

## The Study of Nursing Educational Approach on Psychological effect among Chinese Diploma Nursing Students

Wang Jingjing, Pan Ling, Liu Guiping, Zhang Xiaoqing

School of Nursing, Zhengzhou University, Zhengzhou, Henan 450052, China  
[lgping@zzu.edu.cn](mailto:lgping@zzu.edu.cn)

**Abstract: Objective:** To examine the effect of mental illness knowledge education on changing public stigma through school taught course among Chinese diploma nursing students. **Methods:** 130 second-year diploma nursing students who would learn the Psychiatric Nursing course were recruited. Outcomes were changes in attitudes (using the Stigma Subscale), and behaviors (using the Social Distance Scale, the Acceptance Subscale, and the Questionnaire of Willingness to Deliver Nursing Services to People with Mental Illness), immediately after the course study. **Results:** For all the participants, there was no statistically significant difference of stigmatizing attitudes after the course study. The post-test of acceptance, social distance, and willingness to deliver nursing services were better than pre-test. **Conclusions:** The mental illness knowledge education can promote diploma nursing students to accept people with mental illness, reduce social distance with them, as well as willingness to deliver nursing services to them. But it failed to make any change in students' stigmatizing attitudes toward people with mental illness in our study. The findings imply that nursing educators should explore more effective teaching strategies to promote students' positive attitudes toward mental health.

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### 1. Introduction

Public stigma impacts individuals with mental illness beyond those directly stigmatized (Corrigan et al., 2005). It influences the outcomes and opportunities of people with mental illness, and produces several harmful consequences: hindering them from seeking mental health services, reducing adherence to treatment, increasing social exclusion, lowering the chances of hunting employment, housing and education (Corrigan et al., 2010; Bathje et al., 2011). If the individuals with mental illness endorse and internalize public stigma, they may be influenced by self-stigma, and suffer from low self-esteem and self-efficacy (Corrigan et al., 2002; Corrigan et al., 2005; Bathje et al., 2011).

According to the impact of public stigma, it can be distinguished at the level of institutions (institutional stigma), social groups (public stigma), and individuals (self-stigma) (Corrigan et al., 2007). Of the three levels, public stigma has received the greatest attention. Public stigma refers to general population's endorsement of a set of stereotypes, prejudicial attitudes, and discriminatory behaviors toward members of subgroup (Corrigan et al., 2002). Many investigations in a broad range of groups including the general public (Peluso et al., 2009; Kobau et al., 2009; Hori et al., 2011), police (Watson et al., 2004), mental health work (Nordt et al., 2006; Schulze 2007; Wang et al., 2010; Yi et al., 2011; Hori et al., 2011), nurses (Björkman et al., 2008; Chambers

et al., 2010; Liu et al., 2010), and nursing students (Llerena et al., 2002; Schafer et al., 2011; Zhou et al., 2012) have been done by researchers at home and abroad.

In all investigated groups, negative beliefs about people with mental illness, negative attitudes and behaviors toward them have been identified. In Chinese societies, under the impact of collectivistic ideation, public stigma is believed to be more severe than in Western societies (Fung et al., 2007; Lam et al., 2010). Comparing with undergraduate nursing students, diploma nursing students have more negative attitudes and behavior toward people with mental illness (Zhou et al., 2012). Whilst diploma nursing students are prospective of psychiatric nurses in China, with holding the negative attitudes and behaviors toward people with mental illness, students' willingness to deliver nursing services will be reduced. Consequently, nursing educators should develop effective strategies to promote students' positive attitudes and behaviors toward mental-illness group.

Researchers carried out programs to challenge the public stigma through three approaches: protest, education, and contact. Of all the three anti-stigma approaches, education and contact seem to be more effective (Corrigan et al., 2005). To date, limited intervention study has been conducted regarding reducing the public stigma of mental illness in China. Although many adventive studies have proved that

those approaches are effective, the further work to confirm the effectiveness of these approaches still need to be stressed in Chinese societies. Therefore this study was designed to examine the effect of mental illness knowledge education on changing the public stigma among Chinese diploma nursing students. The effectiveness of the public stigma reduction after Psychiatric Nursing course study was tested and reported in this paper.

