Cronbach Alpha coefficient was found to be 0.82. This version of scale will be applied to Cypriots &Turkish students. (Appendix II)

The scale has 21 items. This is a Likert type scale with six categories, and it is scored from 0 to 5. The scale also had three subscales which are "Dangerousness", "Poor social and interpersonal skills and incurability", and "Shameful".

The instrument consist form two parts; first part that demographic data with 10 questions, the second part is beliefs toward Mental Illness Assessment Scale consisted 21 questions with 5 choices (0:completely disagree, 1:mostly disagree, 2: slightly disagree, 3:slightly agree, 4: mostly agree, 5:completely agree).

- The total scores will be calculated as in Bilge and Çam(2008); Hirai and Clum (1998) literatures by the following:
  - The total score is 105
  - The Highest Score = 105, The lowest score = 0, The mean = 52.5
  - Higher score (> 52.5) Reflect to the negative beliefs about mental illness.
  - Lower scores ($\leq$ 52.5) Reflect to the positive beliefs about mental illness.
- In this study the evaluation was made on the frequency of those whose average score was lower or higher than the mean score.

- The subscales scores was developed by BİLGE & ÇAM, 2006, as the following:
  - The Dangerousness subscale score ranged from (0-40) with Mean 20.
  - The Incurability, poor interpersonal and social skills subscale score ranged from (0-55) with Mean 27.5.
  - The Shameful subscale score ranged from (0-10) with Mean 5.0.

4.2. Pilot Study

A pilot study was performed on twenty students from the selected faculties after approved from the Near East Institutional Reviews Board (IRB) of Near East University. After the pilot study; questionnaire was be revised for clarified.

4.3. Data Collection

Data was collected using a descriptive form and scale between May and June 2018. These tools were administered by researchers on students while they were in the classroom with observational, self-completion method. After the completion, the students returned the questionnaire directly to research assistants. Data collectors avoided the periods of final exams to prevent stresses that may affect data process. Completion of the questionnaire was taken almost 15 minutes.

4.4. Data Analysis

Statistical Package of Social Sciences (SPSS) software version 20.0 was used to analyze the collected data. The methods used to analyze the data include an analysis of descriptive statistic variables such as frequency and percentages for the categorical variables. Comparisons were made between positive and negative beliefs of students from faculties of medicine and nursing, academic years, and other demographical data. The Pearson Chi-Square test was done to determine these differences. When Findings statistic was significant, the chosen level of significance is $p < 0.05$.

4.5. Ethical Aspect

Ethical approval was obtained from the Near East Institutional Reviews Board (IRB) of Near East University (Appendix IV). In addition, informed consent from the students (Appendix III) and deans‟ permission were obtained (Appendix V). The students were free to exclude from the study in any time and the data collected will be kept confidential.

4.6. Limitations of the Study

The data collection was confined to only the faculty of medicine and faculty of nursing in one university only, the replication of the study at different universities in North Cyprus would enable better generalizability of the finding of the study.

5. ANALYSIS

In this chapter, results of the study conducted to determine the beliefs toward mental illnesses for the faculty of medicine and faculty of nursing students in the first and last academic year.

Table 5.1. Demographical Characteristics of the participated Students (N=292)

Demographical Characteristics	**n**	**%**
Faculty		
Medicine	132	45.2
Nursing	160	54.8
Academic Year		
First Academic Year	210	71.9
Last Academic Year	82	28.1
Age(Mean = 18.8)		
17 – 19	199	68.2
20 – 25	84	28.8
Above 25	9	3.1
Gender		
Male	148	50.7
Female	144	49.3
Nationality		
Turkish	184	63
Non-Turkish *	108	37
Marital Status		
Married	7	2.4
Single	284	97.3
Divorced	1	0.3

Family Type		
Single Parent	14	4.8
Extended	72	42.7
Nuclear	190	65.1
Reconstituted	16	5.5

*Arab, African, Asian ….. Etc.

Demographical characteristics of participants are presented in Table 5.1.The final sample consists of 292 students. The percentage of the participated students from the faculty of Medicine was 45.2% and from the faculty of Nursing was 54.8%. The most of the participated students were from the first academic year by percentage of 71.9%, while 28.1% was from the last academic year.

Participant‟s age ranged between 17 and 32 years old, the most frequent age group was from 17 to 19 years old by percentage of 86.2%, the mean age of the students was 18.8 years. Regarding the gender of the participants, male and female students are almost equally participated in this survey, with 50.7% male and 49.3% female, the majority of the participants were from Turkish students with 63% while the non-Turkish students were 37%. The most of participant are single by percentage of 97.3%, and approximately 65% of them are a member of the nuclear family, 42.7% from extended family, 5.5% from reconstituted family, and 4.8% from single parent family.

Table 5.2. Special characteristics for participated students (N=292)

	N	**%**
Met Somebody with Mental Illness		
Yes	42	14.4
No	250	85.6
Have a History of Mental Illness		
Yes	6	2.1
No	286	97.9
Family History of Mental Illness		
Yes	8	2.7
No	284	97.3
Working Area Plan after Graduations		
General Hospital	217	74.3
Polyclinic	52	17.8
Mental & Psychiatric Care Hospital	17	5.8
Others (Private Business, Schools ...etc.)	6	2.1

In the table 5.2 we found that the participants who met somebody with mental illness are 14.4% from the total participants, and the participants who had history of mental illness are only 2.1% out of total participants. In addition, the participants who had a family history of mental illnesses are 2.7%. Significant differences in an interest in a future career between students so the majority of the students were planning to work in the general hospitals by percentage of 74.3% and 17.8% was planning to work in polyclinics, while 5.8% had a plan to work in mental health care units, at the end 2.1% from the total participants were planning to work in the other places like in the schools, organizations or private businesses.

Table 5.3. Assessment of Students Beliefs toward Mental Illness by using BMI Assessment Scale.

