Received: 23 December 2018 | Revised: 23 March 2019 | Accepted: 12 July 2019

DOI: 10.1111/jjns.12295

JAPAN JOURNAL OF NURSING SCIENCE WILEY

BRIEF REPORT

Factors related to recovery knowledge and attitudes among professionals in mental health in Japan

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Funding information
Charitable trust of the Fumiko Yamaji Foundation for Nursing Education and Research; Gushinkai Foundation; JSPS KAKENHI, Grant/Award Numbers: 16K12269, 17K17513; Research and Development Grants for Comprehensive Research for Persons with Disabilities from Japan Agency for Medical Research and Development (AMED), Grant/Award Number: 18dk0307066h0003

Abstract

Aim: To explore what factors may influence recovery knowledge and attitudes among professionals in mental health.

Methods: We utilized an existing dataset from a study that surveyed 331 subjects among 475 eligible professionals. We used data from 289 participants without missing values for the analyses (valid response rate = 60.8%). The questionnaire included three psychometrically tested scales: (a) Recovery Knowledge Inventory (RKI); (b) Recovery Attitudes Questionnaire (RAQ); and (c) Internal Work Motivation, as well as other variables. Mean-based comparisons of the RKI and RAQ scores between several subgroups were examined. We also examined the correlation between RKI and RAQ scores and the continuous variables. Multiple linear regression was implemented to examine the simultaneous effects of the factors on RKI and RAQ scores. The mean age of participants was 39.9 years and 69.2% were female and 44.0% were nursing professionals.

Results: Multiple linear regression analyses showed that the internal work motivation and the experience of discharging patients after a lengthy hospitalization were significantly and positively associated with recovery attitude. Working at community facilities and being young were significantly and weakly correlated with recovery knowledge. The experience of participation in self-help groups exhibited positive relationships with RKI and RAQ scores, while education exhibited positive but weak relationships with RKI and RAQ scores. No significant relationship was observed in the regression analyses.

Conclusions: Internal work motivation, the experience of discharging patients after a lengthy hospitalization, working at community facilities, and being young may positively contribute to better recovery knowledge and attitudes. Future research using a longitudinal design will explore other factors.

KEYWORDS

attitude, cross-sectional survey, knowledge, mental health services, professional, recovery

1 | INTRODUCTION

"Personal recovery" has become a significant concept, policy, and goal in mental health care worldwide, including Asian countries. Although there is no definitive consensus of its meaning (Tickle, Brown, & Hayward, 2014), it is often described as a complex and subjective process of developing new meaning and purpose in life as people grow beyond the

catastrophic effects of mental illness (Anthony, 1993). It clearly differs from conventional "clinical recovery," which is characterized by symptom remission, absence of relapse, and mastery in daily living skills (Le Boutillier et al., 2015). Since professionals' perceptions of personal recovery are the key to the adaptation of recovery-oriented practices (Le Boutillier et al., 2015), the number of studies on how to facilitate professionals' recovery attitudes has increased in recent years (Deane et al., 2014; Slade et al., 2015; Williams et al., 2016).

In previous studies, factors that are theoretically relevant to recovery knowledge and attitudes have been identified. For example, according to Cleary and Dowling (2009), professionals should possess high morale in order to provide effective recovery-oriented services. A partnership approach and a further understanding of consumers' values and identity are also important factors that facilitate recovery-oriented practices (S. Kidd, Kenny, & McKinstry, 2015; Slade et al., 2015). Seeing and hearing the stories of consumers' recoveries also helps professionals' understanding of personal recovery (Happell, Bennetts, Tohotoa, Wynaden, & Platania-Phung, 2017). However, only a limited number of empirical studies have examined the relationships between such potential factors and recovery knowledge and attitudes (Gaffey, Evans, & Walsh, 2016; Stuber, Rocha, Christian, & Johnson, 2014; Tsai, Salyers, & Lobb, 2010), and these factors have not been sufficiently investigated, especially in Asian countries. Therefore, there is a need to further explore the relationship between the relevant factors and recovery knowledge and attitudes in order to effectively facilitate recovery orientation among professionals, including nurses. Thus, this study aimed to explore the factors that may influence recovery knowledge and attitudes among professionals, commencing with nurses. Based on the theoretical studies described above, we primarily hypothesized that internal work motivation and working at community facilities would be positively related to recovery knowledge and attitudes, as well as (a) experiences of involvement with discharge procedures after a lengthy hospitalization and (b) participation in self-help groups for people with mental illness.

