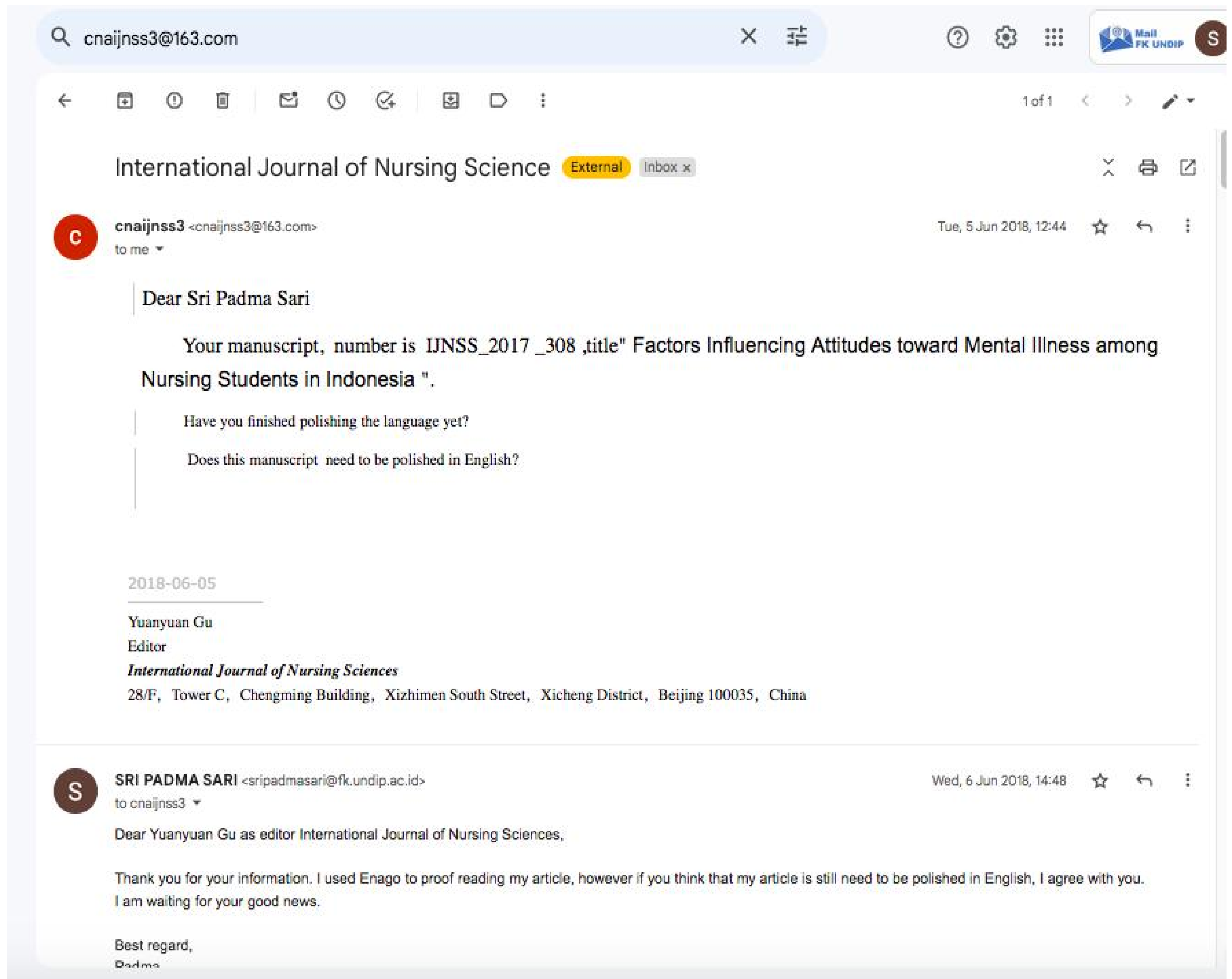
BUKTI KORESPONDENSI

Judul Artikel: Investigation of attitudes toward mental illness among nursing students in Indonesia

Nama Jurnal: International Journal of Nursing Science


cnaijnss3@163.com

International Journal of Nursing Science External Inbox

cnaijnss3 <cnaijnss3@163.com> to me — Tue, 5 Jun 2018, 12:44

Dear Sri Padma Sari

Your manuscript, number is IJNSS_2017 _308 ,title" Factors Influencing Attitudes toward Mental Illness among Nursing Students in Indonesia ".

Have you finished polishing the language yet?

Does this manuscript need to be polished in English?

2018-06-05

Yuanyuan Gu
Editor
International Journal of Nursing Sciences
28/F, Tower C, Chengming Building, Xizhimen South Street, Xicheng District, Beijing 100035, China

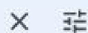
SRI PADMA SARI <sripadmasari@fk.undip.ac.id> to cnaijnss3 — Wed, 6 Jun 2018, 14:48

Dear Yuanyuan Gu as editor International Journal of Nursing Sciences,

Thank you for your information. I used Enago to proof reading my article, however if you think that my article is still need to be polished in English, I agree with you. I am waiting for your good news.

Best regard,
Padma

cnaijnss3@163.com



1 of 1

cnaijnss3 <cnaijnss3@163.com>
to me

28 Aug 2018, 15:43

Dear Sri Padma Sari

The most important thing is: Did you get **permission or authority of use of the questionnaire which were uesed in your manuscript? Please provide authority documents**.