## 2. Material and Methods

### 2.1. Participants

130 second-year diploma nursing students who would learn the Psychiatric Nursing course were recruited in School of Nursing, Zheng Zhou University from January to February in 2012. The participants were predominantly female (97.7%), and had a mean age of 21.45 years old (SD=0.90). All the students were Hans, from He Nan Province, and had never experienced any terms of mental health problems. All the participants endorsed “no religious

belief”, and had not attended any forms of course related to Psychiatric Nursing. The inclusion criteria were as follows: 1) voluntary participation, and informed consent; 2) full attendance rate during the course study; 3) neither contact with mental-illness group nor participate in researches related to mental illness before and during the course study.

Four students were excluded because of absence during the course study. There was no difference in demographic characteristics between four drop-out students and the others who completed the study.

### 2.2. Course implementation

The course was once-weekly, 90-minute-section, lasted for 9 weeks. Taught method was adopted, and published videos were only used in Section 3. Section 14 and 15 were introduced through Section 6 to 13 teaching. The textbook is edited by Ma Fengjie, and published by People's Medical Publishing House. The course schedule is listed in Table 1.

Table 1. The schedule of Psychiatric Nursing course

Sessions	Contents	Time
1	The introduction of Psychiatric Nursing course	30mins
2	The etiology and classification of mental disorders	15mins
3	The symptomatology of mental disorders	180mins
4	The examination and diagnosis of mental disorders	15mins
5	The basic contents, requirements, skills, and assessment of psychiatric care	30mins
6	The care of patients with organic mental disorders	25mins
7	The care of patients with mental disorders because of abusing psychoactive substances	20mins
8	The care of patients with schizophrenia	90mins
9	The care of patients with mood disorders	90mins
10	The care of patients with neurosis	90mins
11	The care of patients with psychosocial related factors causing physiological and mental disorders	15mins
12	The care of patients with personality and psychological disorders	15mins
13	The care of childhood and adolescent patients with mental disorders	15mins
14	Somatotherapy	0min
15	Psychotherapy and counseling	0min

### 2.3. Measures

The Public Stigma Scale (Chan et al., 2009; Mak et al., 2012) consists of 21 items scoring on a 6-point Likert scale ranging from “(1) strongly disagree” to “(6) strongly agree”. It has the “stigma” (12 items) and “acceptance” (9 items) subscales. The “stigma” subscale measures participants’ stigmatizing attitudes toward people with mental illness, higher mean score represents greater stigmatizing attitudes toward them. The “acceptance” measures participants’ acceptance of people with mental illness, higher mean score indicates better acceptance of them. Good psychometric properties (the Cronbach’s  $\alpha$  was .89 and .81 for stigma and

acceptance subscales, respectively.) were demonstrated for the subscales (Chan et al., 2009; Mak et al., 2012). However, taking into account the differences of cultural bias and language between Hong Kong and mainland of China, reliability and validity of the scale were retested (CVI=.982; internal consistency:  $\alpha$ =.83-.81; test-retest reliability: ICC=.82-.81).

The Social Distance Scale (Schulze et al., 2003) used in this study was a modified version of a scale developed for assessing behavioral intention of individuals toward people with mental illness. The original scale consists of 12 statements. According to other researchers’ opinion (Chan et al., 2009), one

statement in the original scale was not included in this study, as they considered it to assess the emotional rather than behavioral responses of participants. The current scale is 11-item. The scale is rated from “(1) strongly disagree” to “(6) strongly agree”. The scores of three positive items were reversed before obtaining the mean score (ranging from “1” to “6”). Higher mean score indicated greater social distance from people with mental illness. Reliability and validity of the scale in the study was found acceptable (CVI=.964; internal consistency:  $\alpha$ =.85; test-retest reliability: ICC=.88).

