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Summary

Objectives: The purpose of this study was to describe undergraduate nursing students' attitudes toward mental health nursing and how these attitudes influenced their professional career choices in mental health nursing.

Design: A descriptive, online survey was utilized to examine students' perceptions of mental health nursing. A total of 229 junior and senior nursing students were recruited from eight nursing colleges in Midwestern United States to participate in this survey.

Results: Students of different ages, genders, ethnicities, and nursing programs did not report significantly different perceptions of: (a) knowledge of mental illness; (b) negative stereotypes; (c) interest in mental health nursing as a future career; and (d), and beliefs that psychiatric nurses provide a valuable contribution to consumers and the community. Negative stereotypes were significantly different between students who had mental health nursing preparation either in class ($p = 0.0147$) or in clinical practice ($p = 0.0018$) and students who had not. There were significant differences in anxiety about mental illness between students who had classes on mental health nursing ($p = .0005$), clinical experience ($p = 0.0035$), and work experience in the mental health field ($p = 0.0012$). Significant differences in an interest in a future career in mental health nursing emerged between students with and without prior mental health experience and between students with and without an interest in an externship program with p -values of 0.0012 and < 0.0001 , respectively.

Conclusions: The more exposure that students have to mental health nursing through clinical experiences, theory classes, and previous work in the field, the more prepared they feel about caring for persons with mental health issues.

Keywords: Psychiatric/mental health nursing, Nursing education, Online survey, Undergraduate nursing student

Millions of people, irrespective of ethnicity, gender, and geographic location, suffer from mental illness. In 2012, 18.6 % of United States [US] adults had lived with a mental illness in the past year (National Institute of Mental Health (NIMH), 2012). Kessler et al. (2009) reported the 12-month prevalence of any mental illness among adults in 17 countries using data from the WHO World Mental Health Survey. These researchers indicated the lowest prevalence of mental illness was estimated to be 7.1% in People's Republic of China, whereas the United States had the highest estimate (27%). People living with mental illness are at increased risk for suicide, living with disability, and premature mortality (Ferrari et al., 2014 and Whiteford et al., 2013). Thus, ensuring that people living with mental illnesses receive appropriate mental health care is the top priority for health care providers. To provide the adequate mental health care needs of the increasing proportion of individuals suffering from mental illness, nurses must be recruited and trained in the mental health specialty.

Ironically, there are shortages of nurses choosing to specialize or work in mental health settings. Despite an increased number of young nursing graduates ages 23 to 26 by 62% between 2000 and 2009, recruiting new graduates to work in mental health care programs remains a challenge because of attitudes related to mental health and mental illness (Auerbach et al., 2011). Anxiety about mental illnesses, stigma associated with mental health nursing, and negative perceptions of psychiatric patients and mental health care create barriers to attracting new nursing graduates to choose mental health nursing for their career (Happell et al., 2014, Hoekstra et al., 2010, Linden and Kavanagh, 2012, Nadler-Moodie and Loucks, 2011, Ng et al., 2010 and Stevens et al., 2013). Mental health nursing has been identified by nursing students as one of the least preferred potential careers (Happell and Gaskin, 2013 and Stevens et al., 2013). Nadler-Moodie and Loucks (2011) stated that new graduates, who might be interested in psychiatric nursing, are often discouraged from their choice by a shared belief among colleagues that: "You must do a year of med-surg first" (p. 479). Thus, new BSN-prepared graduates in the U.S. often prefer to start their careers in acute care settings (Institute of Medicine (IOM), 2010).

There are very few studies in the literature reporting nursing students' attitudes toward mental health nursing in the US. As efforts is being made to train more nurses to work in various health care settings, recruiting and preparing nurses to work in the mental health settings should be one of the priority areas. To accomplish this task, it is essential for policy makers and the future workforce in this specialty to understand undergraduate students' attitudes toward mental health nursing and their interest in this specialty as a career choice. Therefore, the purpose of this study was to examine undergraduate nursing students' attitudes toward mental health nursing and interests in pursuing mental health nursing as a future career choice. Specifically, we explored nursing students' attitudes of mental health nursing in six areas: (a) preparedness for mental health field; (b) knowledge of mental illness; (c) negative stereotypes; (d) future career; (e) anxiety surrounding mental illness; and (f) valuable contributions.

