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Patient-reported outcomes of the nurse-patient relationship in psychiatric inpatients hospitals: a multicentred descriptive cross-sectional study

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Patient-reported outcomes of the nurse-patient relationship in psychiatric inpatient hospitals: a multicentred descriptive cross-sectional study

ABSTRACT:

Introduction

Identifying patient-reported outcomes of the nurse-patient relationship is a priority in inpatient mental healthcare to guide clinical decision-making and quality improvement initiatives. Moreover, demonstrating nurse-sensitive patient outcomes can be a strategy to avoid further erosion of the specialism of psychiatric and/or mental health nursing.

Aim/question

To measure nurse-sensitive patient outcomes of the nurse-patient relationship.

Method

In a multicentred cross-sectional study, 296 inpatients admitted to five psychiatric hospitals completed the recently developed and validated Mental Health Nurse-Sensitive Patient Outcome-Scale (MH-NURSE-POS). The MH-NURSE-POS consists of 21 items (six-point Likert-scale) in four domains: 'growth', 'expression', 'control', and 'motivation'.

Results

Participants displayed moderate to good average scores for the MH-NURSE-POS total (4.42) and domain scores (≥4.09). Especially outcomes related to 'motivation' to follow and stay committed to the treatment received high average scores (≥4.60).

Discussion

The results demonstrate that patients perceive the nurse-patient relationship and the care given by psychiatric and/or mental health nurses as contributing to their treatment.

Implications for practices

Patient-reported outcomes can guide nurses and managers to provide and organize nursing care and to build a nurse-patient relationship that has a positive impact on these outcomes. Additionally, outcomes can create nursing visibility as a profession in- and outside mental healthcare.

RELEVANCE STATEMENT

Evidence on quantitatively measured patient-reported outcomes assessing the outcome measures of psychiatric/mental health nurse-patient relationships is lacking. This research gap implies a risk of losing the conceptual and explanatory power of psychiatric/mental health nursing as a profession and as a discipline. Gathering nurse-sensitive measures of patient-reported outcomes rather than describing effects of the nurse-patient relationship in particular qualities (e.g. empathy) is pivotal. Measuring nurse-sensitive patient outcomes is an innovative strategy to provide insight into the outcomes of the nurse-patient relationship. The recently validated Mental Health Nurse-Sensitive Patient Outcome-scale was used to measure such nurse-sensitive patient outcomes of the nurse-patient relationship.

ACCESSIBLE SUMMARY

What is known on the subject?

Psychiatric and/or mental health nurses are struggling to measure the outcomes of the nurse-patient relationship.

Collecting nurse-sensitive patient outcomes is a strategy to provide outcomes of a nurse-patient relationship from patients' perspectives.

Because there was no validated scale, the Mental Health Nurse-Sensitive Patient Outcome-Scale (six-point Likert-scale) was recently developed and psychometrically evaluated.

What the paper adds to existing knowledge?

This is the first study using the Mental Health Nurse-Sensitive Patient Outcome-scale to measure nurse-sensitive patient outcomes of the nurse-patient relationship in psychiatric hospitals.

- Moderate to good average scores for the MH-NURSE-POS total (4.42) and domains scores (≥4.09). are observed. Especially outcomes related to 'motivation' to follow and stay committed to the treatment received high average scores(≥4.60).

- Our results are consistent with the patient-reported effect(s) of relation-based nursing in qualitative research.
- The scores generate evidence to support the outcomes of the nurse-patient relationship and implicates that further investment in (re)defining and elaborating nurse-patient relationships in mental healthcare is meaningful and justified.
- More comparative patient-reported data can determine how nurse-sensitive patient outcomes are affected by the patient, nurse, and context.

What are the implications for practice?

Demonstrating patient-reported outcomes of the nurse-patient relationship can be important to enhance the therapeutic alliance between nurses and patients, organize responsive nursing care, and create nursing visibility in mental healthcare.

Further nursing staff training on interpersonal competencies, such as self-awareness and cultural sensitivity, can be pivotal to achieving the patient-reported outcomes for inpatients with mental health problems.

MAIN TEXT:

INTRODUCTION

Mental healthcare is challenged worldwide by a cyclic legitimacy crisis. Naturally evolving societal core values of care, such as autonomy and social inclusion, are questioning the alignment of traditional mental health care with renewed societal expectations of safe, effective, and responsive care (Csipke et al., 2014; Scheid & Wright, 2017; Kidd et al., 2014). As a result, mental healthcare is in full transition, manifested by deinstitutionalization and the growing momentum of new concepts such as person-centeredness and strengths-based support (Chow et al., 2019; Nicaise et al., 2014). In this transition, the recovery perspective emerged as a promising paradigm and has been widely adopted by mental healthcare professionals (Deegan, 1988; Lorien et al., 2020; Pincus et al., 2016; van Weeghel et al., 2019). Consequently, in the implementation of a person-centered and recovery-oriented practice, newly created professional activities and modified professional responsibilities affect

the centrality of psychiatric and/or mental health nursing and more specifically the nurse-patient relationship (Cruess et al., 2017; Delaney et al., 2017; Hartley et al., 2020; McAllister et al., 2019; Stuart et al., 2017). In this moment, the identification of outcome measures from relation-based nursing has emerged as a priority to reform mental healthcare. Outcome assessment is perceived as fundamental for nurses to guide clinical decision-making and for management and policymakers to improve mental healthcare services (de Bienassis et al., 2021; Lorien et al., 2020; Moorhead et al., 2018).