The Questionnaire of Willingness to Deliver Nursing Services to People with Mental Illness was developed to assess participants’ willingness to deliver nursing services to people with mental illness. It comprises 10 points from “1” to “10”. The “1” means strongly disagree with delivering nursing services to individuals with mental illness, while the “10” indicates strongly agree with delivering nursing services. The higher the score is, the greater level of students’ willingness to deliver nursing services to people with mental illness should be achieved.

#### 2.4. Data collection

Ethical approval was obtained from the Research Ethics Committee at Zheng Zhou University

and clear information on the research was provided to the class. Under the authorization of class-counselor and course-instructor, assessments were conducted by the researchers at the following intervals: 1) before the course study; 2) immediately after the course study. All the data was collected in class.

#### 2.5. Data analysis

Analyses were conducted with SPSS 15.0 for Windows. Independent t-test was used to compare the stigmatizing attitudes, acceptance, social distance, and willingness to deliver nursing services before and after the course study.

### 3. Results

Independent *t*-test showed that there was no statistically significant difference of stigmatizing attitudes ( $t=1.853$ ;  $p=0.065$ ) among diploma nursing students after the course study. Independent *t*-test also showed that differences of acceptance ( $t=-2.283$ ;  $p=0.023$ ), social distance ( $t=2.404$ ;  $p=0.017$ ), and willingness to deliver nursing services ( $t=-5.091$ ;  $p<0.001$ ) were found among all the participants at post-test. Table 2 presents the overall findings of this study.

Table 2. The comparison of stigmatizing attitudes, acceptance, social distance, and willingness to deliver nursing services before and after the course study

Items	Before course study		After course study		<i>t</i> -value	<i>p</i> -value
	<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>		
stigmatizing attitudes	3.46	0.63	3.32	0.60	1.853	0.065
acceptance	3.09	0.60	3.25	0.53	-2.283	0.023
social distance	3.14	0.58	2.98	0.50	2.404	0.017
willingness to deliver nursing services	4.58	1.74	5.71	1.82	-5.091	<0.001

### 4. Discussions

The findings suggested that the mental illness knowledge education can promote diploma nursing students to accept people with mental illness, reduce social distance with them, and willingness to deliver nursing services to them. But it failed to make any change in students’ stigmatizing attitudes toward people with mental illness in our study.

Studies proved the effect of education in changing individuals’ attitudes and behavior intentions toward people with mental illness (Brown, 2009). A recently published meta-analysis also approved the above standpoints (Corrigan et al., 2012). Unfortunately, the course education did not evidently improve participants’ stigmatizing attitudes toward people with mental illness in our study. Schafer et al., (2011) confirmed that ethnicity was an important influence on attitudes toward mental illness. In China, there are some traditional core

values shared by everyone that have significant influence on understanding and interpreting mental illness and its stigma. Under the impact of traditional core values, nursing students may deeply endorse negative stereotypes on mental illness and people with it in their mind. Furthermore, the second year diploma nursing students held the most negative attitudes and behaviors toward mental-illness group in our previous survey (Pan et al., 2012). So the stigmatizing attitudes may not be completely changed through the course study. In addition, increasing knowledge on the causes and symptoms of mental illness was associated with developing in stigma with mental-illness group in some regions (Szetoa et al., 2010). The views may explain that our findings conflict with others in some extent.

But nurses’ positive attitudes are said to inspire hope, encourage individuals to take control of their lives and engage in proactive decision making

about their future (Repper et al., 2006; Schafer et al., 2011). In the UK, competencies on promoting positive attitudes on mental health were included in the new framework and standards for pre-registration nursing education (Schafer et al., 2011). These points supported that effective strategies on changing negative and promoting positive attitudes on mental illness and people with it should be emphasized in China.

Contact has been proved the most effective approach to reduce the public stigma of mental illness (Corrigan et al., 2012). It has been divided into two paradigms: direct (live social contact) and indirect (filmed social contact). Contacting people with mental illness in clinical practice can make nursing students break the stigma of mental illness (Hung et al., 2009). It implies that nursing educators might arrange clinic observation or practice during the course study. Nursing students will communicate with patients in clinical settings so as to get a better understanding and rebuild the positive cognition to mental illness and people with it. Moreover, it is necessary to organize interactive activities such as visiting patients in mental hospital, offering voluntary healthcare to mental-illness group in communities, aiming to adopt students' attainment of emotion and responsibility in nursing practice. These may help students to show love to people with mental illness, improve positive attitudes toward them, accept them, and be willing to deliver nursing services to them.

