

Exploration of the Factors Associated with Psychiatric Nurses Skills with Patient Care: A Cross-Sectional Survey

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Objectives: Numerous studies revealed that improved nursing skills are associated with the experience of the nurses, social skills, self-education, autonomy, anxiety. In the present study, we have examined whether nursing skills are related to occupational stress. **Methods:** An institution based cross sectional study was conducted from June 20 to December 25, 2020. A total of one hundred and forty-four psychiatric nurses completed a questionnaire assessing the aforementioned variables. Descriptive statistics and independent t-test were used to determine the characteristics of the participants and examine the difference among different variables. **Results:** During the one-month data collection period, 144 psychiatric nurses were included in the analysis. Mean age of the participants were 39.3 ± 9.4 . The majority (127 (88.2%)) of them were female. Of 144 respondents, 83 (57.6%) had a bachelor's degree and 6 (6%) had a higher degree certification. Comparison by courses, those who studied psychiatry more than 3 months reported greater knowledge of psychiatric services. Certification was also associated with greater perceived value. Education level was not associated with greater knowledge of or perceived value in evidence -based practices. **Conclusion:** Nursing specialty certification was associated with nurses' individual psychosocial beliefs. Supporting nurses in obtaining specialty certification could assist with the adoption of evidence-based practices as a means to improve quality of care.

Keywords: Nursing, Mental Health, Psychiatry, Patient Care

Introduction

The American Nurse Association (ANA) defines nursing skills as "communication, interpersonal, and problem-solving skills" [1]. Numerous studies had demonstrated that nursing skills

are vital for patient care, and it is significantly associated with scientific thinking, years of experience in nursing, social skills, self-education, autonomy, anxiety, and self-esteem [2-6]. As nursing skill is acquired through practical education in order to improve nursing performance, nurses often face some stress.

As indicated in several studies, in order to improving their job performance, nurses must reflect on their own nursing care and behavior. Takase et al. demonstrated that reflection has been shown to be positively related to nursing competence among nursing students in both a cross-sectional study and a longitudinal study [7, 8]. The authors concluded that learning from reflection could be useful for both lesser and more experienced nurses, allowing them to embrace a positive view of their competence. Moreover, Reljic et al. showed that self-reflection helps nursing students to express emotions and feelings, to relive and to identify problems, and also, to understand themselves better. Self-reflection is also important to students who self-reflect on their professional and personal growth [9]. Further more, several studies demonstrated the associations between occupational stress and nursing skills, revealing that higher stress was associated with lower nursing competence [10, 11]. Eng et al. [12] showed that self-reflection and insight, practice stress, and practice coping behavior were statistically significantly associated with nursing competence. Students' coping behavior partially mediates the effect of self-reflection and stress on nursing competence. Moreover, Sahir et al revealed that stress is a hindering factor for learning and is related to poor nursing competence [13].

On the other hand, Mukaihata et al identified the factors influencing work engagement among psychiatric nurses. This cross-sectional study in which 425 Japanese psychiatric nurses participated, showed that reward, supervisor support, nurse-physician collaboration, other's emotion appraisal, and use of emotions were positively related to work engagement. Patients' unpleasant attitude toward nurses boosted the association of reward and supervisor support with work engagement. The authors concluded that in order to enhance psychiatric nurses' work engagement, nursing leaders should teach nurses' skills related to empathy and self-motivation, consider whether nurses are confronted with patients' unpleasant attitude, and improve job resources [6]. Van Bogaert et al also showed that nurse practice environment dimensions predicted nurses' ratings of job outcome variables as well as quality of care. Perceived workload, decision latitude, and social capital, are three dimension of work engagement which play mediating roles between nurse practice environment and outcomes [14].