In existing literature from US and Canada, a mental health residency program is an additional training program (typically a 12-

week program) developed for new graduate nurses to develop mental health competencies, promote interest in this specialty, and address the stigma associated with working in mental health sectors (Nadler-Moodie and Loucks, 2011 and Ng et al., 2010). At the time of the study conducted, we were planning and designing an additional mental health training program for new graduates in the study area, which included an 8-week summer externship. The goals of the 8-week summer program were twofold: (1) provide an opportunity to develop critical competences for specialized mental health care delivery and (2) create a sustainable path for working in a community-based or acute mental health care setting after the completion of the training. We also examined nursing students' interest in our externship program. This study was an integral part of Nursing's Voice, a project of Partners Investing in Nursing, led by the Robert Wood Johnson and Northwest Health Foundation at the national level, and Faye McBeath Foundation in Milwaukee. In addition, it was supported by the Jonas Nurse Leaders Scholar Program.

Method

Design and Participants

A descriptive, cross-sectional research design using an online survey was used to collect data on nursing students' interests in and attitudes about caring for persons with mental illness. The target population included all undergraduate nursing students at the junior and senior level (or equivalent) enrolled in either an Associate Degree in Nursing (ADN) or Bachelor of Science in Nursing (BSN) program in a Midwestern state of the U.S. A convenience sampling method was used to recruit participants from ADN and BSN programs in a large metropolitan area. Deans of Nursing programs in the surrounding area were invited to participate in the study by distributing recruitment emails to their respective student bodies. Deans of eight nursing programs agreed to participate in the study. Among the eight colleges, a total of 1,337 juniors and seniors were eligible to participate.

Instruments

The instruments of this study comprised demographic questions and a self-reported questionnaire examining attitudes about mental health nursing. To measure attitudes about mental health nursing, we obtained permission to use the Psychiatric/ Mental Health Clinical Placement Survey for First Day of Placement Scale (Hayman-White and Happell, 2005), a seven-point Likert scale with scores ranging from 1 (strongly disagree) to 7 (strongly agree). The original survey is composed of 24 questions. It included seven subscales: (a) preparedness for mental health field (higher scores represent a greater sense of preparedness); (b) knowledge of mental illness (higher scores represent a more informed attitude); (c) negative stereotypes (lower scores represent less-stereotyped beliefs); (d) future career (higher scores represent a greater desire to pursue a career in mental health nursing); (e) anxiety surrounding mental illness (higher scores represent lower levels of anxiety); (f) valuable contributions (higher scores represent a stronger belief that psychiatric nurses provide a valuable service to consumers, the community, and students' nursing careers); and (g) course effectiveness (higher scores represent the degree to which students' university courses had prepared them for various areas of nursing) (Hayman-White and Happell, 2005). Since this instrument was developed for an Australian audience, we modified the wording to convey the same meaning for U.S. participants. The course effectiveness subscale of four questions was deleted because it was not applicable.

Pilot Study

The modified scale, the Mental Health Nursing Student Survey, including 26 questions (six subscales) and 10 demographic questions was piloted at two nursing colleges located outside the geographical area of the study. The number of eligible junior and senior students for participation from the two colleges (one ADN and one BSN program) was 214, and 86 completed the pilot survey, resulting in 40.19 % response rate. The reliability of six subscales is presented in Table 1. We included an additional 10 questions on a seven-point Likert-type scale to examine the following: the length of time spent completing the survey; technological problems or concerns with the

SurveyMonkey® link; readability and comprehensiveness of the questions; and the clarity of the letter to students. The average score for these 10 questions was above 6.0 (1 = the lowest to 7 = the highest), indicating acceptable clarity of the survey questions.

Table 1. Reliability coefficient of subscales.