While the findings of this study provided new insights to Psychiatric Nursing course teaching. It suggests that teaching methods need to be reformed urgently, and nursing educators should explore effective teaching strategies to promote students' positive attitudes toward mental health. Nursing educators may attempt to work in implementing teaching methods that promote students participation in class and address their stigmatizing beliefs toward people with mental illness (Webster, 2009). Methods may encourage students to express their feelings, and facilitate development of empathy in different forms such as role-play, watching videos, and setting up creative reflective study programs, etc. Under the development of empathy, students may change their negative stereotypes to people with mental illness and enhance positive attitudes toward them.

Several limitations were also encountered in present study. We could not set the control group because every student has the equal rights to participate in the course. So it is impossible to definitively conclude that the mental illness knowledge study could not improve all students' stigmatizing attitudes toward people with mental illness. Also, the sample was in a smaller size, all the participants were from the same university. Therefore

the findings for this study cannot be automatically generalized across all Chinese diploma nursing students.

Future research is needed to enlarge sample size, and select students from different colleges or universities for further exam to the findings. In addition, more randomized controlled trials should be conducted to test the effects of educational and protest approaches in changing the public stigma of mental illness among nursing students in order to develop effective anti-stigma programs in Chinese social contexts.

Notwithstanding these limitations, this study provides evidence that nursing educators urgently need to explore more effective teaching strategies to promote students' positive attitudes toward mental health.

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#### **Corresponding Author:**

Pro. Liu Guiping  
School of Nursing  
Zheng Zhou University  
Zheng Zhou, He Nan 450052, China  
E-mail: [lgping@zzu.edu.cn](mailto:lgping@zzu.edu.cn)

#### **References**

1. Corrigan PW, Kerr A, Knudsen L, et al. The stigma of mental illness: Explanatory models and methods for change. *Applied and Preventive Psychology* 2005; 11(3): 179-90.
2. Corrigan PW, Shapiro JR. Measuring the impact of programs that challenge the public stigma of mental illness. *Clinical Psychology Review* 2010; 30(8): 907-22.
3. Bathje GJ, Pryor JB. The Relationships of Public and Self-Stigma to Seeking Mental Health Services. *Journal of Mental Health Counseling* 2011; 33(2): 161-76.
4. Corrigan PW, Watson AC. Understanding the impact of stigma on people with mental illness. *World Psychiatry* 2002; 1(1): 16-20.
5. Corrigan PW, O'Shaughnessy JR. Changing mental illness stigma as it exists in the real world. *Australian Psychologist* 2007; 42(2): 90-7.
6. Peluso ÉTP, Blay SL. Public stigma in relation to individuals with depression. *International Journal of Nursing Studies* 2009; 115(1-2): 201-6.
7. Kobau R, DiIorio C, Chapman D. Attitudes about mental illness and its treatment: validation