The shift to outcome-based mental healthcare challenges the discipline of nursing to measure what the specialism of psychiatric and/or mental health nursing achieves with patients in clinical practice (Gabrielsson et al., 2020; Gallagher-Ford et al., 2022). The human science basis of nursing in mental healthcare is inextricably linked with Hildegard Peplau, known as 'the mother of psychiatric nursing' (Callaway, 2002; Winship et al., 2009). Peplau's Theory of Interpersonal Relations identified the nurse-patient relationship as the essence of psychiatric and/or mental health nursing (Delaney et al., 2017; Hartley et al., 2020; Peplau 1991). The interpersonal relationship of two humans, connecting a nurse and a patient with the uniqueness of each dyad, is further conceptualized by important nursing authors such as Phil Barker, John Cutcliffe, Kathleen Delaney, Cheryl Forchuk, and Kathleen Wheeler (Deproost, 2018; Santos & Cutcliffe, 2018). Current evidence on outcome measures of relationship-based nursing is limited and relies on scales of considerably varying quality (Boateng et al., 2018; Kilbourne et al., 2018; Moorhead et al., 2018).

The lack of evidence on measurable outcomes from the nurse-patient relationship contributes to the well-documented fading specialty of psychiatric and/or mental health nursing (Gallagher-Ford et al., 2022; Gabrielsson et al., 2021; Hartley et al., 2020). Nursing literature often refers to the extinction of psychiatric and/or mental health nursing because, as a profession and discipline, they struggle to demonstrate their distinct contribution through outcome measures (Cutcliffe & McKenna, 2018; Lakeman & Molloy, 2018; Santangelo et al., 2018). A portfolio of validated outcome measures from the nurse-patient relationship is crucial in response to the erosion and powerlessness of psychiatric and/or mental health nursing (Gabrielsson et al., 2021; Santos & Cutcliffe, 2018; Wand et al., 2022).

Collecting data from patient-reported outcomes is an innovative strategy to provide robust evidence on outcome measures of the nurse-patient relationship in mental healthcare (Kynoch et al., 2022; Vanhaecht et al., 2021). Patient-reported outcomes are collected directly from the

patient, without interpretation of the patient's responses by a clinician or another person, and refer to the patient's clinical and humanistic health status (e.g. symptoms, treatment effects, functional state) (de Bienassis et al., 2021). Patient-reported outcome measures are tools used to gain insight from the perspective of patients, such as self-completed questionnaires to measure patient-reported outcomes (Weldring & Smith, 2013).

To address the research-based gap of measured patient-reported outcomes of the nurse-patient relationship, measuring nurse-sensitive patient outcomes can be a strategy to demonstrate effect(s) in the post-positive nature of evidence-based mental healthcare (Cook et al., 2017, Coster et al., 2018; Paul & Healy, 2018; Truijens et al., 2019; Vanhaecht et al., 2021). Nurse-sensitive patient outcomes are measured in response to nursing intervention(s) from patients' perspectives (Coster et al., 2018). Nurse-sensitive patient outcomes measured using valid and reliable scales provide empirical evidence on nurse-sensitive measures linking nurses' scope and domain of practice to patient-reported outcomes (Moorhead et al., 2018). However, a valid and reliable scale for measuring nurse-sensitive patient outcomes of the nurse-patient relationship in inpatient psychiatric hospital settings was lacking. Recently the Mental Health Nurse-Sensitive Patient Outcome-Scale (MH-NURSE-POS) was developed and psychometrically evaluated to measure nurse-sensitive patient outcomes of the nurse-patient relationship in psychiatric hospitals (Desmet et al., 2021).

In addition to the lack of quantitative research on nurse-sensitive patient outcomes of the nurse-patient relationship in mental health care, outcome analyses of nurse-led interventions indicate a frequently overlooked difficulty in deciphering comparative data on outcomes of the nurse-patient relationship (Chambers et al., 2021; de Bienassis et al., 2021; Hartley et al., 2020; Waldemar et al., 2019). In the nurturing space, referring to the interactional space between the nurse and the patient, a wide variation in the application of theoretical and evidence-based constructs of a therapeutic relationship is observed (Dziopa et al., 2009; Lorien et al., 2020; Mc Allister et al., 2021; Santos & Cutcliffe, 2018). Moreover, the lack of a consensus on core constructs of the interpersonal nurse-patient relationship in clinical practice implies a serious risk of losing the conceptual and explanatory power of nursing as a discipline (Lakeman & Molloy, 2018; Santos & Cutcliffe, 2018). Therefore, service-led outcome research recommends providing empirical evidence to understand how the nurturing space contributes effectively to a patient's perceived ability to improve patient-reported outcomes. As patient-defined meaningful moments in the nurturing space might contribute to positive outcomes, it is of interest to measure patient-reported outcomes after such moments.