Subscale	Number of Items	Cronbach's alpha coefficient	
		Pilot study (n = 86)	Main study (n = 229)
Preparedness for mental health field (PFMHF)	5	0.79	0.84
Knowledge of mental illness (KMI)	6	0.39	0.56
Negative stereotype (NS)	5	0.73	0.72
Future career (FC)	3	0.83	0.47
Anxiety surrounding mental illness (ASMI)	3	0.72	0.72
Value contribution (VC)	4	0.75	0.72

Data Collection

Data were collected electronically using SurveyMonkey® after the Dean of each nursing program and each college's IRB approved the study. We sent an email containing: (a) the SurveyMonkey® web link; (b) a letter explaining the purpose of the study; and (c) information about how to administer the survey to the designated contact person (director of the nursing program, Associate Dean, or Dean of the college) for the study at the respective institutions. The study contact person subsequently forwarded the email to all junior and senior-level nursing students, or equivalent, in the program. The e-mail emphasized the voluntary nature of participation in the study. Names of participants and IP addresses from computers were not collected.

After students received the forwarded e-mail, they were able to click the web link and were promptly directed to a statement of consent before beginning the survey. After giving informed consent, the survey began with demographic questions. Next, participants were asked about their attitudes toward mental health nursing. The survey required approximately ten minutes for completion, and participants were given 10 days to complete the survey. A reminder e-mail was sent out 2–3 days before the survey closed. In existing literature, the

response rate for online surveys varied greatly from 2% to 47% (Monroe and Adams, 2012 and Nulty, 2008). Due to a low response rate initially, a one-week extension for participation and reminder emails were sent up to four times per college. After the end of the extension, 251 of 1,337 students completed the survey (18.8% response rate).

Data Analysis

A total of 251 students completed the survey. However, 22 students failed to answer the demographic questions. As a result, they were excluded from analysis. Demographic and mental health attitude data were summarized using means and standard deviations for continuous variables and frequency and percentages for categorical variables, respectively. For the main study, the reliability of each subscale is presented in Table 1. The average response to the questions in the subscales was used to summarize the outcome and higher scores in all the subscales are indicative of better, more positive responses. Differences in the mental health nursing student survey subscales across age, gender, nursing program, nursing level, and clinical experience in mental health and interest in mental health externship programs were of primary interest. To evaluate these differences, Wilcoxon-Rank Sum tests and Kruskal-Wallis tests were used, where applicable. Non-parametric methods were used because the distributions of the subscales were found to deviate significantly from normal. To determine the students who were more likely to pursue an externship program, all variables were evaluated using logistic regression. A stepwise selection method with a p-value criterion of .05 for variable inclusion and exclusion was used to select the final model.

Results

Demographic information of participants is presented in Table 2. Of the 229 students included in the analysis, 93.5% were female and 83% were Caucasian. The average age of the students was 27 years ($SD = 8.2$) and 92% were in a BSN program, with approximately equal numbers of junior and senior students. Approximately 72% reported having taken a class on the theory of psychiatric/mental health

nursing, but only 35% reported having clinical practice in mental health nursing. In addition, almost 35% of the students expressed an interest in an externship in mental health nursing. Differences in mental health attitudes across demographic variables are presented in Table 3.

Table 2. Descriptive statistics of demographic variables (N = 229)*.

Demographic Variables	Frequency	Percentage**
Age		
20-24	133	58.1
≥ 25 Years	96	41.9
Gender		
Male	15	6.6
Female	214	93.5
Ethnic Groups		
Caucasian	190	83.0
Hispanic / Latino	8	3.5
Black /African American	8	3.5
Asian / Asian American	10	4.4
Mixed Ethnicity	13	5.7
Nursing Program		
ADN	18	7.9
BSN	211	92.1
Nursing Level		
Juniors	113	49.3
Seniors	116	50.7
Have work experience in the mental health field		
Yes, in a nursing role	13	5.7
Yes, in a non-nursing role	57	24.9
No	159	69.4
Have class in mental health theory		
Yes	166	72.5
No	63	27.5
Have experience in mental health clinical		
Yes	80	35.0
No	149	65.0
Interested in a mental health externship program		
Yes	80	34.9
No	149	65.1

*Note: Data from 22 respondents were excluded due to missing demographic data.

**Note: Percentages may not sum to 100 due to rounding.

Table 3. Differences in mental health attitude (N = 229).

