Impact of a Nursing in Psychiatry Course on Students’ Attitudes Toward Mental Health Disorders
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ABSTRACT
Negative attitudes toward patients with mental illnesses are not uncommon among health professionals, and lead to poorer quality and outcomes of care. Because attitudes are formed early in life, the current study aimed to investigate if teaching psychiatry in secondary school nursing students (i.e., adolescents) changes attitudes toward three prevalent psychiatric disorders: schizophrenia, posttraumatic stress disorder (PTSD), and depression. A pilot quasi-experimental study was conducted with 51 fourth-year students in secondary nursing school who completed a questionnaire regarding attitudes toward these disorders on the first and last day of their Nursing in Psychiatry course. Results show that the stigma attached to all three disorders was significantly reduced after students completed the course. Students attached greater stigma to schizophrenia than PTSD, and to PTSD than depression, before and after the course. The study indicates that education in psychiatry helps reduce negative attitudes toward PTSD, schizophrenia, and depression. [Journal of Psychosocial Nursing and Mental Health Services, 56(3), 45-51.]
negative attitudes toward individuals with mental illness are dangerous, violent, represent a threat to others’ security, incompetent (i.e., individuals with mental illness are ignorant and incapable, and do not have any skills), parasitic lifestyle (i.e., individuals with mental illness are unable to lead a meaningful and productive life and take care of themselves), and being their own fault for having the disease (i.e., somehow the disease is the patient’s fault, he/she is weak in character) (Corrigan & Watson, 2002).

These negative attitudes are usually established in childhood and adolescence, and are modeled according to parents, teachers, peer groups, and dominant cultural beliefs (Barke, Nyarko, & Klecha, 2011), as well as transmitted from one generation to the next via socialization (Mojtabai, 2010). Adolescence is a period of life when the opinions of peers strongly affect adolescents’ views of themselves and others, and when their values (as part of one’s identity) are acquired (Pejovic-Milovanovic, Lecić-Toševski, Tenjovic, Popović-Deusic, & Draganić-Gajić, 2009). Therefore, intervening in this period of life could prevent strengthening of negative attitudes toward individuals with mental health problems. Some studies have shown that anti-stigma programs focused on adolescents reduce social discrimination and the tendency toward social restriction, and increase social awareness of mental health–related problems (Gyamfi, Keens-Douglas, & Medin, 2007).

Unfortunately, lay people and health professionals have stigmatizing and negative attitudes toward individuals with mental health disorders (Hansson, Jormfeldt, Svedberg, & Svensson, 2013; Henderson et al., 2014). Some researchers have reported that the most discriminating experience for individuals with mental health disorders was contact with mental health professionals, with their relatives considering the health professionals as intolerant and having insufficient knowledge and lack of understanding of patient communication (Gyllensten et al., 2011). According to Ross and Goldner (2009), nurses working in general medical care report fear, blame, and hostility toward patients with psychiatric diagnoses, which can lead to devaluation of patients’ needs and impact their care and therapeutic relationship; nurses in psychiatric wards tend to be more pessimistic regarding the outcomes of mental illnesses. Other studies have shown that nurses’ negative attitudes toward individuals with schizophrenia are associated with adverse consequences to the patient’s health, quality of care, and quality of life (Sideras et al., 2015). This finding is not surprising, as health professionals’ attitudes and knowledge of mental illness is a major determinant of the quality and outcome of care for individuals with mental illness (Poredi, Thimmaiah, Pashupu, Ramachandra, & Badamath, 2014).

Nursing students initially hold the same negative attitudes as the general population, but these attitudes change following psychiatric nursing education (Arvaniti et al., 2009); stigmatizing attributions in nurses decrease with age and years in school (Hansson et al., 2013). Female nurses have been found to have more positive attitudes toward individuals with mental disorders than male nurses (Chambers et al., ...
In Croatia, it is possible to study nursing on three levels: secondary school, college, and Master's program. Most nurses working in health care (public and private) are secondary school nurses. Usually there is only one or two nurses with a college education on a ward or in an outpatient facility. Master's programs in nursing were established only 6 years ago, so few nurses in Croatia have this degree, and their position, working facilities, and payment levels are not yet fully established.

Secondary nursing education is organized in secondary nursing schools that last for 5 years. Students enter secondary schools after finishing obligatory 8-year primary schools at age 15. Secondary nursing education comprises different general, preclinical, and clinical courses, which entail theoretical knowledge and practical work with patients. The Nursing in Psychiatry course is in the fourth year of schooling and lasts 4 months, and meets once per week for 2 hours.