(Delaney et al., 2017; Mc Allister et al., 2019; Zugai et al., 2015). Gathering such evidence by nurse-sensitive measures of patient-reported outcomes facilitates psychiatric and/or mental health nurses to operate beyond the traditional conventions of describing the effects of the nurse-patient (and other therapeutic) relationship in terms of particular qualities (e.g. empathy, being there, respect) (Dziopa et al., 2009; Santos et al., 2018; Wheeler, 2013). Therefore, in this study, we are not interested in the effect(s) from a one-shot nurse-patient encounter or the nursing team during admission to a psychiatric hospital. We want to distill effect(s) from the patient perspective congruent to a concrete nurse-patient relationship: the most 'meaningful' nurse-patient relationship during hospitalization according to the patient. Demonstrating measured outcomes from a one-to-one nurse-patient relationship characterized by multiple contacts over a longer period can expand the current research-based knowledge on the effects of the nurturing space to avoid further extinction of psychiatric and/or mental health nursing.

Gaining insight into patient-reported outcomes to define an effective nurse-patient relationship and allied nursing interventions is important in the shift to outcome-based mental healthcare. Measuring patient-reported outcomes is a key strategy for nurses in clinical practice, managers in quality improvement initiatives, and policymakers to reform healthcare policy (de Bienassis et al., 2021; Gallagher-Ford et al., 2022; Gabrielsson et al 2020; Vanhaecht et al., 2021). At present, there is little research on nurse-sensitive patient outcomes of the nurse-patient relationship by means of validated scales (Boateng et al., 2018; Kilbourne et al., 2018; Moorhead et al., 2018). This is the first study to measure nurse-sensitive patient outcomes of the nurse-patient relationship through the Mental Health Nurse-Sensitive Outcome-Scale (MH-NURSE-POS). The specific objective of this study was to measure patient-reported outcomes of the most 'meaningful' nurse-patient relationship during hospitalization using nurse-sensitive patient outcomes.

MATERIALS AND METHODS

Study design and setting

A descriptive cross-sectional study using a survey was conducted in five psychiatric hospitals in Flanders (Belgium). Hospitals were selected by purposive sampling or judgmental sampling based on a varying number of psychiatric beds (n= 72–288), the degree of

urbanization of the site, the geographic distribution across the different provinces of Flanders, and the type of psychotherapeutic care and treatment provided (e.g. admission wards, treatment wards, short- and long-term treatment programs, cognitive behavioral treatment, psychodynamic therapy). The TREND statement was used for reporting (Des Jarlais & Lyles, 2004).

Ethical approval

The study protocol was approved by the Ethical Review Committee of Ghent University which was the central committee for this study and by the local ethical committees of all participating hospitals (B670201525848-B670201730991). All participants received written and oral information about the purpose of the study and its procedures and gave written consent.

Participants and procedures

Eligible patients were admitted to one of the 30 psychiatric wards in the five participating psychiatric hospitals. Patients could participate if they met the following criteria: being 18 years or older, being admitted to the hospital for at least two weeks, and being Dutch speaking. Exclusion criteria included admission to crisis units, and patients admitted with intellectual disabilities. Based on received standard written instructions from the researchers containing information about the study and inclusion criteria, ward managers informed the eligible participants about the aim and procedures of this study. To minimize non-response bias and social desirability, the questionnaires were completed in the absence of staff members or the nursing team. Only a researcher who had no affiliation with the teams was present. After giving written consent for participation, each patient received a paper-and-pencil, self-administrated questionnaire. Questionnaires with more than 30% answers missing were removed and data were checked on identically response patterns (long-string responses) to minimize acquiescence response bias or the tendency to agree with items regardless of content (n=12) (Kam & Meyer, 2015). A total of 296 completed surveys of inpatients were retained for further analysis.

Measures

Data were collected using questions about patient characteristics, the most 'meaningful' nurse-patient relationship, and the newly validated Mental Health Nurse-Sensitive Patient Outcome-Scale (MH-NURSE-POS).

Patient characteristics entailed gender (dichotomous variable), age (continuous variable), number of hospital admissions during lifetime (categorical variable), and current admission time (categorical variable). The questions about the most 'meaningful' nurse-patient relationship were aligned with the focus of MH-NURSE-POS for inpatient psychiatric hospital settings. In the Belgian mental healthcare context, mental health nursing care in Flanders is predominantly provided in psychiatric units of large hospitals using the primary nursing model. The primary nursing model, an alternative nursing care model to tasks-based delivery models with an emphasis on task completion, is rooted in humanistic, patient-centered, relationship-based philosophy (Deproost, 2018; Kusk & Groenkjaer, 2016; Naef et al., 2018). This model is characterized by a so-called assigned nurse and ward nurses. The assigned nurse is responsible for relational shared nurse-patient decision-making and for assessing, planning, organizing, and evaluating patient care, and delegating planned care to ward nurses. Each ward nurse engages in relationship-based interactions with patients from admission to discharge to ensure relational continuity of care in an interprofessional team (Butler et al., 2019; Matilla et al., 2014; Moura et al., 2020). Patients were asked to rate if they had an assigned nurse during their current hospitalization (yes/no). Patients had to define their most meaningful nurse-patient relationship (assigned nurse or favorite ward nurse(s)) for which they would complete the MH-NURSE-POS.