	Positive Beliefs			Negative Beliefs		
Scale	**0* n%**	**1** n%**	**2*** n%**	**3**** n%**	**4***** n%**	**5****** n%**
A mentally ill person is more likely to harm others than a normal person.	34 (11.6%)	46 (15.8%)	50 (17.1%)	53 (18.2%)	56 (19.2%)	53 (18.2%)
Mental disorder would require a much longer period of time to be cured than would other general diseases.	27 (9.3%)	45 (15.5%)	50 (17.2%)	68 (23.4%)	45 (15.5%)	56 (19.2%)
It may be a good idea to stay away from people who have psychological disorder because their behavior is dangerous.	34 (11.6%)	46 (15.8%)	50 (17.1%)	53 (18.2%)	56 (19.2%)	53 (18.2%)
The term "Psychological disorder" makes me feel embarrassed.	23 (7.9%)	42 (14.4%)	60 (20.5%)	78 (26.7%)	45 (15.4%)	44 (15.1%)
A person with psychological disorder should have a job with minor responsibilities.	42 (14.4%)	82 28.1	64 21.9	44 15.1	57 19.5	3 1.0
Mentally ill people are more likely to be criminals.	34 (11.6%)	46 (15.8%)	50 (17.1%)	54 (18.5%)	59 (20.2%)	49 (16.8%)
Psychological disorder is recurrent.	27 (9.2%)	40 (13.7%)	59 (20.2%)	66 (22.6%)	44 (15.1%)	56 (19.2%)
I‟m afraid of what my boss, friends and others would think if I were diagnosed as having a psychological disorder.	26 (8.9%)	46 (15.8%)	53 (18.2%)	64 (21.9%)	50 (17.1%)	53 (18.2%)
Individuals diagnosed as mentally ill will suffer from its symptoms throughout their life.	26 (8.9%)	39 (13.4%)	62 (21.2%)	64 (21.9%)	49 (16.8%)	52 (17.8%)
People who have once received psychological treatment are likely to need further treatment in the future.	27 (9.2%)	43 (14.7%)	52 (17.8%)	65 (22.3%)	49 (16.8%)	56 (19.2%)
It might be difficult for mentally ill people to follow social rules such as being punctual or keeping promises.	26 (8.9%)	36 (12.3%)	56 (19.2%)	60 (20.5%)	61 (20.9%)	53 (18.2%)
I would be embarrassed if people knew that I dated a person who once received psychological treatment.	23 (7.9%)	42 (14.4%)	60 (20.5%)	78 (26.7%)	45 (15.4%)	44 (15.1%)
I am afraid of people who are suffering from psychological disorder because they may harm me.	34 (11.6%)	46 (15.8%)	50 (17.1%)	53 (18.2%)	56 (19.2%)	53 (18.2%)
A person with psychological disorder is less likely to function well as a parent.	27 (9.2%)	41 (14.0%)	56 (19.2%)	65 (22.3%)	45 (15.4%)	58 (19.9%)
I would be embarrassed if a person in my family became mentally ill.	23 (7.9%)	42 (14.4%)	60 (20.5%)	78 (26.7%)	45 (15.4%)	44 (15.1%)
I do not believe that psychological disorder is ever completely cured.	26 (8.9%)	42 (14.4%)	50 (17.1%)	61 (20.9%)	58 (19.9%)	55 (18.8%)

	0* **n%**	**1**** **n%**	**2***** **n%**	**3****** **n%**	**4******* **n%**	**5******** **n%**
Mentally ill people are unlikely to be able to live by themselves because they are unable to assume responsibilities.	23 (7.9%)	40 (13.7%)	53 (18.2%)	69 (23.6%)	48 (16.4%)	59 (20.2%)
Most people would not knowingly be friends with a mentally ill person.	23 (7.9%)	35 (12.0%)	59 (20.2%)	66 (22.6%)	57 (19.5%)	52 (17.8%)
The behavior of people who have psychological disorders is unpredictable.	28 (9.6%)	39 (13.4%)	53 (18.2%)	63 (21.6%)	58 (19.9%)	51 (17.5%)
Psychological disorder is unlikely to be cured regardless of treatment.	26 (8.9%)	38 (13.0%)	59 (20.2%)	67 (22.9%)	47 (16.1%)	55 (18.8%)
I would not trust the work of a mentally ill person assigned to my work team.	25 (8.6%)	43 (14.7%)	55 (18.8%)	66 (22.6%)	46 (15.8%)	57 (19.5%)

0*completely disagree, **1****Mostly Disagree, **2*****slightly disagree,
3****slightly agree, **4*******Mostly Agree, **5********Completely Agree

Table 5.3 explains the responses of the participants to the Beliefs toward mental illness scale (BMI); however, higher scores on the negative domain of the scale indicated an overall unhealthy Belief of the students toward those with mental illness. While lower score on the positive domain of the scale indicated an overall healthy beliefs of students toward those with mental illness. The answer of participants was Divided to the two parts positive beliefs which includes the answer by (0: completely disagree, 1: mostly disagree, 2: slightly disagree) while negative beliefs includes the answers by (3: slightly agree, 4: mostly agree, 5: completely agree).

In this table we can see that the most of students have a negative beliefs toward mental illnesses and it was clear from them answers, as in the most of the questions the students who has negative answers are above 50% while the students who have positive answers are less than 50% from the total students ,Except question number 5 which is related to the job responsibilities (A person with psychological disorder should have a job with minor responsibilities) in this question 104 students 35.6% agreed with this Idea that mean they have a negative beliefs, while 188 students 64.4% disagreed with this idea which mean they have a positive belief about mental ill patient responsibilities .

Table 5.4. The Total Scores for the Participated Students.

	Lowest & Highest Score	**Mean**	**# of Students Get Score ≤ 52.5 n**	**# of Students Get Score > 52.5 n**	**Min**	**Max**	**P Value**
Medicine First	0 – 105	52.5 ± 6.924	42	77	8	105	**.204**
Medicine Last			8	5	0	100	
Nursing First			39	52	1	105	
Nursing Last			37	32	0	102	
Total			**126**	**166**			

The total score for the participated students was explained in table 5.4, the participated students' scores are ranged from 0 - 105 with Mean 52.5, the students who get score < 52.5 are having a positive beliefs toward mental illness while the students which get score > 52.5 are having a negative beliefs toward mental illnesses (Bilge and Çam,2008; Hirai and Clum,1998). In this study we can found that 126 students were getting score < 52.5, 81 students from the first academic year and 45 from the last academic year, 50 students from the faculty of medicine and 76 from the faculty of nursing. While 166 students get score > 52.5, 129 from the first academic year and 37 from the last academic year, 82 from the faculty of medicine and 84 from the faculty of nursing.

Table 5. 5. The Dangerousness Subscale Scores for the Participated Students.