Just like the follow contents which the other author's email:

suggest.
4. As mention in our study methods, we used 6 scales, the first is CWEQ-II scale which is consisted of JAS scale and ORS scale, as this scales is openly avail research purpose, we did not ask so, the link is here https://www.uwo.ca/fhs/hkl/cweq_download.html
While for the second scale, Maslach Burnout Inventory we used a license as attached. For the QNWL scale, we used the Bahasa Indonesia version from this s journal.unair.ac.id/index.php/JNERS/article/view/3856 . The last scale, PES, we also used the Bahasa Indonesia version here https://e-journal.unair.ac.id/JEBA
As a credit to the author, we cited the original one rather than translated version for the QNWL and PES.

Please reply as soon as possible.

Kind regards

2018-08-28

Yuanyuan Gu
Editor
International Journal of Nursing Sciences
28/F, Tower C, Chengming Building, Xizhimen South Street, Xicheng District, Beijing 100035, China

cnaijnss3@163.com

1 of 1

SRI PADMA SARI <sripadmasari@fk.undip.ac.id>

to cnaijnss3

29 Aug 2018, 09:55

Dear Yuanyuan Gu,

Thank you for your clarification. We got the permission to use CAMI and MAKS from the authors directly via email.
The first scale "CAMI" we get permission from Michael Dear as his email reply to us as follows (I will forward his email to you)

I hereby grant permission for your use of the CAMI scale, as described above. However, I must insist that any modifications to the original scales are clearly identified in your report and documentation, so that there is absolutely no confusion or ambiguity in the exact changes you have introduced.

I enclose documentation that might assist you. Good luck in your research.

Michael Dear

Whereas, the second scale MAKS we got permission from Professor Graham Thornicroft via email as well (this I will forward to you)

Yes you have our permission to use the MAKS

Please contact Jessica for details

best wishes

graham

Regards,

Padma

...

cnaijnss3 <cnaijnss3@163.com>
to me

4 Sept 2018, 10:01

Dear Sri Padma Sari

There some problems in your manuscript and the table should be solve.

Please revise and reply as soon as possible to this email.

Thank you for your patience.

2018-09-04

Yuanyuan Gu
Editor
International Journal of Nursing Sciences
28/F, Tower C, Chengming Building, Xizhimen South Street, Xicheng District, Beijing 100035, China

2 attachments • Scanned by Gmail

IJNSS_2017_308....   Table juli edited.d...

SRI PADMA SARI <sripadmasari@fk.undip.ac.id>
to cnaijnss3

10 Sept 2018, 14:29

Dear Yuanyuan Gu,

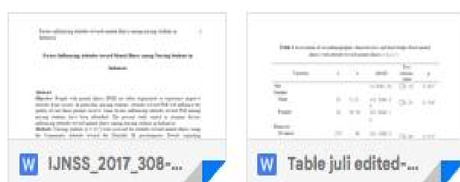
Herewith my revision
1. table 1 and table 2 merge in one table (only table 1),, in the manuscript all the sentences are in table 1)
2. merge family income
3. score MAKS already mentioned in the sentences in the result as well as the association between MAKS and stigma
4. MAKS and CAMI already add the authorisation.
5. table in two decimal places

I am waiting for your response.

Best regard,
Padma

•••

2 attachments • Scanned by Gmail



IJNSS_2017_308-...   Table juli edited-...

cnaijnss3 <cnaijnss3@163.com>
to me

11 Sept 2018, 13:43

Dear Sri Padma Sari

There are still two problem should be solve in the table.
Please reply as soon as possible.

2018-09-11

Yuanyuan Gu
Editor
International Journal of Nursing Sciences
28/F, Tower C, Chengming Building, Xizhimen South Street, Xicheng District, Beijing 100035, China

发件人：SRI PADMA SARI <sripadmasari@fk.undip.ac.id>
发送时间：2018-09-10 15:29
主题：Re: International Journal of Nursing Science
收件人："cnaijnss3"<cnaijnss3@163.com>
抄送：

...

2 attachments • Scanned by Gmail

IJNSS_2017_308-...

Table juli edited-...

cnaijnss3@163.com

1 of 1

SRI PADMA SARI <sripadmasari@fk.undip.ac.id>
to cnaijnss3

13 Sept 2018, 02:50

Dear Yuanyuan Gu,

Herewith my comments,
1. The factors significantly associated with nursing students' attitudes toward mental illness were age, year of study, knowing or having direct contact with PMI, and knowledge about mental illness (MAKS). I will delete these variables in the table (previous comment from reviewer should not write the p value or score in the result) so for manuscript I do not change unless you require for the p value.
2. For year of the study, the data is not meet the criteria of parametric hence this study does not use anova.

Best regard,
Padma

One attachment • Scanned by Gmail

Table juli edited-...

cnaijnss3 <cnaijnss3@163.com>
to me

13 Sept 2018, 14:58

Dear Sri Padma Sari

You change the result of the table 1.
But some contents of the age and the knowledge of mental illness in the absract,result and the discussion.
The data that are not in the table which can be described in words.
If you delete the data ,please also revise in the manuscript.
Please reply as soon as possible.