The MH-NURSE-POS is a recently developed and validated scale to measure the effect(s) of psychiatric and/or mental health nursing from an inpatient perspective based on nurse-sensitive patient outcomes (Desmet et al., 2021). The MH-NUSE-POS was developed based on a literature review, an independent expert's advice, and an expert panel. The content validity was tested in a two-round Delphi procedure and focus groups with patients. A pilot test, based on cognitive interviews, confirmed the feasibility of the MH-NURSE-POS. The factor structure (Kaiser–Meyer–Olkin measure of sampling adequacy 0.924; Bartlett's test of sphericity v2 = 4162.537; df = 231; $p < 0.001$), convergent validity by the Individualized Care Scale (Pearson correlation 0.660; $p < 0.001$), and reliability (Cronbach's Alpha 0.854) were evaluated. The MH-NURSE-POS consists of 21 NSPOs divided into four domains. The 21 items of the MH-NURSE-POS were explicitly linked to the overarching stem 'Due to the nurse…'. The first domain 'growth' refers to a sense of personal agency (8 nurse-sensitive

patient outcomes). The second domain 'expression' is linked to attunement/mentalization and coping with personal emotions and/or problems (4 nurse-sensitive patient outcomes). The third domain 'control' refers to self-control in risk-taking, to building and establishing safe and meaningful contacts (5 nurse-sensitive patient outcomes). The last domain 'motivation' is focused on personal motivation to self-change (4 nurse-sensitive patient outcomes). Participants were explicitly asked to fill in the 21 NSPOs regarding their most 'meaningful' nurse-patient relationship (assigned nurse or favorite ward nurse(s)) without intervention from the researchers. Each NSPO is rated by a self-reported six-point Likert-scale ('fully disagree' to 'fully agree'). Only for the NSPOs in the 'control' domain, which pertains to items about safety, could participants select 'not applicable', as this may not apply to every participant, except 'through the nurse, I build valuable contacts with others'. Patients had the opportunity to add suggestions through an open-ended question after completing the questionnaire.

Statistical Analysis

Statistics were performed using the SPSS software package version 26.0 (SPSS Inc., Chicago, IL, USA). For each individual patient, the average scores were calculated for the total score of the MH-NURSE-POS and each of the four domains 'growth'; 'expression'; 'control'; and 'motivation'. Cronbach's alpha was estimated to present the internal consistency of the scale and four domains. A Cronbach alpha higher than 0.70 is considered as 'acceptable', and higher than 0.80 as 'good' (Polit & Beck, 2012).

RESULTS

The final sample consisted of 296 participants. Just more than half of the participants were female (51.4%). The mean age was 44.4 years (SD 15.7). More than one-third (35.5%, n=105) of participants were hospitalized for the first time, and 51.4% of all participants (n= 150) were admitted for three months or longer at the time of completing the survey. In total, 81.4% of the participants (n=241) had an assigned nurse during hospitalization. Of the 241 participants, 83.0% (n=200) defined the assigned nurse as the most 'meaningful' nurse-patient relationship during hospitalization. Detailed characteristics are shown in Table 1.

Table 2 provides an overview of the MH-NURSE-POS total and four domain scores. The total score and average domain scores ranged between 4.09 (SD=1.20) and 4.61 (SD=1.08). The lowest score was found in the domain 'control' for the item 'due to the nurse I build valuable contacts with others' (3.71, SD=1.49). The highest score of all rated NSPOs was found in the domain 'motivation' for the item 'due to the nurse I remain committed to my

treatment' (4.97, SD=1.22). No additional results were found in the open-ended question of the MH-NURSE-POS after a critical reflection by the researchers.

Results of Cronbach's Alpha are presented in table 3. The total score (Cronbach's α 0.938) and domain 'growth' (Cronbach's α 0.935) had excellent internal consistency. All other domains had good internal consistency (Cronbach's α between 0.802 and 0.858).

DISCUSSION

To our knowledge, this study was one of the first studies to investigate nurse-sensitive patient outcomes of the nurse-patient relationship by means of a validated scale. This is the first study to measure patient-reported outcomes of the most 'meaningful' nurse-patient relationship during hospitalization by the recently developed and validated Mental Health Nurse-Sensitive Patient Outcome-Scale (MH-NURSE-POS) (Desmet et al., 2021). We measured patient-reported nurse-sensitive patient outcomes that evaluated a one-to-one nurse-patient relationship characterized by multiple contacts over a longer period and not a one-shot nurse-patient encounter or a nursing team.