	Question Numbers	**Lowest & Highest Score**	**Mean ± SD**	**# of Students Get Score ≤ 20 n**	**# of Students Get Score > 20 n**	**Min**	**Max**	**P Value**
Medicine First	1, 2, 3, 4 , 5 , 6, 7, 13	0 – 40	20 ± 4.0641	39	80	2	39	**.002**
Medicine Last				8	5	0	40	
Nursing First				45	46	5	40	
Nursing Last				38	31	4	35	
Total				**130**	**162**			

The table 5.5, was explaining the participated students Beliefs toward Mental Illness Subscales scores, which include dangerousness questions number 1,2,3,4,5,6,7 & 13, with score limit from 0- 40 and Mean 20. The participated students who get score ≤ 20 are thinking that mental ill patients are not Dangerous, while the students who get score > 20 have a belief that mental ill patients are dangerous (Bilge & Çam, 2006) So we can found from this table that 130 from the total students (84 students from the first academic year in both faculties and 46 from the last academic year) are beliefs that the mental ill patient are not dangerous with score ≤ 20, while 162 students (126 from the first academic year and 36 from the last) are having a negative belief and thinking that the mental ill patients are dangerous.

80 students from the first academic year students in medicine faculty hold negative beliefs toward mental ill patient‟s dangerousness and 39 students only have a positive belief. In the last academic year from the same faculty 8 students have a positive belief toward mental patient dangerousness and 5 students hold a negatives belief.

In nursing faculty 45 students from the first academic year have a positive belief toward mental ill patients dangerousness while 46 hold a negative belief. In last academic year there are some improvement and 38 student‟s beliefs that the mental ill patients are not dangerous while 31 students still have a negative belief.

Table 5.6. The Incurability, Poor Interpersonal & Social Skills Subscale Scores for the Participated Students.

	Question Numbers	Lowest & Highest Score	Mean ± SD	# of Students Get Score ≤ 27.5 n	# of Students Get Score > 27.5 n	Min	Max	P Value
Medicine First	8, 9 , 10, 11, 14, 16, 17, 18, 19, 20, 21	0 – 55	27.5 ± 5.205	40	79	6	55	**.001**
Medicine Last				6	7	2	47	
Nursing First				39	52	4	52	
Nursing Last				39	30	0	55	
Total				**124**	**168**			

The table 5.6 Also explaining the participated students‟ scores for the Incurability, Poor Interpersonal & Social Skills Subscale, which include the questions numbers 8, 9 , 10, 11, 14, 16, 17, 18, 19, 20 & 21, with score limit from 0- 55 and Mean 27.5. The participated students who get score ≤ 27.5 are beliefs that the mental ill patients are curable and have normal interpersonal and social skills, while the students who get score > 27.5 are beliefs that mental illnesses are Incurable and the mental ill patient are complaining from Poor Interpersonal & Social Skills. (Bilge & Çam, 2006) So we can found in the table that 124 from the total students (79 from the first academic year and 45 from the last) are having a positive beliefs about mental ill patient‟s curability, interpersonal and social skills with score ≤ 27.5 while 168 students (131 from the first and 37 from the last academic year) get score > 27.5 and beliefs that mental illnesses are incurable and the mental ill patient complain from poor social and interpersonal skills.

In the first academic year students of medicine faculty 79 students hold negative beliefs toward mental ill patient‟s Incurability, Interpersonal & Social Skills and 40 students only have a positive belief. In the last academic year from the same faculty 6 students have a positive belief toward mental patient Incurability, Interpersonal & Social Skills and 7 students hold negatives beliefs.

In nursing faculty 39 students from the first academic year have a positive belief toward mental ill patients Incurability, Interpersonal & Social Skills while 52 hold a negative belief. In the last academic year 39 student‟s beliefs that the mental illnesses are curable and the patients with mental illnesses are not complaining from poor social or interpersonal skills while 30 students still have a negative belief.

Table 5.7. The Shameful Subscale Scores for the Participated Students.

	Question Numbers	Lowest & Highest Score	Mean ± SD	# of Students Get Score ≤ 5 n	# of Students Get Score > 5 N	Min	Max	P Value
Medicine First	12,15	0 – 10	5.0 ± 1.049	47	72	0	10	**.179**
Medicine Last				10	3	0	8	
Nursing First				34	57	1	10	
Nursing Last				34	35	0	10	
Total				**125**	**167**			

The table 5.7 was explaining the participated students‟ scores for the shameful Subscale which include the questions number 12 & 15, with score limit from 0- 10 and Mean was 5.0. The participated students who get score ≤ 5 are beliefs that the mental illnesses are not shameful, while the students who get score > 5 are beliefs that mental illnesses are Shameful and they are feeling embarrassing to deal and contact with somebody complain from mental illness or if they are complaining from mental illness, (Bilge & Çam, 2006) So we can found from the table that 125 from the total students (81 from the first academic year and 44 from the last academic year) are beliefs that the mental illnesses are not shameful with score ≤ 5, while 167 from the total students (129 from the first academic year and 38 from the last academic year) are beliefs that the mental illnesses are shameful with score > 5.

72 students from the first academic year students in medicine faculty hold negative beliefs and thinking that mental illnesses are shameful and 47 students only have a positive belief. In the last academic year from the same faculty 10 students have a positive belief about mental illnesses shameful and 3 students hold a negatives belief.

In nursing faculty 34 students from the first academic year have a positive belief toward patients with mental illnesses as its not shameful disease while 57 hold a negative belief. In last academic year 35 students beliefs that mental illnesses are shameful while 34 students have a positive beliefs.

Table 5. 8. The positive and negative beliefs toward mental illnesses for medicine and nursing students according to BMI subscales.

Faculty & Academic Year		Dangerousness		P Value	Incurability		P Value	Shameful		P Value	Total
		Positive Beliefs	Negative Beliefs	.007	Positive Beliefs	Negative Beliefs	.024	Positive Beliefs	Negative Beliefs	.029	n %
Medicine First	**n**	39	80		40	79		47	72		119
	%	34.5	70.8		33.6	66.4		39.5	60.5		40.7
Medicine Last	**n**	8	5		6	7		10	3		13
	%	61.5	38.5		46.2	53.8		76.9	23.1		4.5
Nursing First	**n**	45	46		39	52		34	57		91
	%	49.5	50.5		42.9	57.1		37.4	62.6		31.2
Nursing Last	**n**	38	31		39	30		34	35		69
	%	55.0	45.0		56.5	43.5		49.3	50.7		23.6
Total	**n**	130	162		124	168		125	167		292
	%	44.5	55.5		42.5	57.5		42.8	57.2		100%

Comparison between nursing faculty students and medicine faculty students in both first and last academic years, about the positive and negative beliefs toward mental illnesses according to the BMI subscales shown in Table 5.8. In faculty of medicine the total number of students participated in this assessment were 132 participants, 119 students in the first academic year and 13 students from the last academic year. In the first academic year 70.8% of the participants, 38.5 % from the last academic year participants beliefs that‟s the mental ill patients are dangerous and 66.4% of participants in the first academic year, 53.8% from the last academic year participants beliefs that the mental illnesses are incurability and the mental illnesses patients have poor interpersonal in social skills, 60.5% from the first academic year participants and 23.1% from the last academic year participants beliefs that the mental illnesses are shameful.