Factors Influencing Attitudes toward Mental Illness among Nursing Students in Indonesia

Abstract

Objective: People with mental illness (PMI) are often stigmatized or experience negative attitudes from society. In particular, nursing students' attitudes toward PMI will influence the quality of care these patients receive. Some factors influencing attitudes toward PMI among nursing students have been identified. The present study aimed to examine factors influencing attitudes toward mental illness among nursing students in Indonesia.

Methods: Nursing students (n = 317) were assessed for attitudes toward mental illness using the Community Attitude toward the Mentally Ill questionnaire. Details regarding sociodemographic variables (age, gender, ethnicity, year of study, monthly family income, personal experience with mental illness, family history of mental illness, and knowing or having direct contact with PMI) and knowledge about mental illness by using Mental Health Knowledge Schedule questionnaire were also obtained.

Results: The mean Community Attitude toward the Mentally Ill questionnaire score was 103.75 ± 9.15, with the highest mean of the four subscales being that of authoritarianism (27.97 ± 2.87) followed by social restrictiveness, community mental health ideology, and benevolence (27.52 ± 3.68, 24.38 ± 3.80, and 23.89 ± 3.27, respectively). The factors significantly associated with nursing students' attitudes toward mental illness were age (P = 0.001; $r = -0.182$), year of study (P = 0.000; H = 16.653), knowing or having direct contact with PMI (P = 0.019; $Z = -2.347$), and knowledge of mental illness (P = 0.000; $r = -0.220$). However, gender, ethnicity, monthly family income, personal experience with mental illness, and family history of mental illness were not significantly correlated with students' attitudes toward PMI.

Conclusions: Several demographic variables, direct contact with PMI, and level of knowledge about mental illness can contribute to variations in attitudes toward PMI among nursing students in Indonesia. Education and direct contact with PMI serve as intervention strategies to reduce negative attitudes and stigma associated with mental illness among nursing students.

Keywords: attitude; knowledge; mental illness; nursing students; stigma

1. Introduction

Mental illness is a serious problem in many countries around the world [1], with the most common mental illnesses being depression and anxiety [2]. The Indonesian Health Ministry (2013) reported the prevalence of mental illnesses, such as schizophrenia, is approximately 1%, and emotional disorders affect approximately 6% of the total population [3]. Mental illness is a maladaptive response to stressors from the internal or external environment, manifested by thoughts, feelings, and behavioral disturbances [4]. Consequently, people with mental illness (PMI) are often seen to be aggressive, dangerous, violent, unpredictable in their behavior, unable to handle too much responsibility, and more likely to commit offenses or crimes. These perceptions understandably cause fear and social distance [5–8]. According to a survey of mentally healthy people from 21 countries, as many as 7-8% of respondents in developed countries and 15-16% in developing countries believe that PMI are more violent than the average person [9]. Moreover, approximately 90% of PMI admitted to experiencing stigma, and 86% of PMI had experienced discrimination [10]. That study showed that PMI experienced stigma or suffered negative attitudes from society [11].

Stigma has several impacts on PMI. It gives rise to negative psychological outcomes [5,12–14], such as withdrawal behavior [15], increases the levels of depressive symptoms [11,13–16], lowers self-esteem [13–15,17–19], and reduces the self-efficacy of PMI [12–14]. Furthermore, stigma leads to higher somatic complaints [16], a decrease in quality of life [15,16,19–21], delays in treatment seeking and continuation, worse treatment outcomes, and lower psychological resilience [8,22–24]. Therefore, PMI find it difficult to recover and often relapse [25]. In addition, stigmatized individuals showed lower levels of social functioning [12] and experienced discrimination when searching for housing and employment opportunities, loss of income, frequent isolation, inadequate social lives, and incestuous

family relationships [11,19]; they also felt desperate [26], worthless, and fearful of rejection [27].

The stigma of mental illness also has implications for psychiatric nursing, especially for nursing students. Nursing students provide nursing care to PMI, and their attitudes toward PMI become the main determinants of the quality and outcomes of care that these patients receive [28]. Hence, psychiatric nursing is not the preferred career option for most nursing students [5,6,18,29–36]. Nursing students, in general, display varied attitudes toward mental illness. One study showed that a total of 148 undergraduate nursing students at Bangalore University (Bengaluru, India) had a significantly positive attitude in the domains of restrictiveness, benevolence, and stigmatization but displayed highly negative attitudes in separatism, stereotypes, and pessimistic prediction domains [37]. Other studies have also revealed negative attitudes toward mental illness among nursing students [6,36,38]. These findings provide evidence that nursing students stigmatize and fear PMI, lack understanding of PMI in their environment, and do not want to interact with them. Furthermore, most nursing students also have little interest in being mental health workers in their future careers [35].

Some studies have examined the factors influencing attitudes toward mental illness among nursing students and report that age, gender, ethnicity [29], level of education, and family income [29,39] correlated with attitudes toward mental illness [40], while age, gender, level of education [41,42], and family income [37,38] did not. Other research regarding factors associated with nursing students' attitudes toward PMI are contradictory. While experiencing a mental illness, a family history of mental illness, knowing or having direct contact with PMI, and knowledge of mental illness [11,36,33,35,42–47] have been related to attitudes toward mental illness in some studies, others reported that having experienced a mental illness, having a family history of mental illness, or knowing or having direct contact

with PMI had no significant relationship with attitudes toward mental illness [44]. In addition, some studies have found that having experienced a mental illness did not correlate with nursing students' attitudes toward mental illness [41,42]. Unfortunately, the causes of these different attitudes are unclear, and there are no studies about the factors influencing attitudes toward mental illness among nursing students in Indonesia. Therefore, the present study examined factors influencing attitudes toward mental illness among nursing students in Indonesia.