METHOD
Study Design
The current study was a quasi-experimental pilot of a total population of secondary nursing students attending a Nursing in Psychiatry course in the only secondary nursing school in a selected Croatian town.

Participants
A convenience sample was used, and participants were fourth-year students in a secondary nursing school in a town of 50,000 residents (Croatia has a population of 4.2 million individuals, so this is a medium-sized town). A total of 56 fourth-year students participated and were organized into two groups (i.e., classes). They were asked to complete a questionnaire on the first and last day of their 4-month Nursing in Psychiatry course. This course started in September and ended in December, and comprised thirty 45-minute lectures by a psychiatrist (G.A.). The topics of specific mental disorders (all described in the International Classification of Diseases-10, including those selected for the study), their clinical presentation, diagnostic procedures, and treatment were covered. In addition, students were taught general psychopathology and therapeutic modalities in psychiatry. The course used lectures and class discussions. During the course, students visited a psychiatric ward and had opportunities to talk to patients in small groups, with no individual contact with patients. Because the delivery of the course is prescribed by the state (i.e., the Ministry of Education), it was not possible to change the form of teaching.

All students but one agreed to participate, and four were not present on either the first or last day, resulting in a total of 51 participants. Sixty-nine percent of participants were female, ages 17 to 19, with most (66%) being age 18 (mean [SD] age = 17.83 [0.57] years).

Participation was anonymous and students were informed that participation would not influence their studies. They completed the questionnaire during regular school hours. It was explained to students that participation was voluntary. Because identification data were not used on the questionnaire, participants were not asked to provide written informed consent; completing and returning the questionnaire counted as consent. To keep the questionnaires anonymous, participants were instructed to write a code (they were advised to use a combination of letters and numbers) and use the same code in December for the second questionnaire. Unfortunately, many students did not remember their code and the researchers were unable to match each student’s questionnaires pre- and post-course.

Permission to conduct the study was granted by the ethical committee of the hospital where the students visited patients.

Questionnaire
The questionnaire measured students’ attitudes toward three different mental health disorders: schizophrenia, depression, and PTSD. The questionnaire is described in more detail elsewhere (Arbanas, 2008).

The questionnaire includes 15 items rated on a 5-point Likert scale where 1 = strongly agree and 5 = strongly disagree. These 15 items are listed in Table A (available in the online version of this article). Each item was repeated three times for each mental health disorder. The order of the items was random. Stigma for each of the disorders was calculated by adding the individual scores for each item (all but four of the items were reverse scored because agreeing with these items meant increased stigma). Internal consistency of the subscales for schizophrenia, depression, and PTSD were moderate, with Cronbach’s alpha of 0.623 for schizophrenia, 0.628 for depression, and 0.674 for PTSD (Taber, 2017).

This instrument originated in the Croatian language and was applied in Croatian. The items in the questionnaire were formulated by selecting some questions or statements used in other studies, but adapted not to be used with vignettes (Corrigan, Edwards, Green, Diwan, & Penn, 2001). These items were then assessed by a group of psychiatrists (G.A. and others) with special interest in anti-stigma programs for content validity. The questionnaire has since been used in Croatia for measuring stigma (Rožman & Arbanas, 2015).

Other data collected included age, gender, if the student knew an individual with schizophrenia/depression/PTSD, and if the student had a family member with schizophrenia/depression/PTSD.
Data were analyzed using SPSS version 20. Descriptive statistics (e.g., means, standard deviations, percentages) were used for the description of the sample and stigma level scores. Analysis of variance (ANOVA) was used to compare the sample across the three disorders. For between-group differences (e.g., male and female students, those with and without a friend with one of the disorders), independent sample t tests (two-tailed) were conducted. For comparisons of stigma pre- and post-course, t tests were used for dependent samples. For post-hoc analyses, Scheffe’s test was used. Chi-square tests were used for comparison of dichotomous variables (e.g., number of students with a relative or friend with one of the disorders [male and female groups]). Correlations were computed using Pearson’s r values, and statistical significance was set at 0.05.

RESULTS

The stigma attached to schizophrenia, depression, and PTSD by nursing students pre-course is shown in the Figure. ANOVA showed that students attached greater stigma to schizophrenia than PTSD, and to PTSD than depression (F = 19.75, p < 0.0001) (Table). There were no gender differences in attaching stigma to these three disorders (t = –1.29 for schizophrenia, –1.63 for depression, and 0.20 for PTSD). Pearson’s correlations of attitudes toward schizophrenia, depression, and PTSD ranged from 0.56 to 0.6. The stigma attached to the disorders post-course was significantly lower for all disorders (t = 2.69, p = 0.01 for schizophrenia; t = 2.54, p = 0.015 for PTSD; and t = 3.47, p = 0.001 for depression). Stigma levels were still higher for schizophrenia than PTSD, and for PTSD than depression, post-course (F = 16.49, p < 0.0001).