- of a generic scale for public health surveillance of mental illness associated stigma. *Community Mental Health Journal* 2009; 46(2): 164-76.
8. Hori H, Richards M, Kawamoto K. Attitudes toward schizophrenia in the general population, psychiatric staff, physicians, and psychiatrists: A web-based survey in Japan. *Psychiatry Research* 2011; 186(2-3): 183-9.
  9. Watson AC, Corrigan PW, Ottati V. Police officers' attitudes toward and decisions about persons with mental illness. *Psychiatric Services* 2004; 55(1): 49-53.
  10. Nordt C, Rossler W, Lauber C. Attitudes of mental health professionals toward people with schizophrenia and major depression. *Schizophrenia Bulletin* 2006; 33 (4): 709-14.
  11. Schulze B. Stigma and mental health professionals: a review of the evidence on the intricate relationship. *International Review of Psychiatry* 2007; 19 (2): 137-55.
  12. Wang XP, Liu TQ, Hao W, et al. An investigation of Chinese psychiatrists' attitude to mentally ill person and their disposing policies in the three sites of China. *Journal of International Psychiatry* 2010; 37(1): 1-4.
  13. Yi JL, Liu J, Guo JH, et al. The Cognition of 267 mental health professionals towards stigma of severe mental illness. *Chinese Mental Health Journal* 2011;25(8): 602-3.
  14. Björkman T, Angelman T, Jönsson M. Attitudes towards people with mental illness: a cross-sectional study among nursing staff in psychiatric and somatic care. *Scandinavian Journal of Caring Sciences* 2008; 22(2): 170-7.
  15. Chambers M, Guise V, Välimäki M, et al. Nurses' attitudes to mental illness: a comparison of a sample of nurses from five European countries. *Int J Nurs Stud* 2010; 47(3): 350-362.
  16. Liu SY, Liao LW. Investigation of attitudes of psychiatrists and nurses in department of psychiatry toward mental disorders. *Chin J Mod Nurs* 2010; 16(25): 2983-5.
  17. Llerena A, Cáceres MC, Peñas-Lledó EM. Schizophrenia stigma among medical and nursing undergraduates. *Eur Psychiatry* 2002; 17(5): 298-9.
  18. Schafer T, Wood S, Williams R, et al. A survey into student nurses' attitudes towards mental illness: Implications for nurse training. *Nurse Education Today* 2011; 31(4): 328-32.
  19. Zhou Y, Li YJ, Yang YN, et al. Survey the different degree levels of nursing students' discrimination attitudes towards mental illness people. *Chin J Behav Med & Brain Sci* 2012; 21(3): 275-6.
  20. Fung KMT, Tsang HWH, Corrigan PW, et al. Measuring self-stigma of mental illness in China and its implications for recovery. *International Journal of Social Psychiatry* 2007; 53(5), 408-18.
  21. Lam CS, Angell B, Tsang HWH, et al. Chinese lay theory and mental illness stigma: implications for research and practices. *Journal of Rehabilitation* 2010; 76(1), 35-40.
  22. Chan JYN, Mak WWS, Law LSC. Combining education and video-based contact to reduce stigma of mental illness: "The Same or Not the Same" anti-stigma program for secondary schools in Hong Kong. *Social Science & Medicine* 2009; 68(8): 1521-6.
  23. Mak WWS, Chong ESK, Wong CCY. Beyond attributions—Using the common sense model to understand public stigma towards mental illness 2012; Under review.
  24. Schulze B, Richter-Werling M, Matschinger H, et al. Crazy? So what! Effects of a school project on students' attitudes towards people with schizophrenia. *Acta Psychiatr Scand* 2003; 107(2): 142-50.
  25. Brown JF. Faith-based mental health education: a service-learning opportunity for nursing students. *Journal of Psychiatric and Mental Health Nursing* 2009; 16: 581-8.
  26. Corrigan PW, Morris SB, Patrick J et al. Challenging the Public Stigma of Mental Illness: A Meta-Analysis of Outcome Studies. *Psychiatric services in advance* 2012; 15: 907-22.
  27. Pan L, Liu GP, Zhao W, et al. Survey and analysis on public stigma of mental illness in nursing students 2012; In press.
  28. Szetoa ACH, Dobsona KS. Reducing the stigma of mental disorders at work: A review of current workplace anti-stigma intervention programs. *Applied and Preventive Psychology* 2010; 14(1-4): 41-56.
  29. Corrigan PW, Markowitz F, Watson A, et al. An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior* 2003; 44(2): 162-79.
  30. Hung BJ, Huang XY, Lin MJ. The first experiences of clinical practice of psychiatric nursing students in Taiwan: a phenomenological study. *J Clin Nurs* 2009; 18(22): 3126-35.
  31. Webster DA. Address nursing students' stigmatizing beliefs toward mental illness. *J Psychosoc Nurs Ment Health Serv* 2009; 47(10): 34-42.

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