Variables	PFMHF		KMI		NS		FC		ASMI		VC	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Age												
20-24 years	4.52	1.25	5.93	0.68	3.73	0.98	2.73	1.27	4.46	1.23	6.03	0.93
≥ 25 Years	4.79	1.41	6.05	0.7	3.74	1.07	3.02	1.3	4.73	1.42	6.23	0.84
<i>P-Value</i>	0.1155		0.1013		0.9416		0.0741		0.1207		0.1034	
Gender												
Male	4.92	1.56	6.23	0.62	3.53	0.96	3.33	1.49	5.02	1.75	5.88	0.87
Female	4.61	1.31	5.96	0.69	3.75	1.02	2.82	1.27	4.54	1.28	6.13	0.90
<i>P-Value</i>	0.3533		0.1726		0.3698		0.2245		0.0890		0.1866	
Ethnic groups												
Caucasian	4.64	1.31	5.99	0.68	3.70	0.98	2.82	1.28	4.60	1.31	6.06	0.94
African/American	4.87	1.56	5.90	0.70	3.66	1.15	2.96	1.55	5.21	1.46	6.16	0.78
Asian	4.07	1.32	5.72	0.77	4.49	1.01	2.87	1.03	3.87	1.17	6.38	0.56
Hispanic	3.78	1.23	6.00	0.71	3.20	1.25	2.90	1.10	3.90	1.16	6.28	0.62
Mixed Ethnicity	5.42	0.94	6.01	0.75	4.00	1.18	3.21	1.56	4.77	1.26	6.58	0.58
<i>P-Value</i>	0.0229*		0.6818		0.1346		0.8105		0.089		0.1866	
Nursing Program												
ADN	5.24	1.27	6.01	1.10	3.95	0.91	3.19	1.38	5.31	1.58	6.00	1.49
BSN	4.58	1.32	5.98	0.65	3.72	1.02	2.82	1.28	4.51	1.27	6.13	0.83
<i>P-Value</i>	0.0576		0.2566		0.4278		0.2753		0.0191*		0.2735	
Nursing Level												
Junior	4.27	1.35	5.93	0.73	3.88	1.06	2.85	1.33	4.42	1.32	6.07	1.00
Senior	4.98	1.20	6.03	0.65	3.60	0.96	2.85	1.25	4.72	1.30	6.16	0.79
<i>P-Value</i>	< .0001*		0.1735		0.0562		0.9502		0.0734		0.8889	
Had work experience in mental health field												
Yes, in a nursing role	5.66	0.87	6.15	0.48	3.25	1.00	3.12	1.55	5.72	0.89	6.63	0.45
Yes, in a non-nursing role	4.91	1.32	5.98	0.67	3.70	1.01	3.32	1.36	4.91	1.38	6.18	0.91
No	4.45	1.30	5.96	0.71	3.79	1.01	2.66	1.20	4.36	1.25	6.05	0.91
<i>P-Value</i>	0.0007*		0.6131		0.1708		0.0012*		0.0001*		0.0263*	
Had class in mental health theory												
Yes	4.98	1.22	5.99	0.7	3.63	0.99	2.9	1.33	4.76	1.33	6.1	0.95
No	3.72	1.14	5.94	0.67	4.01	1.03	2.73	1.18	4.09	1.16	6.19	0.75
<i>P-Value</i>	< .0001*		0.34		0.0147*		0.71		0.0005*		0.93	
Had mental health clinical practice												
Yes	5.0	1.23	5.97	0.65	3.45	0.95	2.75	1.32	4.91	1.2	5.97	1.02
No	4.43	1.33	5.98	0.71	3.89	1.02	2.91	1.27	4.39	1.34	6.19	0.82
<i>P-Value</i>	0.0013*		0.8033		0.0018*		0.2402		0.0035*		0.2055	
Interested in a mental health externship program												
Yes	4.67	1.26	6.05	0.66	3.73	1.01	3.23	1.28	4.63	1.35	6.26	0.84
No	4.58	1.41	5.88	0.72	3.75	1.03	2.31	1.09	4.5	1.26	5.91	0.94
<i>P-Value</i>	0.8894		0.0368*		0.9861		< .0001*		0.4434		0.0016*	

Note: scores marked with an asterisk were statistically significant ($p < .05$); PFMHF = Preparedness for mental health field; KMI = Knowledge of mental illness; NS = Negative stereotype; FC = Future career; ASMI = Anxiety surrounding mental illness; and VC = Value contribution.