2. Methods

2.1. Study Design and Participants

This study had a correlational design with a cross-sectional approach and was conducted at one state university in Indonesia. Participants were recruited through purposive sampling. Selection criteria were nursing students in their first, second, or fourth year of study who were willing to participate. A total of 348 respondents were invited to participate. During the investigation, 31 respondents were excluded and 317 respondents returned questionnaires. The study received approval from the Research Ethics Committee of the Faculty of Medicine at Diponegoro University in Semarang, Indonesia (157/EC/FK-RSDK/IV/2017). The objectives, procedures, potential risks and benefits, protection of confidentiality, and right to withdraw during the study were explained to participants. Participants were assured of confidentiality and anonymity. In addition, all participants provided written consent to participate.

2.2. Data Collection

The data were collected from April to May 2017 using a sociodemographic, Community Attitude toward the Mentally Ill (CAMI), and Mental Health Knowledge Schedule (MAKS) questionnaires. If a questionnaire was missing items, respondents were

asked to complete those items when feasible. Of the 348 respondents, 317 completed the questionnaire, yielding a completion rate of 91.09%. The sociodemographic questionnaire collected background information, such as age, gender, ethnicity, year of study, monthly family income, personal experience with mental illness (meaning they have/have had a mental illness), family history of mental illness, and knowing or having direct contact with PMI.

The CAMI questionnaire [39] was developed by Taylor & Dear and is free to use. Additional questions were also devised to elicit informants' experiences with mental illness and discrimination. The CAMI scale rates a total of 40 items on a 5-point Likert scale (1=strongly agree, 5=strongly disagree) and has four subscales (authoritarianism, benevolence, social restrictiveness, and community mental health ideology), each with 10 items. Overall stigma against PMI was computed by summing the scores across all subscales. Negatively-stated items were reverse-coded for analysis. Higher numerical scores indicated greater stigma against PMI; a total CAMI score greater than the mean meant an overall negative attitude, and vice versa. The internal consistency of the CAMI was assessed by using Cronbach's α coefficient, which was 0.813.

The MAKS questionnaire, developed by Evans-lacko *et al*, was administered to assess stigma-related mental health knowledge [43]. MAKS items are scored on an ordinal scale (1 = strong disagreement, 5 = strong agreement); "don't know" was coded as a neutral response and given a score of 3. Items 6, 8, and 12 were reverse-coded to reflect the direction of the correct response. Part A was comprised of six items (1–6), covering stigma-related mental health knowledge areas (help-seeking, recognition, support, employment, treatment, and recovery) and is used to determine the total score. Part B consisted of six items (7–12) inquiring about the classification of various conditions as mental illnesses. Total scores were calculated so that higher numerical scores indicated greater knowledge; a total MAKS score

greater than the mean indicated good knowledge, and vice versa. The overall internal consistency among items was 0.763 (Cronbach's α).

2.3. Statistical Analysis

Sociodemographic characteristics and knowledge about mental illness of respondents were analyzed and described using frequency, percentage, and means ± standard deviations. The Spearman's rho, Wilcoxon, and Kruskal-Wallis statistical tests were applied to examine the correlation between attitudes toward mental illness and sociodemographic characteristics and knowledge about mental illness.

3. Results

The final sample consisted of 317 respondents whose ages ranged from 18 to 21 years (19.8 ± 1.4). The majority of students were female (90.9%), of Javanese ethnicity (88.8%), in their second year of study (34.4%), had a monthly family income greater than IDR1,909,000.00 (60.6%), have never experienced mental illness (97.5%), have no family history of mental illness (93.7%), and knew or had direct contact with PMI (69.4%) (Table 1). Mean total scores for the MAKS and CAMI questionnaires were 20.55±2.07 and 103.75± 9.15, respectively. In addition, the mean total score for the CAMI subscales of authoritarianism, benevolence, social restrictiveness, and community mental health ideology were 27.97 ± 2.87, 23.89 ± 3.27, 27.52 ± 3.68, and 24.38 ± 3.80, respectively.

The factors significantly associated with nursing students' attitudes toward mental illness were age, year of study, knowing or having direct contact with PMI, and knowledge about mental illness. On the other hand, gender, ethnicity, monthly family income, having experienced a mental illness, and family history of mental illness were not correlated with attitudes toward mental illness in Indonesian nursing students (Table 2).

4. Discussion

The present study showed that student age correlated with attitudes toward mental illness among nursing students in Indonesia. These findings were similar to those of previous studies. Numerous studies have shown that older people are more likely to have positive attitudes toward mental illness [38,39,48–50], while others have reported that older people had more negative attitudes than younger ones [29,35,40]. However, one study found that as age increased, total authoritarianism and social restrictiveness decreased. Nonetheless, older age is still likely to be a significant factor in reducing negative attitudes toward PMI [38] because older age is associated with maturity of thought and behavior [50].