2 | METHODS

2.1 | Sample

We conducted a secondary analysis on data from a self-administered questionnaire survey that was conducted from February to March 2012 (Chiba et al., 2016, 2017). In the initial study, the sample included mental health professionals from two psychiatric hospitals in the Kanto region and 56 psychiatric clinics and community service agencies in Tokyo, Japan. In this secondary analysis, 42 were excluded due to missing responses for one or more of the items on either the Recovery Knowledge Inventory (RKI) or Recovery Attitudes Questionnaire (RAQ). Thus, the data from the remaining 289 were used for the analyses (valid response rate = 60.8%).

The mean age of respondents was 39.9 years (range: 22–74 years; *SD* = 11.7), and 69.2% were female. The mean length of tenure at the facilities was 11.7 years (range: 0–55 years; *SD* = 10.4). The occupations included nurses (*n* = 127; 44.1%), social workers (*n* = 103; 35.8%), occupational therapists (*n* = 19; 6.6%), clinical psychologists (*n* = 19; 6.6%), psychiatrists (*n* = 15; 5.2%), and pharmacologists (*n* = 5; 1.7%), of which 42.6% worked in inpatient psychiatry.

2.2 | Measures

2.2.1 | Sixteen-item RKI

The RKI is a tool used to assess one's knowledge of the concept of personal recovery among people with mental illness (Bedregal, O'Connell, & Davidson, 2006). It consists of 20 items, such as "Defining who one is, apart from his/her illness/condition, is an essential component of recovery," which are rated on a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree). High scores indicate a better knowledge base. However, a previous study verified that the 16-item Japanese version of RKI exhibited better reliability (Cronbach's α = .77) and validity (goodness of fit [GFI] = .93; adjusted AGI [AGFI] = .90; confirmatory fit index [CFI] = .91; root mean square error of approximation = .053) (Chiba et al., 2017). Thus, the total score of 16-item RKI was used in this study.

2.2.2 | RAQ

The RAQ was the first tool developed and validated to assess one's attitudes toward recovery (Borkin et al., 2000). It consists of seven items, such as "People differ in the way they recover from a mental illness," which are rated on a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree). Higher total scores indicate a more positive attitude to the concept of personal recovery. The reliability and validity of the Japanese version of the RAQ were also examined (Cronbach's α = .64; GFI = 0.95; AGFI = 0.90; CFI = 0.86) (Chiba et al., 2016). The total score of the seven-item RAQ was used in this study.

2.2.3 | Internal work motivation

The internal work motivation component of the Revised Professional Practice Environment (RPPE) Scale (Erickson, Duffy, Ditomassi, & Jones, 2009) was used in this study.

The subscale consists of seven items, such as "I feel a great sense of personal satisfaction when I do this job well," which are rated on a four-point Likert scale ranging from one (strongly disagree) to four (strongly agree) for responses. Higher scores indicate greater internal work motivation. The subscale showed good reliability (Cronbach's $\alpha = .84$) (Erickson et al., 2009). The total score of the seven-item subscale was used in this study.

2.2.4 | Other variables and demographic data

Two dichotomous questions were included in the questionnaire. (a) Do you have experience of discharging patients after a lengthy hospitalization, and (b) do you have experience participating in self-help groups for people with mental illness? Occupational and demographic data, including education, the assigned department (facilities in community or inpatient psychiatry), age, and sex, were also obtained in the initial study.

2.2.5 | Statistical analysis

Descriptive analyses were implemented to describe the demographic characteristics in this sample. Mean-based comparisons of RKI and RAQ scores between subgroups were examined using *t* tests by three binary variables: (a) experience of discharging patients after a lengthy hospitalization; (b) experience of participation in self-help groups; and (c) the assigned department (facilities in community or inpatient psychiatry). RKI and RAQ scores were also compared between different types of occupations when the sample size of each occupation was 50 or over. We also examined the correlation between RKI and RAQ scores and the continuous variables (i.e., internal work motivation, age, and education). A multivariate analysis of multiple linear regressions with forced entry method was then implemented to examine the simultaneous effects of variables, except for RKI and RAQ scores, between different types of occupations. *P* values of less than .05 were regarded as statistically significant. All of the tests were two-tailed. All statistical analyses were performed using SPSS statistical software version 24 for Windows (IBM, Armonk, NY, USA).

2.2.6 | Ethical consideration

This study was implemented as a secondary analysis of the initial study. The aims and procedures of this study were approved by the Ethics Committee of the Graduate School of Medicine, The University of Tokyo, Japan (#3607).