Preparedness for Mental Health Field

As seen in Table 3, students of different ethnicities expressed significantly different levels of preparedness for practice in mental health nursing ($p = .0229$); specifically, students of mixed ethnicity conveyed significantly greater preparedness than Caucasian ($p = .0277$), Asian ($p = .0149$) and Hispanic ($p = .0088$) students. Hispanic students also expressed significantly lower preparedness compared to their Caucasian counterparts ($p = .0457$). Senior students reported significantly greater preparedness than their junior colleagues did ($p < .0001$). In addition, students with education in psychiatric/mental health nursing acquired both in class and in clinics were found to be significantly more prepared than students without this education. Students who reported having mental health experience in a nursing role and those with experience in a non-nursing role expressed significantly greater preparedness than students with no experience, with p -values of 0.0012 and 0.0204, respectively. No significant differences in preparedness emerged between students by age, gender, and expressed interest in a summer externship in mental health nursing. Although ADN students tended to report greater preparedness than BSN students did, the difference was only marginally significant with a p -value of 0.0576.

Knowledge of Mental Illness

Overall, students of different age, gender, ethnicity, nursing level, nursing program, experience, and educational preparation in mental health nursing did not express significantly different knowledge and attitude towards mental illness. However, a significant difference was found between students who were interested in an externship and those who were not ($p = 0.0368$). In particular, students with an interest in an externship tended to relate more informed attitudes about mental illness than those students who were not interested.

Negative Stereotype

Students who reported no experiences, whether in class or in clinical settings, expressed significantly greater negative stereotypes of mental illness than their colleagues who have had experiences, with p -values of 0.0147 and 0.0018, respectively. However, no significant difference in negative stereotypes of mental health nursing was found between students of different ages, genders, ethnicities, nursing programs, nursing levels, or mental health experience.

Future Career in Psychiatric/Mental Health Nursing

Significant differences in an interest in a future career in mental health nursing were found between students with and without prior mental health experience ($p = .0012$). Specifically, students with mental health experience, but in a non-nursing role, expressed significantly greater interest in a future career than did students with no experience ($p = .0003$). In addition, students who expressed an interest in an externship in mental health nursing also expressed significantly greater interest in a future career in this specialty ($p < .0001$). There was no significant difference in the interest in a future career in mental health nursing across students by age, gender, ethnicity, nursing program, nursing level, or educational preparation in mental health nursing.

Anxiety Surrounding Mental Illness

Significant differences between students were observed in responses about their anxiety surrounding mental illness. In particular, students in a BSN program ($p = .0191$), students with no experience ($p = .0004$) or only non-nursing role experience in mental health ($p = .0437$), students with no course work ($p = .0005$), and students with no clinical practice in mental health settings ($p = .0035$) expressed significantly higher anxiety about mental illness than their colleagues in an ADN program and students with experience and practice, respectively. No significant differences in anxiety were found among students of different ages, genders, ethnicities and nursing preparation program and interest in an externship.

Valuable Contributions

Students with experience in mental health caregiving as a nurse ($p = .0116$) and those interested in an externship ($p = .0016$) expressed significantly greater belief in the value of psychiatric nursing to the community than did their colleagues with no mental health experience and those who were not interested in an externship, respectively. No significant differences were found among age, gender, ethnicity, nursing program, nursing level, and educational preparation in mental health nursing.

Interest in an Externship Program in Mental Health Nursing

Results from the multivariate logistic regression revealed that students without clinical psychiatric/mental health nursing experience were 4.53 (CI: 2.41 – 8.51) times more likely to have an interest in an externship program than students who had already had a clinical practicum ($p < .0001$). In addition, students with higher scores in the future career subscale were significantly more likely to express an interest in an externship program ($p < .0001$).

Discussion

The findings from this study highlight important factors to consider in the healthcare system quest to address the workforce shortage in mental health nursing. Result showed the linkages between educational preparation in mental health theory and clinical experiences and students' sense of preparedness for practice in mental health nursing, negative stereotypes associated with mental illness, and anxiety about mental illness. However, educational preparation did not influence knowledge of mental illness and an interest in a future career in mental health nursing.