Necessary nursing skills differed according to the situation. This is especially noticeable in home-visit nurses, nursing home

nurses, nurses who work in ICU unit as well as the psychiatric ward. Kurebayashi examined whether nursing skills are related to occupational stress, self-focus, and other-consciousness, and whether these relationships differ between general and psychiatric nurses. The questionnaire completed by 271 general and 317 psychiatric nurses showed that internal and fantastic aspects (other-consciousness subscales) and psychological burden (occupational stress subscale) predicted nursing skills in both groups. Nursing education should facilitate other-consciousness in general nurses, but self-focus in psychiatric nurses [15].

To improve nursing education for clinical nurses, psychological factors influencing nursing skills should be clarified. Moreover, there is need to clarify psychological factors between general and psychiatric nurses. Therefore, in the present study, we have conducted a questionnaire assessing the aforementioned variables of the psychiatric nurses.

Materials and Methods

Study area and period

The study was conducted on psychiatric nurses' skills and associated factors among psychiatric nurses at Central Mental Hospital in Ulaanbaatar. The study was conducted from June 20 60 December 25, 2020.

Research design

An institution-based cross-sectional study was conducted in an outpatient psychiatric care unit of Central Mental Hospital.

Study population

According to the annual report of the Ministry of Health in 2019, there are a total of 172 psychiatric nurses nationwide. Informed consent was received and 144 psychiatric nurses, 47 from Ulaanbaatar and 97 from the country side, participated in the survey.

Nursing skills

Nursing skills were investigated using the Self-Evaluation Scale of Oriented Problem Solving Behavior (OPSN), which has good reliability and validity [13]. The OPSN consists of 25 items in the following 5 subscales: subscale I (exploring and identifying patients' problems by organizing and utilizing

their data), subscale II (alternating medication behavior to solve and reduce patients' problems, reducing their symptoms, maintaining daily living functions, and personalizing), subscale III (facilitating interaction to solve patients' problems), subscale IV (psychological support for patients to overcome their problems), and subscale V (self-evaluation for solving patients' problems). Each subscale includes 5 items. Participants were asked to answer each item on a 5-point Likert scale (1 = do not conduct; 5 = always do), with higher scores indicating higher quality of care for solving and reducing nursing problems [16, 17]. In this study, the overall OPSN score was used for analysis.

Data collection and management

The data was collected by three investigators through a self-administered questionnaire and face to face interview for those individuals unable to read and write. The data collection instruments were adapted from prior studies and consist of sections focusing on socio demographic characteristics and satisfaction with the psychiatric outpatient care [12, 18]. To assess patient satisfaction, we have used a standardized satisfaction measurement tool developed for low income countries [19] and contained five-point Likert scale items, on scale "1" stood for rating of the item as "poor" while "2", "3", "4", and "5" stood for "fair", "good", "very good", and "excellent", respectively. The mean level of satisfaction was calculated by averaging their ratings for the parameters of measuring satisfaction. If the patient scored 3 and above, the client was interpreted as a high level of satisfaction, where as a score below 3 was interpreted as a low level of satisfaction.

Statistical analysis

Frequencies, percentages, unpaired t-test and chi-square test were used to examine difference among different groups. Multiple logistic regression analysis was performed to identify factors influencing nurse's skills such as working and nursing experience, working with depressed patients, evaluating psychiatric patients, planning treatments, working on computers, social activity, working with caretakers' family, research methodology as well as team working. P-value < 0.05 was used as cut-off points for determining statistical significance. The data collected using quantitative method was entered to and analyzed using Statistical Packages for Social Sciences (SPSS) version 20 statistical software.

Ethical statement

Ethical approval for this study was obtained from the Mongolian National University of Medical Sciences Research Ethics Committee on June 12, 2020 (No 2020/3- 05).

Results

The descriptive statistics for all variables in this study are shown in Table 1. Psychiatric nurses in this study (n = 144) were mostly women, in their 20s, had graduated from nursing school, and had a mean of 3.4 years (SD = 1.6) of nursing experience. The mean years of working experience was 4.21 years (SD = 2.49). There were 17 men (11.8%), 127 women (82.2%). There were 83 bachelor's degree (57.6 %) and 6 nurses (6%) who had a master degree.