The total number of nursing faculty students participated in this assessment are 160 students, 50.5% from the first academic year participants and 45.0% from the last academic year participants beliefs that‟s the mental ill patients are dangerous, and 57.1% from the first academic year participants, 43.5% from the last academic year participants beliefs that the mental illnesses are incurability and the mental illnesses patients have poor interpersonal in social skills, 62.6% of the first academic year participants and 50.7% of last academic year participants beliefs that the mental illnesses are shameful.

Table 5.4. The total students Beliefs toward Mental Illnesses of nursing and medicine students in first and last academic years

		Positive Beliefs toward Mental Illness		Negative Beliefs toward Mental Illness	
		n	**%**	**n**	**%**
Medicine	**First**	21	40.4%	31	59.6%
	Last	8	61.5%	5	38.5%
Nursing	**First**	39	43.2%	52	56.8%
	Last	37	53.6%	32	46.4%
Total		**126**	**43.2%**	**166**	**56.8%**

Table 5.9. Explained the total students of student‟s beliefs toward mental illnesses, in this table the first academic year Turkish students from the faculty of medicine have been removed to have an effective comparison with the medicine students in the last academic year as there is no Turkish students in the last academic year.

It‟s clear that most of the students from the first academic year have more negative beliefs toward mental illnesses than the students from the last academic year with (n= 31) 59.6% of medicine students and (n=52) 56.8% of nursing students have a score > 52.5. While (n= 21) 40.4% of the first academic year medicine students and (n= 39) 43.2% of the first academic year nursing students have a positive beliefs toward mental illnesses with score $\leq$ 52.5 (See Figure 1).

When we are comparing the students from the last academic year with students in the first, we will find that the students more positive beliefs toward mental illnesses than the students from the first academic year with (n=8) 61.5% of the medicine students and (n=37) 53.6% of the nursing students from the last academic year have score $\leq$ 52.5. While (n=5) 38.5% of the medicine students in the last academic year and (n=32) 46.4% of nursing students in the last academic year have negative beliefs toward mental illnesses with score > 52.5 (Figure.1).

Figure 1. The Total of First & Last Academic Year Students Beliefs toward Mental Illnesses.

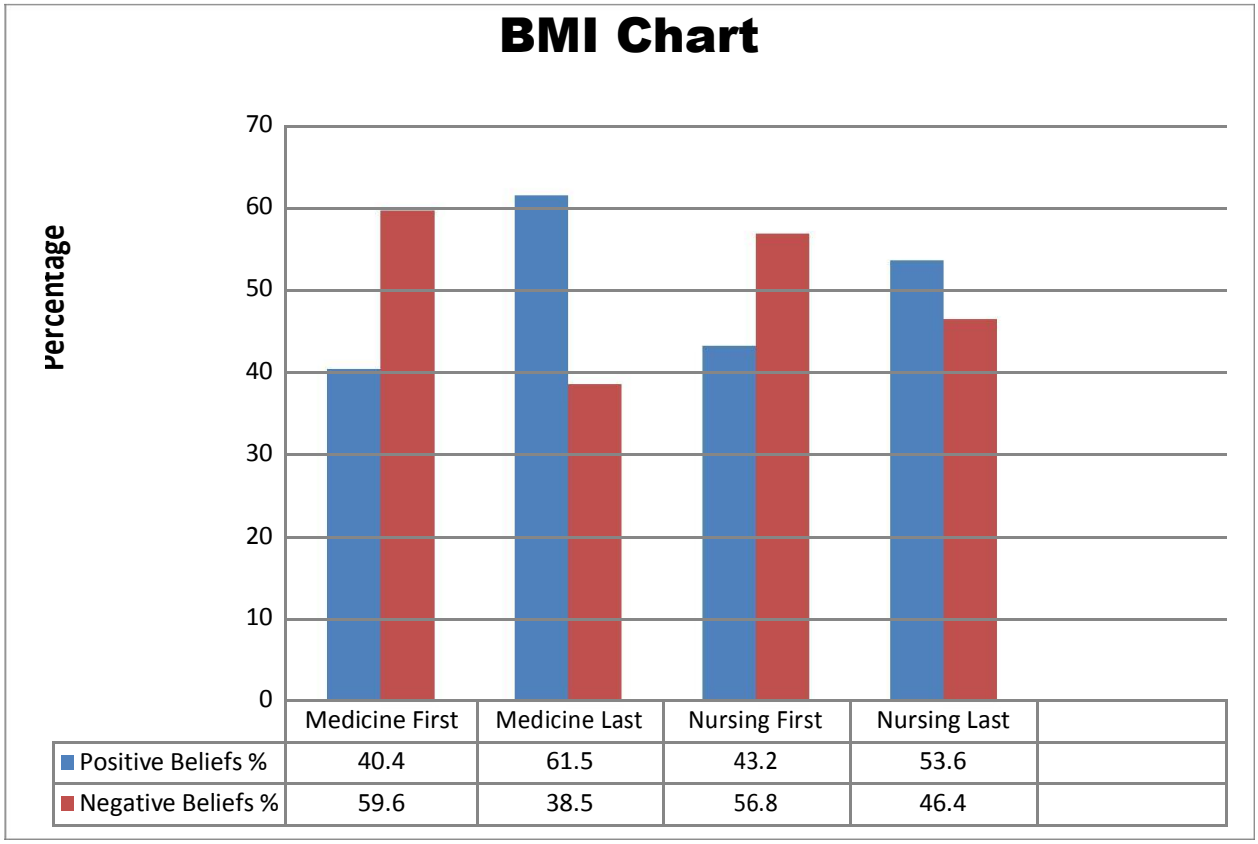

Table 5.5. Comparison of participated student"s beliefs toward mental illnesses according to demographical characteristics and BMI subscales

