


# BMJ Open Work engagement of psychiatric nurses: a scoping review protocol

Tsuyoshi Mukaihata <sup>1</sup>, Yuichi Kato,<sup>2</sup> Toshiyuki Swa,<sup>3</sup> Hirokazu Fujimoto<sup>1</sup>

**To cite:** Mukaihata T, Kato Y, Swa T, *et al.* Work engagement of psychiatric nurses: a scoping review protocol. *BMJ Open* 2022;**12**:e062507. doi:10.1136/bmjopen-2022-062507

► Prepublication history for this paper is available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2022-062507>).

Received 01 March 2022

Accepted 01 July 2022



© Author(s) (or their employer(s)) 2022. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

<sup>1</sup>Department of Nursing, Hyogo University of Health Sciences, Kobe, Japan

<sup>2</sup>Department of Nursing, Faculty of Health Sciences, Kobe University Graduate School of Health Sciences School of Medicine, Kobe, Japan

<sup>3</sup>Division of Health Sciences Nursing Science, Osaka University Graduate School of Medicine, Suita, Japan

## Correspondence to

Dr Tsuyoshi Mukaihata; [tsu-mukaihata@hyo-med.ac.jp](mailto:tsu-mukaihata@hyo-med.ac.jp)

## ABSTRACT

**Introduction** Psychiatric nurses face various stressors related to nurse–patient relationships, workplace interpersonal relationships and organisational problems, and are required to perform excellent work under stressful situations. As work engagement (a counterconcept of burnout) is a key factor that improves the performance of nurses, clarifying how to improve work engagement is an essential topic among researchers. Although some knowledge has been accumulated on the subject, no reviews have been conducted on the work engagement of psychiatric nurses. To fill the gap, this scoping review will examine the status of research activity on the work engagement of psychiatric nurses and identify related factors, consequently mapping the available research in this area.

**Methods and analysis** The review will be conducted according to established scoping review methodological guidelines. The inclusion criteria will be based on nurses (participants), work engagement (concept), and psychiatric settings (context) without language or date restrictions. Regardless of the methodology or study design, research related to the work engagement of psychiatric nurses will be included. A systematic search will be conducted for MEDLINE, CINAHL and PsycINFO, with the searches being arranged by an information specialist through discussion. The first author will screen all potentially relevant publications, and the second author will independently screen a random sample comprising 10% of the manuscripts. Any disagreement will be resolved by a review team. Data will be extracted using a standardised extraction form, subsequently summarised through quantitative (frequencies) and qualitative analyses (narrative synthesis), and reported in the results of the review.

**Ethics and dissemination** As the data will be collected from existing literature, ethical approval is not required. The findings will be disseminated through conference presentations and publication in a peer-reviewed journal. They are expected to help researchers enhance psychiatric nurses' work engagement, consequently contributing to improving their performance.

## INTRODUCTION

### Rationale

Psychiatric nurses face various stressors related to nurse–patient relationships, workplace interpersonal relationships and organisational problems. Among the stressors they experience, 90%, 85%, 71%, 74% and 60%

## STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This will be the first review to map available research on the work engagement of psychiatric nurses.
- ⇒ The searches will be conducted with no date or language restrictions.
- ⇒ An information specialist will contribute to the quality of this review, especially in designing and refining the search.
- ⇒ Given our database selection, this review may have a regional/country bias in nursing practices.

are associated with patient verbal aggression, patient physical aggression, conflict with staff, high workload and lack of support in the workplace, respectively.<sup>1</sup> Psychiatric nurses perceive patient-related factors (eg, aggressive, potentially suicidal and unpredictable patients) as particularly stronger stressors than work-related factors (eg, colleagues overlook their share of the workload and discrepancy between job description and expected work).<sup>2</sup> In psychiatric settings, care providers deal with patients who often express difficult behaviours due to mental illness, such as aggression, being demanding, giving reactions as a maladaptive coping pattern for anxiety and withdrawal.<sup>3</sup> Compared with medical and/or surgical nurses outside psychiatry, psychiatric nurses are more likely to encounter violence and have higher stress levels associated with patient care.<sup>4–6</sup> The unique job characteristics of psychiatry can contribute to mental health deterioration among psychiatric nurses and, consequently, reduce their work performance.<sup>7,8</sup> Therefore, maintaining excellent performance under stressful situations is a significant challenge for psychiatric nurses.