The current findings also indicate that year of study is related to attitudes toward mental illness among Indonesian nursing students. Year of study is related to education level, a demographic factor that has been previously related to attitudes toward mental illness [6,11,29,37,38,39,40,51–53]. Year of study also determines if students have already been exposed to psychiatric nursing [54]. In the first year, nursing students in Indonesia are not typically exposed to psychiatric nursing in theory or practice, whereas second year students are exposed to the theory. Nursing students in their fourth year have been exposed to both the theory of psychiatric nursing and practice in the care of PMI.

Current and previous studies have revealed that nursing students who have studied the theory of and have had clinical experience in psychiatric nursing have positive attitudes toward mental illness [30]. In particular, clinical experiences alone have been found to promote positive attitudes toward mental health nursing. Theoretical components presented before clinical placement play an important role in cultivating a positive attitude toward PMI and psychiatric nursing. Moreover, clinical experience enables students to develop professional competencies to meet the needs of PMI by providing a variety of learning opportunities [31].

Hence, it is clear that education is one approach to reducing stigma associated with mental illness, among other things [55]. In general, knowledge is expected to increase with increasing education level [49]. Knowledge is an important component of stigma and may affect attitudes toward mental illness because knowledge is an important component in the evaluation of anti-stigma [43]. Many studies have assessed knowledge and its association with attitudes toward mental illness and have revealed a correlation between knowledge and attitudes toward mental illness [6,11,33,35,36,42–47,49,56–58]. In line with previous studies, the present results showed that knowledge about mental illness was related to Indonesian nursing students' attitudes toward mental illness in that lack of knowledge has a negative influence on attitudes toward PMI [44].

Besides education, contact is another approach to reducing stigma associated with mental illness [55]. Current findings showed that knowing or having direct contact with PMI was associated with attitudes toward mental illness. Numerous studies have shown that knowing or having direct contact with PMI increases the likelihood of having a positive attitude toward mental illness [11,29,39–42,59–67]. One study in particular showed that those who knew someone with a mental health problem had more positive attitudes to mental illness and attributed this to attitudinal change fostered by contact with PMI [41].

Previous studies have reported that females were less likely to stigmatize PMI and had fewer negative attitudes toward them than males. This was attributed to females being more empathetic [39], open-minded, and prepared to integrate PMI relative to males [48]. In contrast, however, the present study showed that gender does not affect attitudes toward mental illness among nursing students in Indonesia [37,41,42].

Regarding socioeconomic status, some studies have revealed a correlation between monthly family income and attitudes toward mental illness [29,39,40,63,68]. People with a high income were more likely to have a positive attitude because individual attitudes are

influenced by sociocultural factors [29]. However, the present study found that monthly family income was not related to Indonesian nursing students' attitudes toward mental illness, in line with previous studies [37,38].

Personal experience with a mental illness refers to individuals who have or have had a mental illness themselves. Such experience with mental illness is obviously associated with attitudes toward mental illness [59-61,65]. While personal experience with mental illness has been shown to positively impact attitudes toward mental illness, these individuals are often excluded from correlative studies [60]. Interestingly, the present study found that personal experience with mental illness did not correlate with attitudes toward mental illness among nursing students in Indonesia [35,41,42,44,61].

Several previous studies have shown a correlation between a family history of mental illness and attitudes toward mental illness [29,38,39,61,63,65]. They reported that people who have a family history of mental illness had fewer negative attitudes toward mental illness compared with those who did not have a family history of mental illness because direct socialization with PMI reduced stigma or negative beliefs. In contrast, the present study showed that a family history of mental illness was not related to attitudes toward mental illness in Indonesian nursing students, in line with other studies [35,44].

5. Conclusions

The present study revealed that age, year of study, knowing or having direct contact with PMI, and knowledge about mental illness were significantly associated with attitudes toward mental illness among nursing students in Indonesia, while gender, ethnicity, monthly family income, personal experience with mental illness, and family history of mental illness were not. These findings have important implications for academic education. Strategies, including education about mental illness and direct contact with PMI, should be implemented

to foster development of more positive attitudes towards mental illness and reduce stigma. There were some limitations to the current study. The present study only included nursing students from one university in Indonesia, which likely reduced the generalizability of the data.

Acknowledgments

We are grateful to the nursing students who participated in our study. The author(s) disclosed receipt of financial support for publication of this article which was supported by Diponegoro University.

References

[1] Kessler RC, Aguilar-gaxiola S, Alonso J, Chatterji S, Lee S, Ormel J, et al. The global burden of mental disorders: an update from the WHO World Mental Health (WMH) surveys. Epidemiol Psichiatr Soc 2009;18(1):23–33.

[2] WHO. Suicide [Internet]. 2016. Available from: http://www.who.int/gho/publications/world_health_statistics/2016/whs2016_AnnexA_Suicide.pdf?ua=1&ua=1

[3] Indonesian Health Ministry. Riset Kesehatan Dasar [Internet]. 2013. Available from: http://www.depkes.go.id/resources/download/general/HasilRiskesdas2013.pdf

[4] Townsend MC. Essentials of Psychiatric Mental Health Nursing: Concepts of Care in Evidence-Based Practice. 5th ed. Philadelphia: F.A. Davis Company; 2011.