	Positive Beliefs			**Negative Beliefs**			**Total**
	Dangerousness n %	Incurability n %	Shame n %	Dangerousness n %	Incurability n %	Shame n %	
Age							
17-19	81 (39.9%)	76 (37.4%)	80 (39.4%)	122 (60.1%)	127 (62.6%)	123(60.6%)	203
20-25	45 (56.3%)	44 (55.0%)	41(51.3%)	35 (43.8%)	36 (55.0%)	39 (48.8%)	80
Above 25	4 (44.4%)	4 (44.4%)	4 (44.4%)	5 (55.6%)	5 (55.6%)	5 (55.6%)	9
P Value	**.045**	**.027**	**.192**				
Gender							
Male	68 (45.9%)	67 (45.3%)	69(46.6%)	80 (54.1%)	81 (54.7%)	79 (53.4%)	148
Female	62 (43.1%)	57 (39.6%)	56 (38.9%)	82 (56.9%)	87 (60.4%)	88 (61.1%)	144
P Value	**.352**	**.194**	**.112**				
Marital Status							
Married	3 (42.9%)	3 (42.9%)	4 (57.1%)	4 (57.1%)	4 (57.1%)	3 (42.9%)	7
Single	127 (44.7%)	121(42.6%)	121(42.6%)	157 (55.3%)	163 (57.4%)	163(57.4%)	284
Divorced	0 (0.0%)	0 (0.0%)	0 (0,0%)	1 (100.0%)	1 (100.0%)	1(100.0%)	1
P Value	**.665**	**.690**	**.512**				
Family Type							
Single Parent	9 (64.3%)	8 (57.1%)	7 (50.0%)	5 (35.7%)	6 (42,9%)	7 (50.0%)	14
Extended	34 (47.2%)	30 (41.7%)	32(44.4%)	38 (52.8%)	42 (58.3%)	40 (55.6%)	72
Nuclear	79 (41.6%)	77 (40.5%)	79(41.6%)	11 1(58.4%)	113(59.5%)	111(58.4%)	190
Reconstituted	8 (50.0%)	9 (56.3%)	7 (43.8%)	8 (50.0%)	7 (43.8%)	9 (56.3%)	16
P Value	**.349**	**.425**	**.919**				
Nationality							
Turkish	79 (42.9%)	84 (45.7%)	73 (39.7%)	105 (57.1%)	100 (54.3%)	111(60.3%)	184
Non-Turkish	51 (47.2%)	40 (37.0%)	52 (48.1%)	57 (52.8)	68 (63,0%)	56 (51.9%)	108
P Value	**.277**	**.094**	**.099**				
Met Somebody with Mental Illness							
Yes	39 (92.9%)	39 (92.9%)	39 (92.9%)	3 (7.1%)	3 (7.1%)	3 (7.1%)	42
No	91 (36.4%)	85 (34.0%)	86 (34.4%)	159(63.6%)	165 (66.0%)	164(65.6%)	250
P Value	**.005**	**.012**	**.009**				
Have a History of Mental Illness							
Yes	6 (100.0%)	6 (100.0%)	6 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6
No	124 (43.4%)	118(41.3%)	119(41.6%)	162 (56.6%)	168 (58.7%)	167(58.4%)	286
P Value	**.007**	**.005**	**.016**				

Family History of Mental Illness							
Yes	8 (100.0%)	8 (100.0%)	8 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	8
No	122 (43.0%)	116(40.8%)	117 (41.2%)	162(57.0%)	168 (59.2%)	167(57.2%)	284
P Value	**.001**	**.001**	**.001**				
Working Plan after Graduation							
General Hospital	94 (43.3%)	93 (42.9%)	88 (40.6%)	123 (56.7%)	124 (57.1%)	129(59.4%)	217
Polyclinics	25 (48.1%)	20 (38.5%)	26 (50.0%)	27 (51.9%)	32 (61.5%)	26 (50.0%)	52
Mental Hospitals	8 (47.1%)	8 (47.1%)	8 (47.1%)	9 (52.9%)	9 (52.9%)	9 (52.9%)	17
Others	3 (50.0%)	3 (50.0%)	3 (50.0%)	3 (50.0%)	3 (50.0%)	3 (50.0%)	6
P Value	**.917**	**.887**	**.615**				

The table 5.10 is comparing between the demographical characteristics and beliefs toward mental illnesses subscales; firstly we can found that the youngest participant had more negative beliefs toward mental illnesses than others age groups as in age group 17-19 had more negative beliefs than 20-25 years or >25 years age groups. The female participants had more negative beliefs than the male participants, no big effective for the marital status or family types on the beliefs toward mental illnesses, we have only one participant divorced and he had a negative belief toward mental illnesses. Also there is no big difference between the nationalities in them beliefs toward mental but the Turkish participants had slightly more negative beliefs toward mental illnesses than other nationalities. The participants who was met somebody with mental illnesses had more positive beliefs toward mental illnesses than the participants who didn‟t met somebody with mental illnesses before. Also all of the participants who had mental illness before or has a family history of mental illnesses had positive beliefs toward mental illnesses. The participants who are planning to work in mental care units are not having more positive beliefs toward mental illnesses than the others who are planning to work in general hospitals or polyclinics or any other places. It was finding that there were no statistically significant differences between items and faculties with ($P > 0.05$).

6. DISCUSSION

A recent study examined the nursing and medicine faculties‟ students‟ beliefs toward mental illnesses among 300 students selected randomly, 292 students complete the full assessment scale with responding rate 97.3%, which include 132 students from the faculty of medicine (119 from 1st academic year, 13 from the last academic year) and 160 students from the faculty of nursing (91 from the 1st academic year and 69 from the last academic year)

The Belief toward Mental Illnesses Scale divided to the 3 subscales Dangerousness, Incurability, poor interpersonal & social skills, shameful. Lower scores lead to positive beliefs toward mental illnesses and higher score lead to negative beliefs toward mental illnesses.