Table 1. Presents the general characteristics of participants.

Variables	Number	Percentage (%)
Age, years	39.30 ± 9.38	
Working experience	4.21 ± 2.49	
Nursing experience	3.40 ± 1.60	
Age groups		
19-30	34	23.6
31-40	42	29.2
41-50	51	35.4
> 50	17	11.8
Sex		
Male	17	11.8
Female	127	88.2

Continued

Area		
Ulaanbaatar	47	32.6
Country side	97	67.4
University		
State	107	74.3
Private	37	25.7
Degrees		
Master	6	5.1
Bachelor	83	57.6
Diploma	55	38.2
Certification		
Higher	8	5.6
Intimidate	30	20.8
Low degree	106	73.6
Majored organizations		
State university	22	25.7
State hospital	122	74.3
Period of professional courses		
3 months	99	68.8
More than 3 months	39	31.2

Table 2. Characteristics of the participants by the training period.

Variables	3 months (n = 105)	More than 3 months (n = 39)	Total (n = 144)	p-value
	Mean ± SD	Mean ± SD	Mean ± SD	
Age	40.5 ± 9.02	36.3 ± 9.71	39.4 ± 9.4	0.019
Working experience	4.53 ± 2.69	3.33 ± 1.58	4.21 ± 2.49	0.001
Nursing experience	3.72 ± 1.57	2.54 ± 1.31	3.40 ± 1.60	0.000
Sex	N (%)	N (%)	N (%)	
Male	10 (9.5)	7 (17.9)	17 (11.8)	0.271
Female	95 (90.5)	32 (82.1)	127 (88.2)	
Age (in years)				0.076
19-30	20 (19.0)	14 (35.9)	34 (23.6)	
31-40	30 (28.6)	12 (30.8)	42 (29.2)	
41-50	43 (40.9)	8 (20.5)	51 (35.4)	
> 50	12 (11.4)	5 (12.8)	17 (11.8)	
Area				0.021
Ulaanbaatar	28 (26.7)	19 (48.7)	47 (32.6)	
Country side	77 (73.3)	20 (51.3)	97 (67.4)	
Nursing schools				0.837
State	79 (75.2)	28 (71.7)	107 (74.3)	
Private	26 (24.8)	11 (28.2)	37 (26.7)	

Table 3. Nursing skills by the training period

Variables	3 months (n = 105)	More than 3 months (n = 39)	Total (n = 144)	p-value
	Mean ± SD	Mean ± SD	Mean ± SD	
Working experience	4.53 ± 2.69	3.33 ± 1.57	4.21 ± 2.49	0.001
Nursing experience	3.72 ± 1.58	2.54 ± 1.32	3.40 ± 1.59	0.000
Sex	N (%)	N (%)	N (%)	
Male	10 (9.5)	7 (17.9)	17 (11.8)	0.271
Female	95 (90.5)	32 (82.1)	127 (88.2)	
Working with depressed patients				
Not bad	13 (12.4)	5 (12.8)	18 (18.7)	0.031
Good	78 (74.3)	22 (54.4)	100 (69.4)	
Excellent	14 (13.3)	12 (30.8)	26 (18.1)	
Evaluating psychiatric patients				
Not bad	18 (18.3)	11 (28.2)	29 (26.9)	0.082
Good	70 (66.7)	19 (48.7)	89 (61.8)	
Excellent	16 (15.3)	9 (23.1)	25 (17.4)	
Planning treatments				
Not bad	13 (12.8)	7 (17.9)	20 (19.9)	0.058
Good	76 (72.4)	21 (53.8)	97 (67.3)	
Excellent	16 (15.3)	11 (28.3)	27 (18.8)	
Working on computers				
Not bad	14 (12.0)	10 (25.6)	24 (16.3)	0.043
Good	74 (70.5)	19 (48.7)	93 (64.6)	
Excellent	17 (16.2)	10 (25.6)	27 (18.8)	
Social activity				
Not bad	17 (16.1)	6 (17.8)	24 (16.6)	0.075
Good	71 (67.6)	20 (51.3)	91 (63.2)	
Excellent	17 (16.2)	12 (30.7)	29 (20.1)	
Working with caretakers' family				
Not bad	16 (15.2)	6 (15.4)	22 (15.3)	0.671
Good	69 (65.7)	23 (58.9)	92 (63.9)	
Excellent	20 (19.0)	10 (25.6)	30 (20.8)	
Research methodology				
Not bad	31(29.5)	14 (35.8)	45(31.2)	0.821
Good	57 (54.3)	18 (46.2)	75 (52.1)	
Excellent	17 (16.2)	7 (17.9)	24 (16.7)	
Team working				
Not bad	16 (15.3)	7 (17.9)	23 (15.9)	0.451
Good	62 (59.0)	23(58.9)	85 (59.0)	
Excellent	27 (25.7)	9 (23.1)	36 (25.0)	