The moderate to good patient-defined scores demonstrate a unique quantitative language on the outcome measures of the nurse-patient relationship (Chambers, 2017; Hartley et al., 2020; Wand et al. 2022). We must emphasize that our metric-driven results from the MH-NUSE-POS are a valid representation of patient-reported outcomes compatible with earlier studies on the effect(s) of the nurturing space between the nurse and the patient (Chambers, 2017(Boateng, Neilands, Frongillo, Melgar-Quiñonez, & Young, 2018); Deproost, 2018; Forchuk, 2001; Peplau, 1991). Our findings on 'growth' are consistent with patient-reported evidence on the therapeutic potential of a nurse-patient relationship on being able to exercise personal agency, making choices about their personal lives, and their aspirations for hope (Gottlieb, 2014; Halldorsdottir, 2008; Peplau, 1991; Norman & Ryrie, 2013; Molin et al., 2019; Waldemar, 2019). The variation in scores on 'growth' is compatible with patient-reported research identifying the contrasting presence of sufficient human qualities of the nurse and the different projection of these qualities in the nurse-patient relationship as pivotal to support patients to work towards personalized needs and goals (Cutcliffe & Barker, 2002; Delaney, 2017; Felton et al., 2018; MacDonald, 2016). The results on 'expression' are in line with prior evidence argued by patients that the nurse-patient relationship contributes to problem-solving and narrative to 'putting into words' shared experiences (Forchuk &

Reynolds, 2001; Lorien et al., 2020; McAllister et al., 2019; Peplau, 1991; Wheeler, 2013). In prior qualitative research, struggling patients expressed the importance of assistance from an authentically interested nurse. They describe how nurse-led individual communication with the more familiar steps in problem-solving but also with encouraging exploration of the narrative, achieves clarity and carries a sense of what was salient in their unique subjective experience (Griep et al., 2016). The study results on 'control' are compatible with the significance of the nurse-patient relationship promoting safety in acute units expressed by patients ‘at risk’ and patients ‘not at risk’ (Cutler et al., 2020; Felton et al., 2018). Patients report how symptoms may actually worsen during treatment within psychiatric hospitals, even with experiencing positive change(s) by inpatients themselves, as therapy even in and of itself is highly anxiety-proving (Wheeler, 2013). However, numerous patient-reported studies have described the effects of nurses assisting patients in managing anxiety that interferes with their functioning as a diametric contradiction of staying within the physiological window of arousal or tolerance. That is the optimum state of ‘arousal’ stimulation for the work of therapy. Therapy will not work if the person becomes too anxious and hyperaroused (sympathetic system) or too hypoaroused (parasympathetic system) (Siegel, 2006, Vandewalle et al., 2020, Wheeler, 2013). Our study results on 'motivation' confirm the documented research evidence on patients’ narratives that the nurse-patient relationship seems to empower patients from a therapeutically activating and pharmacological perspective on their level of energy and motivation (Chambers, 2017; Myklebust et al,. 2019; Norman & Ryrie, 2013). However, the discussed variations in the scores of 'growth', 'expression', 'control', and 'motivation' are important to understand the total score of the MH-NURSE-POS. The (unexpected) variations in the study results on nurse-sensitive patient outcomes can be influenced by patients’ contrasting perceptions of shared humanity and compassion of the nurse; power differential in the unique dyad of connecting two humans; quality of nursing interactions in small talk, counseling and therapeutic environment, engagement by nurses, and nursing accessibility by the lack of time (Bowers, 2014; Molin et al., 2019; Vandewalle et al., 2020). Quantitative comparison of nurse-sensitive patient outcomes can be problematic due to context heterogeneity (e.g. model fidelity of nursing or other therapeutic models, skill mix nursing workforce, patient-nurse ratio) especially as low quality of care is easier to identify (Chambers et al., 2021; Hartley et al., 2020; Waldemar et al., 2019; Van Wilder et al., 2021). Acknowledging that patient’s experience is effectively grasped and validated by the nurse is a multifactorial model, that challenges the contemporary dichotomous thinking about the quality of care (Mc Allister et al., 2020). Defining quality of care as multidimensional calls

for a person-focused approach with patient-reported outcomes such as the results of the MH-NURSE-POS (de Bienassis et al., 2021; Vanhaecht et al., 2021).

Especially noteworthy is the patient-voiced choice of the most 'meaningful' nurse-patient relationship within the primary nursing model, which indicates the importance of the assigned nurse as well as the ward-nurse(s) to support inpatients. The patient-reported results of the two interpersonal-based nursing roles in a naturalistic setting call for future research on how nurse-sensitive patient outcomes are influenced by relational-contextual factors. Identifying and understanding the interplay between essential nursing constructs and the organizational characteristics within the interpersonal-based nursing practice, such as the primary nursing model, is an important strategy to demonstrate the contribution of a relationship-based nurse as a change-agent or psychotherapist.