Based upon the analysis of the results the last academic year students generally have more positive beliefs towards mental illness (57.6$\pm$6.924) than first academic year students (39$\pm$6.924). Nursing and medicine students in last academic year are having more knowledge about mental illness, have a highly awareness about mental health topics, and are trained in skills that help them to deal with the challenging behavior displayed by mentally ill patients and to provide them with care. The training programs they had (Ng P & Chan, 2002; Pitre et al., 2007) and contact with patients with mental illnesses lead to increase the positive beliefs and enlightened views. (Boyle et al., 2010; Hamaideh & Mudallal, 2009) It seems that practices and contacting with patients complaining from mental disorders improved the students answers, who give lower scores to the questions which is related to “dangerousness, Incurability and shameful which result to a better attitude to take care of the patients. Specifically, Markstrom et al.,2009; found that, after clinical experiences, nursing & medicine students beliefs that people with mental disorders are less dangerous than they did before. This is similar to the results found by (Beltran, Scanlan, Hancock, and Luckett,2007; Grav, Lysfjord, and Hellzen, 2010 ; and Horsfall, Cleary, and Hunt,2010).

However, most of the participated students did not exhibit the positive beliefs about mental disorders services. The current study, which assessed the students of nursing and medicine faculties ' beliefs towards mental illness found that students have negative beliefs about the idea of working in mental care units with 5.8% only from the total sample would like to work in mental care units (Table 5.2), this was a result of negative beliefs about mental health services and users.

Most of the 1st year students about 61.31$\pm$ 6.924 of them held misconceptions or negative beliefs about the areas assessed (Table 5.9). These findings could be related to poor of knowledge and awareness about nature of mental disorders. Considering that the students from the first academic year had not been exposed to the mental patients or mental health courses, while the students from the final academic year had been exposed to psychiatric courses during the previous academic years, this finding clarified the importance of exposure to the psychiatry in improving the beliefs toward mental illnesses. Similar observations have also been made in previous studies (Murthy & Khandelwal, 2007, Chawla et.al.,2012; Baxter et.al., 2001, Feifel et al.,2014).

However, also after exposure to psychiatric courses as per the current curriculum, 42.43% of the final year students still have a negative beliefs toward mental illnesses, which reflects that while knowledge improved along the course, yet gaps in knowledge remained, highlighting the insufficiency of the current educational plan in increasing a positive beliefs. These gaps in knowledge have been seen by other studies as well (Trivedi & Dhyani, 2007; Gulati et al., 2014).

Negative beliefs about mental illnesses is appeared when more than half of the participated students beliefs that the mental ill patient can harm the others. And more than half of the students beliefs that mental ill patients were unemployable, irrespective of their recovered status, and beliefs that they will not have normal life as a normal people like possibility to married , have friends, assume responsibilities and follow the social rules. Also more than half of participated students feeling embarrassing to contact, deal or have relationship with somebody complain of mental illness. These results highlight the stigma and discrimination appeared about mental illnesses, within the health care communities itself. These finding is also founded in the previous studies (Jugul et al., 2007; Kishore et al., 2011; Chawla et al., 2012; Feldman, 2005; Mukherjee et al., 2002).

In this study also it was clear that the most of the participated students who was met somebody with mental illness before hold positive beliefs about the mental illnesses with 92.9% (39$\pm$ 2.014), and all of the participated students who had history of mental disorder before or had a family history of mental illnesses have a positive beliefs about mental illnesses with 100.0% (Table 5.10). This result is connecting with those students who have or had a relationship with mental disorder similar to those of other authors (Henderson et al.,2007; Mann & Himelein,2008; Markstrom et al.,2009; Shafer, Wood, & Williams,2011). It seems that practices and direct contact with people with mental disorders changes the answers of the students, who give lower scores to the questions related to "dangerousness, Incurability, shameful" which leads to a better disposition to take care of the patient.

Age, gender and ethnicity were the factors that founded to exert some effecting on students‟ Beliefs and attitude toward mental illnesses. Specifically, youngest students are more stigmatizing than the other age groups, about 61.1% of participated students aged from 17 to 19 years old hold negative beliefs toward mental illnesses. Women appeared more stigmatizing with Percentage around 59.5% than men 54.1% and also Turkish participants had slightly more negative beliefs toward mental illnesses with 57.2% than Non Turkish students 55.9% but the differences between the two genders, marital status and family types were not substantial. This finding is consistent with other studies that have pointed towards this lack of effect (Jorm & Oh E, 2009; Schnittker J,2000).

This study focused on the need for more practices and education to improve mental health attitudes toward mental illnesses for nurses & medicines students‟ population, these findings, as those of Markstrom et al. 2009, presented past experience from contacting people with mental disorders can be a good starting point in the changing for less-stigmatizing attitude and belief

about mental disorders. The results of this study is also focused on the relationship between direct contact and the student‟s attitude and belief toward patients with mental disorders, which supports those results in others study as (Corrigan, Morris, Michaels, Rafacz,and Rusch, (2012).

Finally; the present study had some strengths and limitation, the strengths of the study include that It has recruited a good representative of nursing & medicine student‟s from different ethnicity, cultures and from first academic year before mental health theoretical educations and last academic year students after completion of the mental health theoretical education, which allows us to make a good and meaningful comparisons in beliefs toward mental illnesses.

Regarding the limitations of this study, for assessment of beliefs and attitudes using the quantitative study could be a limitation to the studies as it was not supported with any qualitative data in case to add more information‟s. Moreover, other methodological approaches, such as observation of the participant‟s, would be more better to evaluate students behaviors toward patients with mental disorders and another important types of stigma.

7. CONCLUSION & RECOMMENDATIONS

7.1 Conclusion

The results of this study showed highly percentage of the students in the first academic year from medicine or nursing faculties hold negative beliefs toward mental illnesses which express about the stigmatizing attitude toward mental illnesses are still in the public as they are newly joined to the university and still have the public thoughts and attitudes. Also high percentage from the students in the last academic year from both faculties still has a negative belief toward mental illness after finishing the theoretical aspect of psychiatric courses which expressed about some weaknesses in the educational plan and the importance of review and develop the current curriculum to reinforce the positive beliefs of the future health care professionals.

7.2 Recommendation's

1. It is important to review and update the current curriculum to reinforce the positive beliefs of the future health care practitioners toward patients with these types of illnesses. A theoretical part of education is not being enough to change the belief and attitude of the students. This education must be complemented with clinical practices that reinforce the development of personal needs "experiences" in their relationships with mental ill patients, the relatives, and in their professional contribution to public.

2. Also there is need for continuously evaluations system allows to assess the student‟s beliefs, thus important to find the early signs of negative beliefs and attitudes toward people with mental disorders and manage.

3. Suggest the need for more studies about students beliefs including qualitative methodologies approach in which researcher can define the role that students beliefs play in their behavior toward patients with mental disorders.