3 | RESULTS

3.1 | Factors related to RKI and RAQ

Table 1 shows that professionals who had experience of discharging patients after a lengthy hospitalization indicated a higher RKI score ($M = 56.1$, $SD = 5.8$) than those who had not ($M = 54.6$, $SD = 5.6$), as well as a higher RAQ score ($M = 27.4$, $SD = 2.8$; $M = 26.6$, $SD = 2.6$). Professionals who had participated in self-help groups for people with mental illness showed a higher RKI score ($M = 56.9$, $SD = 5.8$) than those who had not ($M = 54.6$, $SD = 5.6$), as well as a higher RAQ score ($M = 27.4$, $SD = 2.9$; $M = 26.5$, $SD = 2.3$). Professionals who worked at community departments/facilities also had a significantly higher RKI score ($M = 57.8$, $SD = 5.5$) than those on the ward settings

TABLE 1 Mean-based comparison of RKI and RAQ scores between subgroups by binary variables ($N = 289$)

	RKI				RAQ			
Variable	**Mean**	***SD***	***t***	***p***	**Mean**	***SD***	***t***	***p***
Experience of discharging patients after a lengthy hospitalization								
Never	54.9	5.7	−2.75	**.006**	26.6	2.6	−2.20	**.029**
Have experiences	56.1	5.8			27.4	2.8		
Experience of participation in self-help groups for people with mental illness								
Never	54.6	5.6	−3.30	**.001**	26.5	2.3	−3.05	**.003**
Have experiences	56.9	5.8			27.4	2.9		
Assigned department								
Community[a]	57.8	5.5	5.58	**<.001**	27.4	2.8	2.49	**.013**
Inpatient psychiatry	54.1	5.5			26.6	2.6		

Note: The bold values represent statistical significance with $p < .05$.

Abbreviations: RKI, 16-item Recovery Knowledge Inventory; RAQ, Recovery Attitudes Questionnaire.

[a]Community: All departments/facilities other than inpatient psychiatry.

(M = 54.1, SD = 5.5), as well as a higher RAQ score (M = 27.4, SD = 2.8; M = 26.6, SD = 2.6). Social workers had a significantly higher RKI score (M = 59.1, SD = 5.4) than nurses (M = 54.1, SD = 6.0), while RAQ scores did not show significant differences between these two occupations.

Internal work motivation was significantly and weakly correlated with both RKI (r = .16; p < .01) and RAQ scores (r = .24; p < .001). Education was also significantly and weakly correlated with both RKI (ρ = .20; p = .001) and RAQ scores (ρ = .14; p = .02). Higher age was significantly and negatively associated with only RKI score (r = − .29; p < .001); RAQ score showed only r = − .09 (p = .17).

Table 2 shows the results of the multiple linear regression analyses. RKI score was significantly associated with the assigned department (community/ward) (p < .01) and being young (p < .001). RAQ score was significantly associated with internal work motivation (p < .001) and the experience of discharging patients after a lengthy hospitalization (p = .04).

4 | DISCUSSION

Multiple linear regression analyses showed that internal work motivation and the experience of discharging patients after a lengthy hospitalization were significantly and positively associated with recovery attitude. Working at community facilities and being young were significantly and weakly associated with recovery knowledge. The experience of participation in self-help groups exhibited positive relationships with RKI and RAQ scores, while education exhibited positive but weak relationships with RKI and RAQ scores. No significant relationship was observed in the regression analyses.

These findings align with the previous research that demonstrated a positive relationship between job satisfaction and recovery-oriented clinical practice (Stuber et al., 2014); higher internal work motivation can boost one's recovery attitude. Professionals with higher motivation may be more likely to learn about recovery and strengthen one's view for recovery.

The experience of discharging patients after a lengthy hospitalization and participation in self-help groups were associated with recovery knowledge or attitudes. A previous study demonstrated that professionals who listened to the successive narratives of individuals who had previously been hospitalized improved their recovery orientation (S. A. Kidd et al., 2014). These findings support the importance of seeing and understanding the personal recovery process of people with severe mental health concerns, which may lead to the improvement of one's recovery attitudes.