DISCUSSION

It is well known that attitudes are formed early in life, and harder to change as one ages. For that reason, it was decided that the current study would measure attitudes and stigma in the youngest nursing students in Croatia (ages 17 to 19). Due to a different schooling system and requirements for jobs in Croatia, most nurses working in the health care system are secondary school nurses. Pre-course, students had the highest stigma toward schizophrenia, and stigma toward PTSD was higher than toward depression. The highest stigma toward schizophrenia, compared to other mental health disorders, is a ubiquitous phenomenon present in the general population, but also in nursing personnel and physicians (Mannarini & Boffo, 2014). The more individuals attach stereotypes to a disorder, the more stigma they will have toward that disorder. Typical stereotypes toward schizophrenia are that patients are dangerous, incompetent, live a parasitic lifestyle, and that having schizophrenia is their fault (Corrigan et al., 2001).

One of the differences in the current study is that case vignettes were not used. Because nursing students were interviewed, it was expected that they would be familiar with the terms and symptoms, especially after the course. The other difference was that PTSD was included in the research. Research of stigma toward PTSD is scarce, but among the few studies that exist, the results are diverse—some show that stigma toward PTSD is of the same level or higher for depression, and some show that it is higher for PTSD (Arbanas, 2008; Maier, Moergeli, Kohler, Carcano, & Schnyder, 2015). In the current sample, stigma toward PTSD was higher than toward depression. The usual depiction of individuals with PTSD in Croatia is of violent, unpredictable, and dangerous individuals who commit family abuse and other forms of criminal activity, although
there are no data supporting these claims (Frančišković et al., 2011).

There were no gender differences in the current sample, but it is suspected that this is because the sample was small and contained few male students. The other possible explanation is that men who decide to study nursing differ from the general male population in their attitudes toward mental health disorders. Poreddi et al. (2014) also did not find gender difference in stigma in a similar sample of nursing students.

Post-course, students’ stigma toward the disorders significantly decreased. A previous study showed that, at the beginning of their education, students held the same negative attitudes as the general population, but their negative attitudes decreased following education (Halter, 2004). In addition, some studies have shown that it is contact with individuals with mental illnesses that helps reduce stigma, rather than education alone (Sideras et al., 2015). Because students in the current study had theoretical lessons on mental health disorders, as well as exercises organized at the psychiatric ward, it is unclear which part of the curriculum made a difference. Unfortunately, because the Ministry of Education prescribes that all nursing students be taught theoretically (with lectures) and participate in experimental learning during visits to psychiatric wards, the current authors were unable to arrange learning in a different setting (e.g., one group having only didactic learning and the other group having didactic and experimental learning). The exercises were conducted in groups of eight to 10, and students visited patients in groups rather than one-on-one. Still, meeting a patient with a mental health disorder can have a strong influence on an individual and can influence his/her attitudes. Due to the style of the study, it was impossible to say whether the experience of meeting patients or the training received had a greater influence on students’ attitudes. Therefore, the current authors conclude that the firsthand experience and knowledge gained about mental health disorders reduced stigma. Earlier studies show that specific knowledge of psychiatry and not general knowledge reduces stigma toward mental health disorders in adolescents, but these studies compared adolescents in different schools at one time (Arbanas, 2008), whereas the current study compared the same adolescent nursing students pre- and post-course. Although these earlier studies showed that education can reduce negative attitudes toward schizophrenia and depression (Halter, 2004; Sideras et al., 2015), the current study showed the same was also true for PTSD.

Another difference from other studies is students’ age. In other countries, nursing is a college-level education completed at an older age, but in Croatia it is possible to study nursing at the secondary school level at ages 15 to 19. The decrease in stigmatizing levels after a short, less intensive training may be due to students’ ages. The most similar age groups were studied by Bennett and Stennett (2015), who found that nursing students predominantly ages 20 to 21 had overall negative attitudes toward patients with mental illnesses associated with perceptions of danger; and Jingjing, Ling, Guiping, and Xiaoqing (2015), who reported no differ-

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stigma Level</th>
<th>ANOVA (F), p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Schizophrenia</td>
<td>PTSD</td>
</tr>
<tr>
<td>Pre-course</td>
<td>26.02</td>
<td>23.59</td>
</tr>
<tr>
<td>Male</td>
<td>24.00</td>
<td>24.48</td>
</tr>
<tr>
<td>Female</td>
<td>27.08</td>
<td>24.29</td>
</tr>
<tr>
<td>Post-course</td>
<td>23.23</td>
<td>20.53</td>
</tr>
<tr>
<td>Male</td>
<td>24.55</td>
<td>23.64</td>
</tr>
<tr>
<td>Female</td>
<td>24.64</td>
<td>19.71</td>
</tr>
<tr>
<td>Pre–post (t test, p value)</td>
<td>2.69, 0.01</td>
<td>2.54, 0.015</td>
</tr>
</tbody>
</table>

Note. PTSD = posttraumatic stress disorder; ANOVA = analysis of variance.