[5] Bennett J, Stennett R. Attitudes towards mental illness of nursing students in a Baccalaureate programme in Jamaica : a questionnaire. J Psychiatr Ment Health Nurs 2015;22(8):599–605.

[6] Poreddi V, Thimmaiah R, Chandra R, BadaMath S. Bachelor of nursing students' attitude towards people with mental illness and career choices in psychiatric nursing. An Indian perspective. Investig y Educ en Enfermería 2015;33(1):138–54.

[7] Ross CA, Goldner EM. Stigma, negative attitudes and discrimination towards mental illness within the nursing profession: A review of the literature. J Psychiatr Ment Health Nurs 2009;16(6):558–67.

[8] Zartaloudi A, Madianos M. Stigma related to help-seeking from a mental health professional. Heal Sci J 2010;4(2):77–83.

[9] Seeman N, Tang S, Brown AD, Ing A. World survey of mental illness stigma. J Affect Disord 2016;190(2016):115–21.

[10] Pawar AA, Peters A, Rathod J. Stigma of mental illness: A study in the Indian Armed Forces. Med J Armed Forces India 2014;70(4):354–9.

[11] Rüsch N, Angermeyer MC, Corrigan PW. Mental illness stigma: concepts, consequences, and initiatives to reduce stigma. Eur Psychiatry 2005;20(8):529–39.

[12] Hill K, Startup M. The relationship between internalized stigma, negative symptoms and social functioning in schizophrenia: The mediating role of self-efficacy. Psychiatry Res 2012;206(2-3):151–7.

[13] Livingston JD, Boyd JE. Correlates and consequences of internalized stigma for people living with mental illness: A systematic review and meta-analysis. Soc Sci Med 2010;71(12):2150–61.

[14] Świtaj P, Wciórka J, Smolarska-Świtaj J, Grygiel P. Extent and predictors of stigma experienced by patients with schizophrenia. Eur Psychiatry 2009;24(8):513–20.

[15] Ow C-Y, Lee B-O. Relationships Between Perceived Stigma, Coping Orientations, Self-esteem, and Quality of Life in Patients With Schizophrenia. Asia Pac J Public Health 2012;27(2):1932–41.

[16] Lin C-Y, Chang C-C, Wu T-H, Wang J-D. Dynamic changes of self-stigma, quality of life, somatic complaints, and depression among people with schizophrenia: A pilot study applying kernel smoothers. Stigma Heal 2016;1(1):29–43.

[17] Karakaş SA, Okanlı A, Yılmaz E. Archives of Psychiatric Nursing The Effect of Internalized Stigma on the Self Esteem in Patients with Schizophrenia. Arch Psychiatr Nurs 2016;30(6):648–52.

[18] Link BG, Struening EL, Neese-Todd S, Asmussen S, Phelan JC. The Consequences of Stigma for the Self-Esteem of People With Mental Illnesses. Psychiatr Serv2001;52(12):1–6.

[19] Picco L, Pang S, Lau YW, Jeyagurunathan A, Satghare P, Abdin E, et al. Internalized stigma among psychiatric outpatients: Associations with quality of life, functioning, hope and self-esteem. Psychiatry Res 2016;246(2016):500–6.

[20] Kao YC, Lien YJ, Chang HA, Wang SC, Tzeng NS, Loh CH. Evidence for the indirect effects of perceived public stigma on psychosocial outcomes: The mediating role of self-stigma. Psychiatry Res 2016;240(2016):187–95.

[21] Shimotsu S, Horikawa N. Self-stigma in depressive patients: Association of cognitive schemata, depression, and self-esteem. Asian J Psychiatr 2016;24(2016):125–9.

[22] Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, et al. What is the impact of mental health-related stigma on help-seeking? A systematic

review of quantitative and qualitative studies. Psychol Med 2015;45(1):11–27.

[23] Corrigan PW, Druss BG, Perlick DA. The Impact of Mental Illness Stigma on Seeking and Participating in Mental Health Care. Psychol Sci Public Interes 2014;15(2):37–70.

[24] Crowe A, Averett P, Glass JS. Mental illness stigma, psychological resilience, and help seeking: What are the relationships? Ment Heal Prev 2016;4(2):63–8.

[25] Shrivastava A, Johnston M, Bureau Y. Stigma of Mental Illness-1: Clinical reflections. Mens Sana Monogr 2012;10(1):70–84.

[26] Olçun Z, Şahin Altun Ö. The Correlation Between Schizophrenic Patients' Level of Internalized Stigma and Their Level of Hope. Arch Psychiatr Nurs [Internet] 2017;1–6. Available from: http://dx.doi.org/10.1016/j.apnu.2017.03.001

[27] Sirey JA, Bruce ML, Alexopoulos GS, Perlick DA, Friedman SJ, Meyers BS. Stigma as a Barrier to Recovery: Perceived Stigma and Patient-Rated Severity of Illness as Predictors of Antidepressant Drug Adherence. Psychiatr Serv 2001;52(12):1615–20.

[28] Lawrence D, Kisely S. Inequalities in healthcare provision for people with severe mental illness. J Psychopharmacol 2010;24(4):61–8.

[29] Bedaso A, Yeneabat T, Yohannis Z, Bedasso K, Feyera F. Community Attitude and Associated Factors towards People with Mental Illness among Residents of Worabe Town, Silte Zone, Southern Nations Nationalities and Peoples Region, Ethiopia. PLoS One 2016;11(3):1–12.