Regarding job positions, 22 were managers (16.7%), 104 were non-managers (78.8%), and 21 left this unanswered. Although the majority of the nurses had a bachelor degree, only about 6% had a higher degree certification. Table 1 presents the general characteristics of participants.

The previous data should be contrasted with the results obtained in subscale II, that refers to nurses' willingness to work with alcoholic patients. The means of the different items were mostly below 3 points, which represented dissatisfaction or dislike related to working with alcoholic patients. The results

Table 4. Factors influencing nurse’s skills.

Variables	OR	95% CI	p-value
Working experience			
4 - 8 years	1.00	Reference	
8 <	1.29	1.00 - 3.01	0.001
Nursing experience			
3 - 7years	1.00	Reference	
7 <	1.47	1.12 - 3.56	0.000
Sex			
Male	1.00	Reference	
Female	0.94	0.08 - 4.71	0.246
Working with depressed patients			
Good	1.00	Reference	
Excellent	1.78	1.65 - 6.81	0.131
Evaluating psychiatric patients			
Good	1.00	Reference	
Excellent	1.04	0.80 - 7.35	0.090
Planning treatments			
Good	1.00	Reference	
Excellent	1.33	1.80 - 12.20	0.083
Working on computers			
Good	1.00	Reference	
Excellent	1.59	1.03-3.01	0.043
Social activity			
Good	1.00	Reference	
Excellent	1.19	1.29 - 16.01	0.075
Working with caretakers’ family			
Good	1.00	Reference	
Excellent	1.47	1.01 - 9.31	0.671
Research methodology			
Good	1.00	Reference	
Excellent	3.56	0.01 - 2.09	0.142
Team working			
Good	1.00	Reference	
Excellent	2.89	1.01 - 11.01	0.000

indicated that 42.7% (73) and 30.4% (52) did not feel better nor comfortable working with alcoholics, respectively, evidencing a neutral positioning by 42% (72) and 42.7% (73) concerning the two issues mentioned.

Each question and subscale was described in a disaggregated manner to better understand the results. Likewise, in the case of the grouped results, a mean lower than 2 points represented disagreement, 3 represented neutralities, and higher than 3 points represented agreement (Table 3).

Curiously, in our study there was no association between the

assessment of the knowledge level and the attitudes measured in SM scale.

Discussion

To improve nursing education for clinical nurses, the psychological factors influencing nursing skills should be clarified. Therefore, in the present study, we have conducted a questionnaire assessing the aforementioned variables of nursing skills of psychiatric nurses.