What is unique about our patient-reported scores is that the lack of comparable quantitative research with validated scales to assess patient-reported outcomes of the nurse-patient relationship reflects the complexity of measuring outcomes from the nurturing space (Chambers, 2017, Coster et al., 2018; Hartley et al., 2020; Gabrielsson et al., 2020; Lakeman & Molloy, 2018). Quantitative nursing research is often focused on clinical outcomes assessment tools (e.g. HoNOS or Global Assessment of Functioning GAF), one specific nursing role often 'instrumental' to somatic rather than psychotherapeutic treatment (e.g. medication-based role), or a distinct nursing intervention (e.g. aggression management) (Dickens et al., 2019; Harley et al., 2020; Hurley & Lakeman, 2021; Kilbourne et al., 2018, Meehan & Robertson, 2015). Therefore, our moderate to good average patient-reported scores from the nurse-patient relationship can contribute to the quest to avoid further extinction of psychiatric and/or mental health nursing as a discipline and as a profession (Gabrielsson et al., 2021; Cutcliffe & McKenna, 2018). Our study results generate external evidence in contemporary outcome-based mental healthcare with the validated MH-NURSE-POS (Gallagher-Ford et al., 2022; Lakeman & Molloy, 2018). To avoid further erosion of the specialism of psychiatric and/or mental health nursing our validated outcome measures from the MH-NURSE-POS can empower psychiatric and/or mental health nurses. Our results can support psychiatric and/or mental health nurses to demonstrate their distinct contribution as a specialty within the discipline of nursing, a change-agent within interprofessional inpatient mental healthcare, an active policymaker in the transition of evidence-based mental healthcare (Cutcliffe & McKenna, 2018; Gallagher-Ford et al., 2022; Gabrielsson et al., 2021; Wand et al. 2022). The

results of the MH-NURSE-POS can expand the portfolio of outcome measures of the nurse-patient relationship. Our metric-driven findings by quantitative research are a valuable contribution to the well-documented evidence of deciphering the patient narrative on the effect(s) in qualitative research of relationship-based nursing (Chambers, 2017; Deproost, 2018; Forchuk, 2001; Santangelo et al., 2018). Having quantitative and qualitative language on the effect(s) of the nurse-patient relationship can reflect on its complexity and speak to the core of being a psychiatric and/or mental health nurse (Chambers, 2017; Peplau, 1991; Wand et al., 2022).

As revealed, the study results of the MH-NURSE-POS can be supported by patient narratives on the effects of a humanistic and personalized nurse with interpersonal engagement skills (Delaney et al., 2017; Moreno-Poyato et al., 2016). Furthermore, the application of measuring patient-reported outcomes using nurse-sensitive patient outcomes in response to the most meaningful nurse-patient relationship during hospitalization can be an impetus to measure nurses' effect(s) in outpatient psychiatric services as well as nurse's response(s) on patient-defined targets before hospitalization (Cuijpers, 2019). Measuring individualized target objectives, referring to expectations toward a hospitalization that are influenced by the cultural conceptualization of mental disorder, can be important in the context of personal-subjective definitions of recovery (Deegan, 1988; Van Weeghel et al., 2019). Understanding changes in target objective severity by the nurse-patient relationship from the patient's perspective can be helpful to identify the contextual common model and specific factors of the nurturing space (Wampold et al., 2017; Santos & Cutliffe, 2018; Truijens et al., 2019).

Study limitations

Some critical reflections in this study are outlined. First, an important limitation is linked to the choice of patients to fill in the MH-NURSE-POS regarding their most meaningful nurse during hospitalization. Our findings are relevant to the outcome measures of the nurse-patient relationship from the patient's perspective, but may not gauge the effectiveness of primary nursing care by a broad diverseness of quality in interactions and interventions by different nurses working in inpatient interprofessional teams.

Second, in this study, we did not investigate the patient-reported outcomes of the nursing team or adverse nurse-patient relationships. Demonstrating outcome measures using nurse-sensitive patient outcomes of the most 'meaningful' nurse-patient relationship during hospitalization according to the patient is one step to making more visible the black box of

beneficial processes of interpersonal change facilitated by psychiatric and/or mental health nursing.

Third, a prudent approach is recommended toward cross-sectional design in outcome research. This study cannot access the causality of the nurse-patient relationship to affect patient-reported outcomes but reveal an important influence of patient and therapist characteristics, features of the therapeutic relationship, and the treatment context (Kelley et al., 2014; Beutler et al., 2016; Johns et al., 2019; McAllister et al., 2019). For example, further research is needed to investigate the impact of the nursing workforce on an international level, such as the different nurse-patient ratios and nursing education. We hypothesized that a multicentred study would improve the reliability and validity of the patient-reported outcomes of the temporally nurse-patient relationship.

Fourth, the recruitment of patients in this study could have been biased by the study design. The absence of the response rate per war and in total is a limitation of sample control. Different strategies were applied to reduce the risk of bias. To minimize the selection bias, the researcher's written instructions for the ward managers were crucial. The risk of common bias was reduced by giving instructions to the respondents who participated in the study was voluntary and anonymity of responses was guaranteed. Also, the questionnaires were completed in the absence of the care team with researchers emphasizing that there were no right or wrong answers and that respondents should answer the questions as honestly as possible.

Lastly, non-participation of patients by refusal or early resignation due to dissatisfaction with nursing care can influence participation bias. As researchers collecting data, it was impossible to re-contact non-participants for this study based on ethically justified principles. Nevertheless, to strive for a heterogeneous sample of participants, we set up a multicenter study in five psychiatric inpatient hospitals and 30 wards.