In this study, professionals in community facilities showed higher RKI scores than those in inpatient psychiatry. Despite

TABLE 2 The effect of associated factors on the total scores of RKI and RAQ using multiple linear regression model with forced entry method (N = 289)

	RKI				RAQ			
Variable	***β***	***t***	**95% CI**	***p***	***β***	***t***	**95% CI**	***p***
Internal work motivation	.10	1.61	(−0.04 to 0.34)	.11	**.23**	**3.74**	**(0.09 to 0.27)**	**<.001**
Experience of discharging patients after a lengthy hospitalization								
Never	Reference				Reference			
Have experiences	.11	1.76	(−0.15 to 2.70)	.08	**.13**	**2.05**	**(0.03 to 1.45)**	**.04**
Experience of participation in self-help groups for people with mental illness								
Never	Reference				Reference			
Have experiences	.12	1.80	(−0.13 to 2.89)	.07	.06	.95	(−0.39 to 1.12)	.34
Department								
Community [a]	Reference				Reference			
Inpatient psychiatry	**− .22**	**−3.13**	**(−4.24 to −0.97)**	**< .01**	− .05	− .71	(−1.11 to 0.52)	.48
Age	**− .24**	**−3.83**	**(−0.18 to −0.06)**	**< .001**	− .06	− .89	(−0.04 to 0.02)	.37
Education	− .08	−1.10	(−1.11 to 0.32)	.28	.08	1.04	(−0.17 to 0.54)	.30
	F(6, 248) = 8.44, p < .001, adjusted R^2 = .15				F(6, 248) = 5.51, p < .001, adjusted R^2 = .10			

Note: The bold values represent statistical significance with p < .05.

Abbreviations: RKI, 16-item version of Recovery Knowledge Inventory; RAQ, Recovery Attitudes Questionnaire.

[a]Community: All departments/facilities other than wards.

the inconsistent findings in previous studies (Cleary & Dowling, 2009; Gaffey et al., 2016), other studies have demonstrated the difficulty of recovery-oriented care in inpatient psychiatry (Chen, Krupa, Lysaght, McCay, & Piat, 2011; Piat, Sabetti, & Bloom, 2010). Thus, the higher RKI scores of professionals in the community is justifiable since they are generally more exposed to social resources that pursue personal recovery and more people who evidently show their own recovery. Professionals who have been in inpatient psychiatry for a lengthy period may be designated to other areas or departments in the community to improve recovery knowledge.

The positive relationship between being young and recovery knowledge was similar to that in another previous study (Mak, Lam, & Yau, 2010). Changes in the contents and quality of education may contribute to better knowledge of recovery. Given the difference of RKI scores between nurses and social workers, one can argue that community-based education is more important than the medical-based education that had been used in nursing education. The positive but weak correlations between education level and recovery knowledge and attitudes may indicate that higher education or length of education is not necessarily related to recovery knowledge and attitudes.

Most variables showed weak correlations between RKI and RAQ scores, and no significant relationship was observed in the regression analyses. Thus, the results should be treated with caution, since the finding in this study is considerably limited. While this study focused on personal attribution and experience, further longitudinal study may rigorously determine other factors, including organizational climate, learning opportunities, and so on. Such study may contribute to future research that aims at fostering better work environment or developing an educational curriculum, as well as determining how recovery knowledge and attitudes are applied in nursing practice.

5 | CONCLUSIONS

Internal work motivation, the experience of discharging patients after a lengthy hospitalization, working at community facilities, and being young may positively contribute to better recovery knowledge and attitudes. Participation in self-help groups was also be associated with higher RKI and RAQ scores, while there were positive but weak correlations between education and RKI/ RAQ scores. Future research should employ a longitudinal study to rigorously explore other factors related to recovery knowledge and attitudes.

ACKNOWLEDGMENTS

This study was funded by the charitable trust of the Fumiko Yamaji Foundation for Nursing Education and Research, and Gushinkai Foundation, Japan. It was also partially supported by JSPS KAKENHI under Grant Numbers 17K17513 and 16K12269, as well as AMED under Grant Number 18dk0307066h0003.

CONFLICT OF INTERESTS

The authors declare no conflict of interests.

AUTHOR CONTRIBUTIONS

R. C., M. U., Y. M. and S. Y. designed this study; R. C. and K. G. collected the data; R. C. carried out the data analysis and drafted the paper; R. C., M. U., Y. M. and S. Y. revised the manuscript: all the authors approved the final version of the manuscript.

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How to cite this article: Chiba R, Umeda M, Goto K, Miyamoto Y, Yamaguchi S. Factors related to recovery knowledge and attitudes among professionals in mental health in Japan. *Jpn J Nurs Sci*. 2020;17:e12295. https://doi.org/10.1111/jjns.12295