To improve nurse skills regardless of patients' disease type, it is important and necessary to respecting other's feelings or pain. Basogul et al. revealed that nurses' emotional intelligence affects conflict management strategies. To use effective strategies in conflict management, nurses must develop emotional intelligence. Training programs on conflict management and emotional intelligence are needed to improve effective conflict management in healthcare facilities. In the study of Sarazine et al, it has become clear that, among 68 000 registered nurses, 35% of hospital nurses were experiencing symptoms of burnout. Nurses at a Midwest academic medical center were recruited through e-mail to attend a 4-hour mindfulness workshop. At 6 months, statistically significant findings included increased perceptions of mindfulness (2.50, $p = .04$), personal accomplishment (4.43, $p = .04$), and decreased emotional exhaustion (-6.21, $p = .05$). Perceptions of stress and depersonalization improved but were not statistically significant. In this study, nurses reported decreases in burnout and perceived stress and increases in mindfulness after attending a 4-hour mindfulness workshop [20-22].

On the relationship between occupational stress and nursing skills in general nurses, better nursing skills were predicted by lower "stress in personal relationships at the working place" and lower "stress in occupational environments". However, Sarafis et al. investigated job-related stress and nurses' caring behavior in 246 Greek nurses, and reported an association between greater problems with peers and poorer care practices, which agrees with our findings [23]. The authors revealed that higher workload stressors predicted worse caring behavior, suggesting a negative relationship between stress and nursing skills. On the other hand, in the study of AbuAlRub et al where 263 American hospital nurses and 40 non-American nurses participated, it was shown that the relationship between job-stress and job performance was U-shaped [24]. Nurses who reported moderate levels of job stress believed that they performed their jobs less well than did those who reported low or high levels of job stress.

In the nursing process, psychiatric nurses need to use themselves as caring tools for patients with psychiatric diseases, which requires them to express their own feelings in ordinary care situations. Moreover, psychiatric nurses also need to focus and reflect on their own nursing care, behavior, and emotions. As for psychiatric nurses, Kurebayashi investigated the relationships between occupational stress and nursing skills in 433 psychiatric

nurses and analyzed demographics, other-consciousness, self-compassion, self-focus, and nursing competency using the Other-Consciousness Scale (OCS), Self-Compassion Scale (SCS), Japanese version of the Rumination-Reflection Questionnaire (RRQ), and Oriented Problem Solving Behavior (OPSN). The author concluded that higher internal aspect and lower fantastic aspect in OCS, higher reflection in RRQ, and lower SCS negative subscales predicted a higher OPSN score.

There is a limitation in our study. Our study design was cross-sectional; therefore, conclusions about the causal relations among occupational stress and nursing skills cannot be made. Moreover, the sample size was relatively small in this study. Also, direct comparisons of degree of stress between rural and urban nurses were not performed. Therefore, future studies need to examine whether these factors influence nursing skills and need to show the impact between nursing at rural or urban areas, as well as between general and psychiatric nurses, using relatively large samples.

Conclusions

Nursing specialty certification was associated with nurses' individual psychosocial beliefs. Supporting nurses in obtaining specialty certification could assist with the adoption of evidence-based practices as a means to improve quality of care.

Conflict of Interest

The authors declare no conflict of interest.

Acknowledgment

References

1. American Nurses Association. Competency model. Maryland, USA, Silver Spring, 2013, p 51-5.
2. Peterson BL, Pittenger AL, Kaas MJ, Lounsbery JL. Partnering for a sustainable interprofessional psychiatric mental health nurse practitioner education curriculum. *J Nurs Educ* 2019; 58: 723-7.
3. Yada H, Abe H, Odachi R, Adachi K. Exploration of the factors related to self-efficacy among psychiatric nurses. *PLoS One* 2020; 15: e0230740.
4. Tatsumi N, Nakama Y, Tada M, Koyama S. The evaluation