Work engagement, first introduced by Kahn,<sup>9</sup> can be characterised as harnessing organisational members' selves to work roles.<sup>10</sup> Subsequently, Maslach and Leiter<sup>11</sup> defined work engagement as the polar opposite of burnout, whereas Schaufeli *et al*<sup>12</sup> described it as a positive state of mind characterised by vigour (ie, high levels of psychological energy during work), dedication (ie,



a sense of significance, enthusiasm and challenge with regard to work) and absorption (ie, total immersion in one's work). In particular, Schaufeli *et al*'s<sup>12</sup> definition of work engagement has been most frequently used in systematic reviews on work engagement.<sup>13</sup> Workers with strong work engagement are expected to perform better as they experience positive emotions, better health and improved productivity.<sup>14</sup> Previous reviews have reported that the work engagement of nurses positively impacts their performance (eg, patient-centred care) and personal outcomes (eg, intention to remain in the workplace).<sup>13 15</sup> Recent reviews have also shown that the work engagement of healthcare professionals is positively and significantly associated with quality of care<sup>16</sup> and patient safety.<sup>17</sup> These results corroborate the importance of enhancing work engagement to improve the performance of nurses, which has been the focus of many researchers.

Currently, studies on work engagement interventions have been increasing, some of which touch on work engagement among nurses. Accordingly, a systematic review with meta-analysis involving 14 studies<sup>18</sup> revealed that the overall effect of interventions on work engagement was positive but small. Moreover, Knight *et al*,<sup>19</sup> who conducted a narrative synthesis on the effectiveness of a wide range of interventions to clarify which type of intervention strategy (eg, resource building-focused intervention or health promotion-focused intervention) is essentially effective to improve work engagement, found that 20 of 40 studies obtained exhibited significant positive effects on work engagement. Regarding which type of intervention strategy was effective, the same study showed that job crafting interventions and mindfulness interventions were particularly successful and that interventions employing strategies that simultaneously access multiple factors influencing work engagement (eg, job and personal resources) tended to be more useful compared with those that focused on a single factor.<sup>19</sup> Overall, however, the relationships between effectiveness and type of work engagement intervention strategy varied. Elucidating the underlying mechanisms of effective interventions is an essential topic among work engagement researchers.<sup>20</sup> Thus, it is imperative to identify potentially modifiable factors that stimulate work engagement.

A systematic review by Keyko *et al*<sup>13</sup> and an integrative review by García-Sierra *et al*<sup>15</sup> revealed that work-related factors (eg, job control, social support and collaboration with other professionals) and individual factors (eg, personality, self-efficacy and emotional competence) influenced work engagement among nurses. Other studies have confirmed the impact of work engagement (eg, performance, job satisfaction and intention to remain in the institution). Two studies on the work engagement of psychiatric nurses<sup>21 22</sup> were included in the aforementioned reviews.<sup>13 15</sup> Given that the aforementioned papers analysed data obtained from the same sample using different methods, the two can substantially be considered only one investigation. Although some knowledge has been accumulated on the factors associated

with nurses' work engagement, previous reviews did not specify the specialty of the nurses who participated in the research.<sup>13 15</sup> Keyko *et al*<sup>13</sup> pointed out the possibility that the influencing factors and impacts of work engagement depend on the nursing specialty area.

As the work environment of psychiatric nurses differs from that of non-psychiatric nurses, as mentioned earlier, psychiatric nurses may have unique factors associated with their work engagement. Therefore, identifying the factors that influence work engagement among psychiatric nurses can lay the groundwork for future research to design interventions for improving their work engagement. Moreover, identifying the impact of work engagement for psychiatric nurses may inspire further studies on the topic of the usefulness of work engagement. Moreover, knowing the number and type of studies conducted on the work engagement of psychiatric nurses will help researchers determine the current research activity status in this area. These efforts can help identify solutions to the challenges faced by psychiatric nurses. To the best of our knowledge, however, no reviews have been conducted regarding the work engagement of psychiatric nurses as of April 2022. Hence, we propose a scoping review on the work engagement of psychiatric nurses.