Implications for mental health nursing and research

Considering the patient-reported outcomes measured by the MH-NURSE-POS from the most 'meaningful' nurse-patient relationship in naturalistic settings, the study findings can be an important element for nurses in clinical practice to operate on a personalized and interpersonal level. Tailoring nurse-led interventions by shared decision-making toward measured nurse-

sensitive patient outcomes can enhance the nurse-patient relationship to its full potential based on the unique needs of the person with mental health problems.

If facilitated appropriately, using the quantitative language of patient-voiced effects of the nurse-patient relationship during in-depth clinical intervision sessions, a peer-led group reflection method, can enhance nurses' self-reflection in clinical practice to maintain a person-centered and recovery-oriented nurse-patient relationship in each encounter. Independent of the nursing role in the primary nursing model, the results of the MH-NURSE-POS as a research tool can support nurses' sensitivity and responsiveness to their autonomy within the notion of interprofessional collaboration. The results of the MH-NURSE-POS can facilitate in-depth clinical intervision by enhancing the theoretical and interpersonal reflection of nurses. Considering how variations in nurse-sensitive patient outcomes are affected by internal nursing experiences is imperative to move beyond standardized interventions and tangible communication skills to improve patient-reported outcomes (Peplau, 1991; Santos & Cutcliffe, 2018). Especially when patients are 'at risk' of safety, the quantitative language of outcome measures by the MH-NURSE-POS can be a practical strategy to assist the reflective nursing practice in particular how nurses think, sense, and respond to address seemingly incongruent values during positive risk-taking with the patient. (Matsuoka, 2021; Wheeler, 2013). Nurses can develop nurse-led strategies through innovation and creativity addressed accordingly to ensure the distinct effects using the MH-NURSE-POS as a study tool. Therefore, nurses' awareness and insights into the effects of interpersonal relationship-based nursing are pivotal to increasing self-awareness, cultural sensitivity, and personal competence forging engagement and alliance in the uniqueness of each nurse-patient relationship in clinical practice as well in research (Chambers 2017, McAllister 2019).

Demonstrating the patient-voiced outcome measures of the nurturing space can provide a unique insight into the cyclic legitimacy crisis of contemporary mental healthcare. Quantitatively measured patient-reported outcomes using nurse-sensitive patient outcomes of the most 'meaningful' nurse-patient relationship can be an important tool to understand the dynamic interactional space between patients and nurses and to enhance the therapeutic alliance or engagement. Our quantitative study results can be a tool to facilitate a learning culture in clinical practice and nursing education with an emphasis on nursing's accountability as a change-agent (Hartley et al., 2020; Scheydt & Hegedüs ,2020; Wheeler, 2013). Furthermore, the application of measuring nurse-sensitive patient outcomes of the nurse-patient relationship can help nurses and nursing management to organize responsive

nursing care aligned with changing expectations of mental healthcare service users (Chow et al., 2019; Cusack et al., 2017; Stickley & Wright, 2013; Santos & Cutcliffe, 2018).

Providing more comparative patient-reported data on the outcome measures of the nurse-patient relationship in different inpatient care facilities and outpatient settings using the research tool MH-NURSE-POs can create new insights. Demonstrating patient-reported outcomes using nurse-sensitive patient outcomes is the first step to understanding the black box of beneficial processes of interpersonal change by psychiatric and/or mental health nursing (Wheeler, 2013). Nursing outcome research can determine how nurse-sensitive patient outcomes are affected by key features such as patient and nurse characteristics, features of the therapeutic relationships, and its treatment (Desmet et al., submitted for publication, McAllister et al., 2019). In future nursing outcome research to improve patient-reported outcomes from the nurse-patient relationship, patients and/or mental health peer workers co-design in future research could be considered (Elg et al., 2012). Particularly based on the growing body of literature on patient-reported experiences measures (PREMs), capturing service users' experience of mental health service delivery can transcend the traditional discourse of the ubiquitous relational component of person-centeredness and power sharing in relationship-based nursing (de Bienassis et al., 2021; Weldring & Smith, 2013). The combination of measuring nurse-sensitive patient outcomes and PREMs can capture a more complete and holistic picture of a patient's recovery and the impact of psychiatric and/or mental health nursing care that patients are receiving (Hartley et al., 2020; Prentice et al., 2021). Therefore, gathering future comparative patient-reported outcomes from different mental health professionals can create a unique insight into the generic and specific or distinct outcomes of the nurse-patient relationship in interprofessional mental healthcare.

Conclusion

To the best of our knowledge, this study was one of the first studies to measure patient-reported outcomes of the nurse-patient relationships in psychiatric inpatient hospitals using nurse-sensitive patient outcomes. The study findings indicated that inpatients reported moderate to good nurse-sensitive patient outcomes from the most 'meaningful' nurse-patient relationship. However, the variation in scores and the importance of the assigned nurse as well as the ward-nurse(s) within the primary nursing model implies future research on various contributing and hindering constructs to the effectiveness of humanistic and personalized nursing care by nurses with interpersonal engagement skills. Demonstrating nursing effect(s)

using well-defined quantitatively measured patient-reported outcomes can create nursing visibility as change-agent in- and outside mental healthcare and can contribute to the value of nursing as a profession.