[30] Happell B, Gough K. Nursing Students' Attitudes to Mental Health Nursing: Psychometric Properties of a Self-report Scale. Arch Psychiatr Nurs [Internet] 2009;23(5):376–86. Available from: http://dx.doi.org/10.1016/j.apnu.2008.10.005

[31] Happell B, Gaskin CJ. The attitudes of undergraduate nursing students towards mental health nursing : a systematic review. J Clin Nurs 2012;22(1):148–58.

[32] Hayman-White K, Happell B. Nursing students' attitudes toward mental health nursing and consumers: Psychometric properties of a self-report scale. Arch Psychiatr Nurs 2005;19(4):184–93.

[33] Hunter L, Weber T, Shattell M, Harris BA. Nursing Students' Attitudes about Psychiatric Mental Health Nursing. Issues Ment Health Nurs 2015;36(1):29–34. Available from: http://www.tandfonline.com/doi/full/10.3109/01612840.2014.935901

[34] Jack-ide IO, Amiegheme FE, Ongutubor KE. Undergraduate Nursing Students ' Mental Health and Psychiatric Clinical Experience and Their Career Choice in Nursing : Perspectives from the Niger Delta Region of Nigeria. J Ment Disord Treat 2016;2(2):116–21.

[35] Markström U, Gyllensten AL, Bejerholm U, Björkman T, Brunt D, Hansson L, et al. Attitudes towards mental illness among health care students at Swedish universities--a follow-up study after completed clinical placement. Nurse Educ Today

2009;29(6):660–5.

[36] Hastings T. Nursing Student Attitudes Toward Mental Illness : A Quantitative Quasi-Experimental Study 2015. Available from: http://gradworks.umi.com/37/36/3736711.html

[37] Poreddi V, Thimmaiah R, Pashupu DR, Ramachandra, Badamath S. Undergraduate Nursing Students' Attitudes towards Mental Illness: Implications for Specific Academic Education. Indian J Psychol Med 2014;36(4):368–72.

[38] Morrison R. Nursing Students' Attitudes toward People with Mental Illness: Do they change after instruction and clinical exposure?. 2011. Available from: https://honors.usf.edu/documents/Thesis/U00977266.pdf

[39] Taylor SM, Dear MJ. Scaling community attitudes toward the mentally ill. Schizophr Bull 1981;7(2):225–40.

[40] Alexander LA, Link BG. The impact of contact on stigmatizing attitudes toward people with mental illness. J Ment Heal 2003;12(3):271–89.

[41] Schafer T, Wood S, Williams R. A survey into student nurses' attitudes towards mental illness: implications for nurse training. Nurse Educ Today 2011;31(4):328–32.

[42] Thongpriwan V, Leuck SE, Powell RL, Young S, Schuler SG, Hughes RG. Undergraduate nursing students' attitudes toward mental health nursing. Nurse Educ Today 2015;35(8):948–53.

[43] Evans-lacko S, Little K, Meltzer H, Rose D, Rhydderch D, Henderson C, et al. Development and psychometric properties of the mental health knowledge schedule. Can J Psychiatry 2010;55(7):440–8.

[44] Gyllensten AL, Bengt S, Björkman T, Hansson L, Leufstadius C, Bejerholm U, et al. Attitudes in healthcare students towards mental illness - a pre- and post multicenter university program survey. Internet J Allied Heal Sci Pract 2011;9(3):1–8.

[45] Karimollahi M. An investigation of nursing students' experiences in an Iranian psychiatric unit. J Psychiatr Ment Health Nurs 2012;19(8):738–45.

[46] Locke CR. Public Attitudes Toward Mental Illness: an Experimental Design Examining the Media's Impact of Crime on Stigma. The Ohio State University; 2010.

[47] Vijayalakshmi P, Reddy D, Math SB, Thimmaiah R. Attitudes of undergraduates towards mental illness : A comparison between nursing and business management students in India. South African J Psychiatry 2013;19(3):66–73.

[48] Ewalds-Kvist B, Högberg T, Lützén K. Impact of gender and age on attitudes towards mental illness in Sweden. Nord J Psychiatry 2013;67(5):360–8.

[49] Van Der Kluit MJ, Goossens PJJ. Factors Influencing Attitudes of Nurses in General Health Care Toward Patients with Comorbid Mental Illness: An Integrative Literature

Review. Issues Ment Health Nurs 2011;32(2005):519–27.

[50] Hsiao C-Y, Lu H-L, Tsai Y-F. Factors influencing mental health nurses' attitudes towards people with mental illness. Int J Ment Health Nurs 2015;24(3):272–80.

[51] Chiles C, Stefanovics E, Rosenheck R. Attitudes of Students at a US Medical School Toward Mental Illness and Its Causes. Acad Psychiatry 2016;41(3):320–5.

[52] Günay S, Bekitkol T, Beycan Ekitli G, Yildirim S. Determination of the Mental Disorder Beliefs of Students in a Nursing Faculty. J Psychiatr Nurs 2016;7(3):129–34.

[53] Kosyluk KA, Al-Khouja M, Bink A, Buchholz B, Ellefson S, Fokuo K, et al. Challenging the Stigma of Mental Illness Among College Students. J Adolesc Heal 2016;59(3):325–31.