We explain how the scoping review approach will appropriately address our objectives. Although we do not attempt to provide information regarding clinical decision making or the final answers to our research questions (see further), we will map available research on the work engagement of psychiatric nurses by clarifying the research status of and identifying factors associated with work engagement. This is consistent with the indications for scoping reviews.<sup>23–25</sup>

### Objectives and research questions

This scoping review aims to examine the status of research activity on the work engagement of psychiatric nurses and to identify related factors, consequently mapping the available research in this area. Specifically, the following two research questions are proposed:

1. How many studies and what types of studies have been conducted so far on the work engagement of psychiatric nurses?
2. What factors influence and impact work engagement among psychiatric nurses?

### METHODS AND ANALYSIS

This scoping review will be conducted based on the methodological framework by Arksey and O'Malley<sup>26</sup> and the updated guidance by the Joanna Briggs Institute.<sup>23 24</sup> The findings will be reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for scoping reviews (PRISMA-ScR) checklist.<sup>25</sup> The initial search will start by August 2022, and the paper will be submitted for publication by March 2023.

### Eligibility criteria

The following inclusion criteria will be established based on the participants, concept, and context elements<sup>23 25</sup> and types of evidence sources:

1. Participants: nurses of any demographic characteristics, such as age, sex, work experience, job title, qualification and country.
2. Concept: work engagement.
3. Context: psychiatric and mental health settings, including hospitals, residential facilities or home-visit nursing.
4. Types of evidence sources: full-text publication available and research papers, regardless of methodology or study design.

No language restrictions will be applied. In addition, the following exclusion criteria will be established:

1. Papers without enough information to answer our research questions (eg, tutorials, conference abstracts or protocols).
2. Studies in which isolated information on psychiatric nurses is not available.
3. Studies in which more than half of the participants are not psychiatric nurses.

### Information sources

The information sources in this search will be as follows:

1. Comprehensive systematic search of bibliographic databases, that is, MEDLINE (Ovid), CINAHL (EBSCOhost) and PsycINFO (EBSCOhost), with no date restriction.
2. Other additional searches, that is, citation chasing of the reference lists of relevant papers, citation tracking using Web of Science, and a keyword search of PubMed, Google Scholar, Nursing & Allied Health and other resources.

### Search strategy

The literature search strategy will be arranged by an information specialist (TS) through discussions with the first author (TM). According to the checklist and explanation of the PRISMA-ScR,<sup>25</sup> the full search strategy should be provided for at least one electronic database to allow easy replication by others. The search strategy for MEDLINE is presented in [table 1](#).

### Selection of sources of evidence

After removing duplicates, the study selection will start by reviewing both titles and abstracts using the inclusion criteria followed by full-text retrieval of potentially relevant evidence for further review against the inclusion criteria. The study selection process will be presented according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram.<sup>25</sup>

The first author (TM) will screen all potentially relevant publications, and the second author (YK) will independently screen a random sample comprising 10% of the papers.<sup>13 27</sup> Thereafter, the second author will check the screening results with the first author. Any disagreement

**Table 1** Search strategy for MEDLINE (Ovid)

1	Psychiatric Nursing/
2	exp Nurses/ or exp Nursing Staff/
3	Nurse's Role/
4	nurs*.mp.
5	2 or 3 or 4
6	Hospitals, Psychiatric/
7	Emergency Services, Psychiatric/
8	Psychiatric Department, Hospital/
9	Community Mental Health Services/
10	Mental Disorders/ or exp "Bipolar and Related Disorders"/ or exp Dissociative Disorders/ or exp Personality Disorders/ or exp "Schizophrenia Spectrum and Other Psychotic Disorders"/
11	(psychiatr* or mental or schizopreni* or bipolar).mp.
12	6 or 7 or 8 or 9 or 10 or 11
13	5 and 12
14	1 or 13
15	Work Engagement/
16	engagement*.mp.
17	15 or 16
18	14 and 17
19	remove duplicates from 18

on eligibility will be resolved through discussions with the last author (HF). The review team will undertake pilot testing on the selection of eligible papers to ensure consistency of the approach taken in the study selection process. We are currently considering using Microsoft Excel for the process of study selection, but we may use a bibliographic software of some kind based on the results of a further assessment.