- of education for nursing research as part of in-service education. *Jpn J Nurs Sci* 2008; 33: 72-6.
5. Mukaihata T, Fujimoto H, Greiner C. Factors influencing work engagement among psychiatric nurses in Japan. *J Nurs Manag* 2020; 28: 306-16.
 6. Amini K, Rezaei B, Esmaeilpour BM. The relationship between clinical competence and occupational stress in Iranian clinical nurses. *Pharmacophore* 2017; 8: 117-34.
 7. Zakeri MA, Bazmandegan G, Ganjeh H, Zakeri M, Mollaahmadi S, Anbariyan A et al. Is nurses' clinical competence associated with their compassion satisfaction, burnout and secondary traumatic stress? A cross-sectional study. *Nursing open* 2020; 8: 354-63.
 8. Kurebayashi Y. Comparison of factors predicting nursing skills between general and psychiatric nurses. *Perspect Psychiatr Care* 2019; 55: 183-9.
 9. Takase M, Yamamoto M, Sato Y, Niitani M, Uemura C. The relationship between workplace learning and midwives' and nurses' self-reported competence: a cross-sectional survey. *Int J Nurs Stud* 2015; 52: 1804-15.
 10. Eng CJ, Pai HC. Determinants of nursing competence of nursing students in Taiwan: the role of self-reflection and insight. *Nurse Educ Today* 2015; 35: 450-5.
 11. Pai HC. The effect of a self-reflection and insight program on the nursing competence of nursing students: a longitudinal study. *J Prof Nurs* 2015; 31: 424-31.
 12. Sahir A, Afzal M, Hussain M, Gilani SA. The impact of stress on competency among nursing students in Lahore, Pakistan. *J Adv Educ Philos* 2019; 3: 200-3.
 13. Van Bogaert P, van Heusden D, Timmermans O, Franck E. Nurse work engagement impacts job outcome and nurse-assessed quality of care: model testing with nurse practice environment and nurse work characteristics as predictors. *Front Psychol* 2015; 5: 12-6.
 14. Mlinar R, Nataša P, Majda F. Self-reflection during first clinical practice: the experiences of nursing students. *Nurse Educ Today* 2018; 7: 12-9.
 15. Başoğul C, Özgür G. Role of emotional intelligence in conflict management strategies of nurses. *Asian Nurs Res* 2016; 10: 228-33.
 16. Pai HC. An integrated model for the effects of self-reflection and clinical experiential learning on clinical nursing performance in nursing students: a longitudinal study. *Nurs Edu Today* 2016; 45: 156-62.
 17. Kistoffersen M, Friberg F. The nursing discipline and self-realization. *Nurs Eth* 2015; 22: 723-33.
 18. Hasson H, Arnetz JE. Nursing staff competence, work strain, stress and satisfaction in elderly care: a comparison of home-based care and nursing homes. *J Clin Nurs* 2008; 17: 468-81.
 19. Kurebayashi Y. Self-compassion and nursing competency among Japanese psychiatric nurses. *Perspect Psychiatr Care* 2021; 57: 1009-18.
 20. Sarazine J, Heitschmidt M, Vondracek H, Sarris S, Marcinkowski N, Kleinpell R. Mindfulness workshops effects on nurses' burnout, stress, and mindfulness skills. *Holist Nurs Pract* 2021; 35: 10-8.
 21. Andela M, Auzoult L, Truchot D. An exploratory study of self-consciousness and emotion-regulation strategies in health care worker. *Psychol Rep* 2014; 115: 106-14.
 22. Cheng CY, Tsai HM, Chang CH, Liou SR. New graduate nurses' clinical competence, clinical stress, and intention to leave: a longitudinal study in Taiwan. *Sci* 2014; 74: 83-9.
 23. Sarafis P, Rousaki E, Tsounis A, Malliarou M, Lahana L, Bamidis P, et al. The impact of occupational stress on nurses' caring behaviors and their health related quality of life. *BMC Nurs* 2016; 15: 56-61.
 24. AbuAlRub RF. Job stress, job performance, and social support among hospital nurses, *Journal of nursing scholarship. J Nurs Schol* 2014; 36: 73-8.