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Appendix I

Demographical Characteristics:

Faculty of:	□ Medicine □ Nursing
The academic year:	□ First Year □ Last Year
Age:	
Gender:	□ Male □Female □ Other: _____
Nationality	
Marital Status:	□ Married □ Single □ Divorced
Family Type:	□ Single Parent □ Extended □ Nuclear □ Reconstituted
Have you met before with someone have a mental Illness	□ Yes □ No
Do you Have History of Mental Illnesses	□ Yes □ No If **Yes** Do you Receive any treatment as : □ Pharmacological □ Hospitalization □ Other: _____
There is any Family History of Chronic Mental Illnesses	□ Yes □ No , If Yes; Who : □ Father □ Mother □ Brother □ Sister □ Other: _____
Where do you want to work, when you graduate?	

Beliefs toward Mental Illness Assessment Scale

By using the scale below, please indicate the level of your agreement with the Following items by choosing the number that most closely corresponds with your beliefs:

0 = completely disagree, **1** = mostly disagree, **2** = slightly disagree

3 = slightly agree, **4** = mostly agree, **5** = completely agree.

#	Scale	0	1	2	3	4	5
1	A mentally ill person is more likely to harm others than a normal person.						

2	Mental disorder would require a much longer period of time to be cured than would other general diseases.						
3	It may be a good idea to stay away from people who have psychological disorder because their behavior is dangerous.						
4	The term "Psychological disorder" makes me feel embarrassed.						
5	A person with psychological disorder should have a job with minor responsibilities.						
6	Mentally ill people are more likely to be criminals.						
7	Psychological disorder is recurrent.						
8	I‟m afraid of what my boss, friends and others would think if I were diagnosed as having a psychological disorder.						
9	Individuals diagnosed as mentally ill will suffer from its symptoms throughout their life.						
10	People who have once received psychological treatment are likely to need further treatment in the future.						
11	It might be difficult for mentally ill people to follow social rules such as being punctual or keeping promises.						
12	I would be embarrassed if people knew that I dated a person who once received psychological treatment.						
13	I am afraid of people who are suffering from psychological disorder because they may harm me.						
14	A person with psychological disorder is less likely to function well as a parent.						
15	I would be embarrassed if a person in my family became mentally ill.						
16	I do not believe that psychological disorder is ever completely cured.						
17	Mentally ill people are unlikely to be able to live by themselves because they are unable to assume responsibilities.						
18	Most people would not knowingly be friends with a mentally ill person.						
19	The behavior of people who have psychological disorders is unpredictable.						
20	Psychological disorder is unlikely to be cured regardless of treatment.						
21	I would not trust the work of a mentally ill person assigned to my work team.						

Thank You

Appendix II

Demografik veriler:

Fakülte:	□ Tıp □ Hemşirelik
Akademik yıl:	□ İlk yıl □ Son yıl
Yaş:	
Cinsiyet:	□ Erkek □ Kadın □ Diğer
Milliyet:	
Medeni hal:	□ Evli □ Bekar □ Boşanmış
Aile tipi	□ Çekirdek □ Geniş □ Boşanmış
Ruh hastalıkları öykünüz var mı?	□ Evet □ Hayır - Eğer Evetse; herhangi bir tedavi alıyor musunuz? □ ilaç tedavisi □ hastaneye yatırma □ Diğer_____
Aile nizden birinde ruh hastalığı öyküsü var mı?	□ Evet □ Hayır, Eğer evetse ; kim de var: □ Baba □ Anne □ Erkek kardeş □ Kız kardeş □ Diğer_____
Daha önce ruhsal sorunu olan biriyle karşılaştınız mı?	□ Evet □ Hayır
Mezunolunca nerede çalışmak istiyorsun ?	

RUHSAL HASTALIĞA YÖNELĞK ĠNANÇLAR ÖLÇEĞĞ

Aşağıdaki ifadeler, sizin ruhsal hastalığa yönelik inançlarınızı ölçmek için geliştirilmiştir. Bu ifadeleri dikkatlice inceleyerek en doğru şekilde yanıtlamanız oldukça önemlidir. Ankete vereceğiniz yanıtlar araştırmacılar dışında hiç kimse tarafından okunmayacak ve farklı bir amaçla kullanılmayacaktır. Aşağıdaki her bir maddenin yanına, ilgili madde için size göre uygun gelen sayıyı işaretleyiniz

Ölçek Değerlendirmesi:

0 = Tamamen katılmıyorum, **1** = Çoğunlukla katılmıyorum, **2** = Kısmen katılmıyorum

3 = Kısmen katılıyorum **4** = Çoğunluklakatılıyorum **5** = Tamamen katılıyorum

	Ruhsal Hastalığa Yönelik Ġnançlar Ölçeği	**0**	**1**	**2**	**3**	**4**	**5**
1	Ruhsal hastalığı olan bir bireyin başkalarına zarar verme olasılığı, sağlıklı bir bireye göre daha fazladır.						

2	Ruhsal hastalıklar, fiziksel hastalıklara göre, daha uzun bir iyileşme süreci gerektirir.						
3	Davranışları tehlikeli olması nedeniyle, ruhsal hastalığı olan bireylerden uzak durmak iyi bir fikirdir.						
4	"Ruhsal hastalık" ifadesi beni rahatsız eder.						
5	Ruhsal hastalığı olan bir bireyin, sorumluluğu az olan bir işte çalışması gerekir.						
6	Ruhsal hastalığı olan bireylerin suç işleme olasılığı daha fazladır.						
7	Ruhsal hastalıklar tekrarlayıcıdır.						
8	Ruhsal hastalık teşhisi alırsam; patronumun, arkadaşlarımın ve başkalarının, hakkımda düşünecekleri şeyler beni endişelendirir.						
9	Ruhsal hastalık teşhisi konmuş bireyler, hastalıklarının olumsuzluklarını ömür boyu yaşayacaklardır.						
10	Bir kez ruhsal hastalık tedavisi alan bireyler, gelecekte tekrar tedaviye gereksinim duyma eğilimindedirler.						
11	Ruhsal hastalığı olan bireylerin dakik olma veya sözünde durma gibi toplumsal kurallara uyması zordur.						
12	İnsanlar daha önce ruhsal hastalık tedavisi alan bir birey ile yakın arkadaşlık kurduğumu bilseydi, utanırdım.						
13	Bana zarar verebileceği nedeniyle, ruhsal hastalığı olan bireyden korkarım.						
14	Ruhsal hastalığı olan bir bireyin iyi anne- baba olma olasılığı daha düşüktür.						
15	Ailemden bir bireyin ruhsal hastalığı olsa, utanırım.						
16	Ruhsal hastalığın tamamen iyileşebileceğine inanmıyorum.						
17	Sorumluluk alamadıkları için ruhsal hastalığı olan bireylerin kendi başlarına yaşayabilmeleri çok uygun değildir.						
18	Çoğu birey ruhsal hastalığı olan bir bireyle, bile bile arkadaşlık kurmaz.						
19	Ruhsal hastalığı olan bireylerin davranışları önceden tahmin edilemez.						
20	Ne kadar tedavi edilirse edilsin, ruhsal hastalığın iyileşmesi mümkün değildir.						
21	Çalışma ekibimdeki ruhsal hastalığı olan bir bireyin yaptığı işe güvenemem.						