*p = 0.206 for schizophrenia, 0.841 for PTSD, and 0.112 for depression (t test).

*p = 0.973 for schizophrenia, 0.133 for PTSD, and 0.391 for depression (t test).
ences in stigmatizing attitude in participants (median age = 21) before and after a 9-week course. However, one group of students who were offered practicum experiences (i.e., hearing voices simulation) showed a decrease in negative attitudes toward individuals with schizophrenia (Sideras et al., 2015).

Most previous studies found that nurses who were in personal contact with patients with mental illness (Mårtensson, Jacobsson, & Engström, 2014) showed more positive attitudes. In the current study, no differences were found in stigma between students who did or did not have a relative or friend with a mental health disorder.

LIMITATIONS

The main limitation of the current study (aside from the small sample) is that the authors were unable to follow up with students because they finished their schooling. The lack of a control group (i.e., nursing students not attending the course) is another limitation. It is possible that just the passing of time and the general knowledge about medicine and contact with other patients reduced stigma. The lack of a control group hinders any conclusions on the causative influences of the course on students’ attitudes. In addition, there is a possibility that some students gave desired answers on the questionnaires.

CONCLUSION AND CLINICAL IMPLICATIONS

The current results showed that before education in psychiatric care, nursing students had negative attitudes toward mental health disorders (specifically schizophrenia). After a 4-month course and gaining basic knowledge about psychiatric disorders, students’ stigma levels were significantly reduced (p = 0.01, 0.015, and 0.001 for schizophrenia, PTSD, and depression, respectively). Because the sample was small and it was not possible to organize a control group, the results cannot be generalized. However, this is the first pilot study showing reduced stigma toward PTSD after taking a course in psychiatry. Hence, there is a need to improve psychiatric courses for nursing students so they include topics relevant for a particular region to reduce stigma, and develop therapeutic relationships and optimize adequate care for psychiatric patients to improve their treatment and quality of life.

REFERENCES


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<table>
<thead>
<tr>
<th>Table A. Questionnaire Items.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I would never marry a person with schizophrenia/ depression/ PTSD.*</td>
</tr>
<tr>
<td>2. Schizophrenia/ depression/ PTSD is curable.</td>
</tr>
<tr>
<td>3. I think people with schizophrenia/ depression/ PTSD are not capable of working properly.*</td>
</tr>
<tr>
<td>4. Schizophrenia/ depression/ PTSD is an illness like any other (e.g. diabetes mellitus, hypertension).</td>
</tr>
<tr>
<td>5. A person with schizophrenia/ depression/ PTSD is dangerous and unpredictable.*</td>
</tr>
<tr>
<td>6. People with schizophrenia/ depression/ PTSD should be placed in a hospital or an institution.*</td>
</tr>
<tr>
<td>7. A person with schizophrenia/ depression/ PTSD has only himself/ herself to blame for having the disorder.*</td>
</tr>
<tr>
<td>8. If I had a flat to rent, I probably wouldn't rent it to a person with schizophrenia/ depression/ PTSD.*</td>
</tr>
<tr>
<td>9. Anyone can have schizophrenia/ depression/ PTSD.</td>
</tr>
<tr>
<td>10. I would feel ashamed if I had a family member with schizophrenia/ depression/ PTSD.*</td>
</tr>
<tr>
<td>11. I would feel uneasy in the company of a person with schizophrenia/ depression/ PTSD.*</td>
</tr>
<tr>
<td>12. If I had schizophrenia/ depression/ PTSD, I would contact a psychiatrist.</td>
</tr>
<tr>
<td>13. I would be afraid to speak to a person with schizophrenia/ depression/ PTSD.*</td>
</tr>
<tr>
<td>14. I would be distressed if I found out my doctor had schizophrenia/ depression/ PTSD.*</td>
</tr>
<tr>
<td>15. Drugs used in the treatment of schizophrenia/ depression/ PTSD result in addiction.*</td>
</tr>
</tbody>
</table>

* = item was reverse scored.