Consistent with existing literature (Gough and Happell, 2009, Happell, 2009, Happell et al., 2008a and Happell et al., 2008b), our findings suggest an influence of educational preparation on attitudes and readiness for practices in mental health fields. In this study, senior students and students receiving preparation either in theory or in

clinical practices demonstrated a greater sense of preparedness for practice in mental health nursing, fewer stereotypes associated with mental illness, and lower levels of anxiety while working with people with mental illnesses. Initiatives aimed at reducing students' anxiety addressing stereotypes associated with mental illnesses and promoting a sense of preparedness for practice in the mental health field are important to include in the education of nurses. Nurse educators and healthcare policy makers should acknowledge that there is a clear need for students to have essential learning experiences in mental health nursing theory and clinical practice (Happell, 2009). In this study, we did not examine how specific components of mental health educational preparation either in theory (e.g., contents, numbers of credit hours, or pedagogy of teaching) or in clinical practices (e.g., practice setting, numbers of days/weeks in practice) promote the sense of preparedness and reduce negative stereotypes and anxiety associated with mental illness. Investigators of prior studies noted that more extensive components of theory, positive clinical experiences, and longer hours of clinical practice tended to foster a sense of preparedness and more favorable attitudes, toward mental health nursing (Happell, 2008, Happell, 2009 and Henderson et al., 2007).

In existing literature, the mental health profession was identified as the least desirable career choice among nursing students (Happell and Gaskin, 2013, Hoekstra et al., 2010 and Stevens et al., 2013). Many factors (e.g., students' demographics, influence of theoretical and clinical education, anxiety and stigma associated with mental illness, and perceptions of mental health professions) have been examined to predict an existence of barriers in choosing mental health nursing as a career (Happell et al., 2014, Hoekstra et al., 2010 and McCann et al., 2010). Consistent with existing literature (Nadler-Moodie and Loucks, 2011 and Ng et al., 2010), our findings demonstrated that students' interest in choosing mental health nursing as a future career had been influenced by an interest in an externship program and individual exposure to mental health nursing and non-nursing roles. Age, gender, ethnicity, and educational preparation in theory or practice have not influenced the students' career choice. When we administered the survey, 72.5% of students had had mental health theory and 35% clinical practicums. In addition, we did not examine specific components of theoretical and clinical preparation and how mental health nursing is promoted to students at each school.

Therefore, these variations in educational preparation among students at the time of the study may have an impact on their interest in mental health nursing as a career.

We examined attitudes toward mental health nursing among students between BSN and ADN programs. The findings reveal that ADN students showed lower levels of anxiety about mental illness compared to BSN students. Many factors such as personal knowledge, hands-on experience of care delivery for people living with mental illness, and formal education can influence a continuum of anxiety about mental illness (Happell et al., 2014). Our research study was not designed to examine factors influencing anxiety about mental illness among students between BSN and ADN programs. Future researchers might consider investigating if and why such a difference exists in other cohorts of students.

Limitations

The demographic profile of participants was relatively homogenous. The homogeneity of the demographic distribution represented the state population (83.1% White/Caucasian) but did not reflect the state RN workforce, which was 93.5% White/Caucasians (Wisconsin Center for Nursing, 2013). We examined ADN and BSN students in one region of the U.S. Nursing students in BSN completion programs, accelerated programs, or graduate programs were not included in this study. Therefore, generalization of the results is limited. Two subscales (i.e., knowledge of mental illness and future career) had a relatively low Cronbach's alpha coefficient. Given the low reliability of these two subscales, interpretations of the findings related to knowledge of mental illness and future career are limited. These limitations might have been due to the modification (e.g., changes in wording and numbers of questions) to the original scale. Further investigators might consider modifying the language to improve reliability. With students' accurate email addresses and nursing deans or program directors sent emails to potential participants, we achieved an 18.8% response, which was favorable.

Conclusion

The need for competent and well-prepared mental health nurses has grown exponentially over the past few decades. We concluded that the more exposure students have to mental health nursing through clinical experiences, theory, and previous work in the field, the more prepared they feel to care for persons with mental health issues. Furthermore, students are more likely to consider careers in mental health nursing as their exposure to mental health nursing increases. Our collaborative efforts among employers, nursing colleges, and the community in addressing issues of anxiety and stigma surrounding mental illness and ensuring that students feel adequately prepared for a future career in mental health nursing can create a positive impact on the likelihood of successful outcomes for persons living with mental illnesses.

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