### Data extraction process and data items

We developed and piloted the data extraction form in a review team meeting based on the research objectives and questions. The form is expected to comprehensively and sufficiently capture relevant information; however, it may be further refined at the review stage and updated accordingly.<sup>23 25</sup>

The potential data items to be extracted from the included evidence sources by our data extraction form are as follows:

1. Information related to research question 1.
  - Bibliographic information (eg, title, author, year of publication and journal).
  - Study characteristics (eg, aim, study design and theoretical framework).
  - Participants (eg, demographic characteristics, setting, sample size and sampling method).
  - Work engagement (eg, concept or definition, measures and score).
2. Information related to research Question 2.

- Analytical methods for identifying the relationship between work engagement and other variables (eg, analysis of variance, correlation or regression).
- Factors related to work engagement (eg, predictor, mediator, moderator and outcome).
- Statistical significance and direction of the relationship between work engagement and other variables.
- If there are papers that do not report the relationship between work engagement and other variables, only the information regarding the data items that can be extracted within the aforementioned data items will be reported.

Aside from the aforementioned data, the following data will be also extracted from intervention or qualitative studies. For intervention studies, the contents of the intervention and presence of a control group will be extracted. For qualitative studies, data collection methods, analytical methods and the findings will be extracted.

Throughout the data extraction process, the first author (TM) will extract data from the evidence sources using a bibliography management software (Mendeley Desktop V.1.19.8), with other reviewers (YK and HF) verifying the data for accuracy. Any disagreements will be resolved through discussions among the review team.

### Critical appraisal of included sources of evidence

Critical appraisal is generally not recommended in scoping reviews, given that the aim is to map the available evidence rather than provide a synthesised and clinically meaningful answer to a research question.<sup>23</sup> Considering the exploratory and descriptive nature of our scoping review, which seeks to determine the overall state of research activity on psychiatric nurses' work engagement, we will not conduct a critical appraisal of individual sources of evidence.

### Synthesis of the results

Due to the exploratory nature of the scoping review, we will adopt an appropriate method of data synthesis for available data. Our specific plans for data synthesis are presented as follows.

First, we will create a table with the vertical axis as the papers retrieved and the horizontal axis as the data items extracted. Thereafter, the findings of our scoping review will be presented in a descriptive manner.

Second, for research question 1, quantitative analyses will be conducted. The frequency of papers will be reported according to data items, such as year of publication, study design and participant characteristics.

Third, regarding research question 2, qualitative analysis will be conducted. Influencing factors and the impact of the work engagement of psychiatric nurses will be categorised through descriptive and narrative synthesis. We will examine whether the variable is an independent or dependent variable of work engagement. However, if only correlation coefficients are reported, we will report such findings.

### Patient and public involvement

No patients are involved in this study.

### ETHICS AND DISSEMINATION

Given that this review will analyse the data collected from existing literature, ethical approval is not required. Our findings will be disseminated through conference presentations and publication in a peer-reviewed journal. The findings will show the knowledge available for future research aimed at enhancing the work engagement of psychiatric nurses. This will contribute to establishing effective intervention strategies for work engagement enhancement. Moreover, using that knowledge, nurse managers and policy-makers will be able to help their staff improve performance.

**Contributors** All authors were involved in the design of the review. TM and HF conceptualised the research and drafted the protocol. YK helped develop the research idea and conceptualise the study and wrote sections of the protocol. TS developed and conducted the systematic search strategy by analysing the research concept.

**Funding** This work was supported by JSPS KAKENHI (grant number JP21K17368).

**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were not involved in the design, conduct, reporting or dissemination plans of this research.