[54] Garg R, Shah S, Kataria L, Sharma D. Impact of psychiatry postings on attitudes towards mental illnesses and psychiatry - a comparative study done on medical and nursing students. Eur J Patient Diagnosis Clin Res 2013;2(2013):140–4.

[55] Penn DL, Couture SM. Strategies for reducing stigma toward persons with mental illness. World Psychiatry 2002;1(1):20–1.

[56] Martensson G, Jacobsson JW, Engström M. Mental health nursing staff's attitudes towards mental illness: An analysis of related factors. J Psychiatr Ment Health Nurs 2014;21(9):782–8.

[57] Santos S da S, Soares MH, Hirata AGP. Attitudes, knowledge, and opinions regarding mental health among undergraduate nursing students. Rev da Esc Enferm da USP 2013;47(5):1195–202.

[58] Tork HMM, Abdel-fattah AES. Female Students ' Attitude toward Mental Illness in Qassim. Am J Nurs Sci 2015;4(3):50–6.

[59] Angermeyer MC, Matschinger H, Corrigan PW. Familiarity with mental illness and social distance from people with schizophrenia and major depression: Testing a model using data from a representative population survey. Schizophr Res 2004;69(2-3):175–82.

[60] Angermeyer MC, Matschinger H. The effect of personal experience with mental illness on the attitude towards individuals suffering from mental disorders. Soc Psychiatry Psychiatr Epidemiol 1996;31(6):321–6.

[61] Corrigan PW, Edwards AB, Qreen A, Thwart SL, Perm DL. Prejudice, Social Distance, and Familiarity with Mental Illness. Schizophr Bull 2001;27(2):219–26.

[62] Couture SM, Penn DL. Interpersonal contact and the stigma of mental illness : A review of the literature. J Ment Heal 2003;12(June):291–305.

[63] Evans-lacko S, Henderson C, Thornicroft G. Public knowledge, attitudes and behaviour regarding people with mental illness in England 2009 – 2012. Br J

Psychiatry 2013;202(55):51–7.

[64] Kelly C. College Students Attitudes towards Mental Illness In relation to Gender, Empathy, Agreeableness and Exposure. DBS School of Arts; 2014.

[65] Phelan JE, Basow SA. College Students ' Attitudes Toward Mental Illness : An Examination of the Stigma. J Appl Soc Psychol 2007;37(12):2877–902.

[66] Radhakanth C, Vijayalakshmi D, Rahul P, Reddy KTR. A Comparative Study of Attitudes Towards Mental Illness Among Nursing Students. Indian J Psychiatry 2016;15(9):8–11.

[67] Rogge J. Changes in Nursing Student Attitudes Toward Mental Illness. Western Michigan University; 2005.

[68] Girma E, Tesfaye M, Froeschl G, Möller-Leimkühler, Anna Maria Müller N, Dehning S. Public Stigma against People with Mental Illness in the Gilgel Gibe Field Research Center (GGFRC) in Southwest. PLoS One 2013;8(12):e82116.

The item in two tables were the same,so please merge the table 1 and tabe 2 together. Data must be kept in two decimal places.

Table 1 Sociodemographic characteristics and knowledge about mental illness of Indonesian nursing students （*n*=317）

Variables	*n*	%
Gender		
Male	29	9.1
Female	28	90.9
Ethnicity		
Javanese	279	88.0
Non-Javanese	38	12.0
Year of study		
First	100	31.5
Second	109	34.4
Fourth	108	34.1
Monthly family income (IDR)		
<1,909,000.00	96	30.3
=1,909,000.00	29	9.1
>1,909,000.00	192	60.6
Experienced a mental illness		
Yes	79	2.5
No	238	97.5
Family history of mental illness		
Yes	20	6.3
No	297	93.7
Know or have direct contact with PMI		
Yes	220	69.4
No	97	30.6

Table 2 Correlation between sociodemographic characteristics and knowledge about mental illness of Indonesian nursing students

Variables	*Mean±SD*	Test statistic value	*P*
Age	19.8±1.4	−0.182	0.001[a]
Gender		−0.311	0.756[b]
Male	103.5±9.5		
Female	103.8±9.1		
Ethnicity		−0.059	0.953[b]
Javanese	103.7±8.9		
Non-javanese	103.8±10.6		
Year of study		16.653	0.000[c]
First	104.1±8.5		

Variables	*Mean±SD*	Test statistic value	*P*
Second	106.0±8.9		
Forth	101.2±9.4		
Monthly family income		1.335	0.513[c]
<1,909,000.00	104.7±9.0		
=1,909,000.00	103.2±10.3		
>1,909,000.00	103.4±9.1		
Experienced a mental illness		−1.196	0.232[b]
Yes	99.5±10.0		
No	103.9±9.1		
Family history of mental illness		−0.726	0.468[b]
Yes	101.9±9.9		
No	103.9±9.1		
Knowing or direct contact with PMI		−2.347	0.019[b]
Yes	103.9±9.3		
No	105.6±8.5		
Knowledge about mental illness	20.55±2.07	−0.220	0.000[a]

[a]Spearman's rho test; [b]Wilcoxon test; [c]Kruskal–Wallis test; n = 317 total respondents
PMI, people with mental illness