Teşekkür Ederim

Appendix III

INFORMED CONSENT FORM FOR ADULTS
(FOR THE STUDENTS / PARTICIPANTS)

You are invited to participate in a research study conducted by Prof. Dr. Fatma Oz and Talal Bani Ahmad, from the Near East University Faculty of Nursing Dep. This study was planned to determinate the Beliefs toward Mental Illness among Health Science Faculties Students. You were selected as a possible participant in this study, because findings of the study may be useful in improving health science faculties students‟ awareness about mental illnesses. If you decide to participate, a questionnaire will be used as data collection tool in this study. The questionnaire contains questions regarding for demographics, Beliefs toward Mental Illness (BMI) with 6 choices (0 = completely disagree, 1 = mostly disagree, 2 = slightly disagree, 3 = slightly agree, 4 = mostly agree, 5 = completely agree). However, I cannot guarantee that you personally will receive any benefits from this research. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Subject identities will be kept confidential by don‟t using the name, and using participant coding. Your participation is voluntary. Your decision whether or not to participate will not affect your relationship with Near East University. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without penalty. If you have any questions about the study, please feel free to contact [05488711470-talol_2004@yahoo.com]. [0533 814 0062 – fatma.oz@neu.edu.tr]. If you have questions regarding your rights as a research subject, please contact the Near East Institutional Review Board. You will be offered a copy of this form to keep. Your signature indicates that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty, that you will receive a copy of this form, and that you are not waiving any legal claims.

Participant
Name, Surname:
Address:
Phone:
Signature:

Witness
Name, Surname:
Address:
Phone:
Signature:

Researcher:
Name, Surname:
Address:
Phone:
Signature:

Appendix IV

EK-673-2018

YAKIN DOĞU ÜNİVERSİTESİ
BİLİMSEL ARAŞTIRMALAR DEĞERLENDİRME ETİK KURULU

ARAŞTIRMA PROJESİ DEĞERLENDİRME RAPORU

Toplantı Tarihi : 31.05.2018
Toplantı No : 2018/58
Proje No : 591

Yakın Doğu Üniversitesi Hemşirelik Fakültesi öğretim üyelerinden Prof. Dr. Fatma Oz'ün sorumlu araştırmacısı olduğu, YDU/2018/58-591 proje numaralı ve **"Beliefs Towards Mental Illness For The Undergraduate Turkish & Non Turkish Students Of Medicine & Nursing Faculties İn The First And Last Academic Years"** başlıklı proje önerisi kurulumuzca değerlendirilmiş olup, etik olarak uygun bulunmuştur.

1. Prof. Dr. Rüştü Onur (BAŞKAN)
2. Prof. Dr. Nerin Bahçeciler Önder (ÜYE)
3. Prof. Dr. Tamer Yılmaz (ÜYE)
4. Prof. Dr. Şahan Saygı (ÜYE)
5. Prof. Dr. Şanda Çalı (ÜYE)
6. Prof. Dr. Nedim Çakır (ÜYE)
7. Prof. Dr. Kaan Erler (ÜYE)
8. Doç. Dr. Ümran Dal Yılmaz (ÜYE)
9. Doç. Dr. Nilüfer Galip Çelik (ÜYE)
10. Yrd. Doç.Dr. Emil Mammadov (ÜYE)

Appendix V

YAKIN DOĞU ÜNİVERSİTESİ
TIP FAKÜLTESİ

NEAR EAST UNIVERSITY
FACULTY OF MEDICINE

Sayı:160/2018

8 Mayıs 2018

Yakın Doğu Üniversitesi Hemşirelik Fakültesi Dekanlığı'na,

Fakülteniz Ruh Sağlığı ve Hastalıkları Hemşireliği alanında danışmanı Prof. Dr. Fatma Öz olan, yüksek lisans öğrencisi Talal Bani Ahmad'ın "The undergraduate students of health sciences faculties beliefs to wards mental illness in the Near East University" konulu tez araştırmasının soru formunu fakültemiz İngilizce ve Türkçe bölümlerindeki öğrencilere uygulayabilmesi uygun görülmüştür.

Saygılarımla,

YAKIN DOĞU ÜNİVERSİTESİ TIP FAKÜLTESİ 1988 Dekan Prof. Dr. Gamze Mocan

Prof. Dr. Selda Önderoğlu
Dekan Vekili

LEFKOŞA, MERSİN 10 TURKEY, KKTC · Tel: +90 392 675 10 00 / 3016-3030 · Faks: +90 675 10 50 · www.neu.edu.tr · info@neu.edu.tr

YAKIN DOĞU ÜNİVERSİTESİ
HEMŞİRELİK FAKÜLTESİ

NEAR EAST UNIVERSITY
FACULTY OF NURSING

08 Mayıs 2018

Sayı: HF - 526 / 2018
Konu: Tez Araştırması Hk.

Hemşirelik Fakültesi Dekanlığı'na;

Fakültemiz Ruh Sağlığı ve Hastalıkları Hemşireliği alanında danışmanı Prof. Dr. Fatma Öz olan yüksek lisans öğrencisi Talal Bani Ahmad'ın "The undergraduate students of health sciences faculties beliefs to wards mental illness in the Near East University" konulu tez araştırmasının soru formunu fakülteniz İngilizce ve Türkçe bölümlerindeki öğrencilere uygulayabilmesi tarafımızca uygun görülmüştür. Bilgi ve gereğini arz ederim.

Saygılarımla.

Prof. Dr. Nurhan BAYRAKTAR
Hemşirelik Fakültesi Dekanı

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