**Patient consent for publication** Not applicable.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

### ORCID ID

Tsuyoshi Mukaihata <http://orcid.org/0000-0002-8556-0730>

### REFERENCES

- 1 Foster K, Roche M, Giandinoto J-A, *et al*. Mental health matters: a cross-sectional study of mental health nurses' health-related quality of life and work-related stressors. *Int J Ment Health Nurs* 2021;30:624–34.
- 2 Hasan AA, Tumah H. The correlation between occupational stress, coping strategies, and the levels of psychological distress among nurses working in mental health hospital in Jordan. *Perspect Psychiatr Care* 2019;55:153–60.
- 3 Koekkoek B, van Meijel B, Hutschemaekers G. "Difficult patients" in mental health care: a review. *Psychiatr Serv* 2006;57:795–802.
- 4 Magnavita N, Heponiemi T. Violence towards health care workers in a public health care facility in Italy: a repeated cross-sectional study. *BMC Health Serv Res* 2012;12:1–9.
- 5 Pekurinen V, Willman L, Virtanen M, *et al*. Patient aggression and the wellbeing of nurses: a cross-sectional survey study in psychiatric and non-psychiatric settings. *Int J Environ Res Public Health* 2017;14:1245.
- 6 Qi Y-K, Xiang Y-T, An F-R, *et al*. Nurses' work-related stress in China: a comparison between psychiatric and general hospitals. *Perspect Psychiatr Care* 2014;50:27–32.
- 7 de Looft P, Nijman H, Didden R, *et al*. Burnout symptoms in forensic psychiatric nurses and their associations with personality, emotional intelligence and client aggression: a cross-sectional study. *J Psychiatr Ment Health Nurs* 2018;25:506–16.
- 8 Yoshizawa K, Sugawara N, Yasui-Furukori N, *et al*. Relationship between occupational stress and depression among psychiatric nurses in Japan. *Arch Environ Occup Health* 2016;71:10–15.

- 9 Kahn WA. Psychological conditions of personal engagement and disengagement at work. *Acad Manag J* 1990;33:692–724.
- 10 Bargagliotti LA. Work engagement in nursing: a concept analysis. *J Adv Nurs* 2012;68:1414–28.
- 11 Maslach C, Leiter MP. *The truth about burnout: how organizations cause personal stress and what to do about it*. San Francisco: CA, 1997. <https://psycnet.apa.org/record/1997-36453-000>
- 12 Schaufeli WB, Salanova M, González-romá V, et al. The measurement of engagement and burnout: a two sample confirmatory factor analytic approach. *J Happiness Stud* 2002;3:71–92.
- 13 Keyko K, Cummings GG, Yonge O, et al. Work engagement in professional nursing practice: a systematic review. *Int J Nurs Stud* 2016;61:142–64.
- 14 Bakker AB. An evidence-based model of work engagement. *Curr Dir Psychol Sci* 2011;20:265–9.
- 15 García-Sierra R, Fernández-Castro J, Martínez-Zaragoza F. Work engagement in nursing: an integrative review of the literature. *J Nurs Manag* 2016;24:E101–11.
- 16 Wee KZ, Lai AY. Work engagement and patient quality of care: a meta-analysis and systematic review. *Med Care Res Rev* 2022;79:345–58.
- 17 Janes G, Mills T, Budworth L, et al. The association between health care staff engagement and patient safety outcomes: a systematic review and meta-analysis. *J Patient Saf* 2021;17:207–16.
- 18 Knight C, Patterson M, Dawson J. Building work engagement: a systematic review and meta-analysis investigating the effectiveness of work engagement interventions. *J Organ Behav* 2017;38:792–812.
- 19 Knight C, Patterson M, Dawson J. Work engagement interventions can be effective: a systematic review. *Eur J Work Organ Psychol* 2019;28:348–72.
- 20 Björk JM, Bolander P, Forsman AK. Bottom-up interventions effective in promoting work engagement: a systematic review and meta-analysis. *Front Psychol* 2021;12:3754.
- 21 Van Bogaert P, Wouters K, Willems R, et al. Work engagement supports nurse workforce stability and quality of care: nursing team-level analysis in psychiatric hospitals. *J Psychiatr Ment Health Nurs* 2013;20:679–86.
- 22 Van Bogaert P, Clarke S, Willems R, et al. Staff engagement as a target for managing work environments in psychiatric hospitals: implications for workforce stability and quality of care. *J Clin Nurs* 2013;22:1717–28.
- 23 Peters MDJ, Marnie C, Tricco AC, et al. Updated methodological guidance for the conduct of scoping reviews. *JBI Evid Synth* 2020;18:2119–26.
- 24 Peters M, Godfrey C, McInerney P. Chapter 11: Scoping reviews. In: *JBI manual for evidence synthesis*, 2020. <https://jbi-global-wiki.refined.site/space/MANUAL/3283910770/Chapter+11%3A+Scoping+reviews>
- 25 Tricco AC, Lillie E, Zarin W, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Ann Intern Med* 2018;169:467–73.
- 26 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;8:19–32.
- 27 Boland A, Cherry MG, Dicson R, eds. *Doing a systematic review: a student's guide*. Vol. 84. 2nd end. SAGE publishing, 2017. <https://us.sagepub.com/en-us/nam/doing-a-systematic-review/book251308>