REFERENCES

Beutler, L. E., Someah, K., Kimpara, S., & Miller, K. (2016). Selecting the most appropriate treatment for each patient. International Journal of Clinical and Health Psychology, 16(1), 99-108. doi:https://doi.org/10.1016/j.ijchp.2015.08.001

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: a primer. Frontiers in public health, 6.

Bowers, L. (2014). Safewards: a new model of conflict and containment on psychiatric wards. *Journal of Psychiatric and Mental Health Nursing, 21*(6), 499-508. doi:https://doi.org/10.1111/jpm.12129

Butler, M., Schultz, T. J., Halligan, P., Sheridan, A., Kinsman, L., Rotter, T., . . . Drennan, J. (2019). Hospital nurse-staffing models and patient-and staff-related outcomes. *Cochrane Database of Systematic Reviews*(4).

Callaway, B. J. (2002). *Hildegard Peplau: Psychiatric nurse of the century*: Springer Publishing Company.

Chambers, M. (2017). *Psychiatric and mental health nursing: the craft of caring*: CRC Press.

Chambers, M., McAndrew, S., Nolan, F., Thomas, B., Watts, P., & Kantaris, X. (2021). Measuring therapeutic engagement in acute mental health inpatient environments: the perspectives of service users and mental health nurses. *BMC Psychiatry, 21*(1), 547. doi:10.1186/s12888-021-03561-z

Chow, W. S., Ajaz, A., & Priebe, S. (2019). What drives changes in institutionalized mental health care? A qualitative study of the perspectives of professional experts. *Social Psychiatry and Psychiatric Epidemiology, 54*(6), 737-744. doi:10.1007/s00127-018-1634-7

Cook, S. C., Schwartz, A. C., & Kaslow, N. J. (2017). Evidence-based psychotherapy: Advantages and challenges. *Neurotherapeutics, 14*(3), 537-545.

Coster, S., Watkins, M., & Norman, I. J. (2018). What is the impact of professional nursing on patients' outcomes globally? An overview of research evidence. *International Journal of Nursing Studies, 78*, 76-83.

Cruess, R. L., Cruess, S. R., Boudreau, J. D., Snell, L., & Steinert, Y. (2014). Reframing Medical Education to Support Professional Identity Formation. *Academic Medicine, 89*(11).

Csipke, E., Flach, C., McCrone, P., Rose, D., Tilley, J., Wykes, T., & Craig, T. (2014). Inpatient care 50 years after the process of deinstitutionalization. *Social Psychiatry and Psychiatric Epidemiology, 49*(4), 665-671. doi:10.1007/s00127-013-0788-6

Cuijpers, P. (2019). Targets and outcomes of psychotherapies for mental disorders: an overview. *World psychiatry, 18*(3), 276-285.

Cusack, E., Killoury, F., & Nugent, L. (2017). The professional psychiatric/mental health nurse: skills, competencies and supports required to adopt recovery-orientated policy in practice. *Journal of Psychiatric and Mental Health Nursing, 24*(2-3), 93-104.

Cutcliffe, J. R., & Barker, P. (2002). Considering the care of the suicidal client and the case for 'engagement and inspiring hope'or 'observations'. *Journal of Psychiatric and Mental Health Nursing, 9*(5), 611-621.

Cutcliffe, J., & McKenna, H. (2018). Psychiatric/Mental Health Nursing in the 21st century: It's' Déjà vu'all over again! *International Journal of Nursing Studies, 81*, A3.

Cutler, N. A., Sim, J., Halcomb, E., Moxham, L., & Stephens, M. (2020). Nurses' influence on consumers' experience of safety in acute mental health units: A qualitative study. *Journal of Clinical Nursing, 29*(21-22), 4379-4386.

de Bienassis, K., Kristensen, S., Hewlett, E., Roe, D., Mainz, J., & Klazinga, N. (2021). Measuring patient voice matters: setting the scene for patient-reported indicators. *International Journal for Quality in Health Care, 33*(1), mzab002.

Deegan, P. E. (1988). Recovery: The lived experience of rehabilitation. *Psychosocial rehabilitation journal, 11*(4), 11.

Delaney, K. R., Shattell, M., & Johnson, M. E. (2017). Capturing the interpersonal process of psychiatric nurses: A model for engagement. *Archives of Psychiatric Nursing, 31*(6), 634-640.

Deproost, E. (2018). Verpleegkunde in een nieuw geestelijke gezondheidszorg: uitdagingen en een visie voor de toekomst. *Psychiatrie en Verpleging, 1*, 24-51.

Des Jarlais, D. C., Lyles, C., Crepaz, N., & Group, T. (2004). Improving the reporting quality of nonrandomized evaluations of behavioral and public health interventions: the TREND statement. *American Journal of Public Health, 94*(3), 361-366.

Desmet, K., Duprez, V., Deproost, E., Beeckman, D., Goossens, P. J., Vandewalle, J., . . . Verhaeghe, S. (2021). The development and psychometric evaluation of the Mental Health Nurse-Sensitive Patient Outcome-Scale (MH-NURSE-POS) for inpatient psychiatric hospital settings. *International Journal of Mental Health Nursing*.

Desmet, K., Bracke, P., Deproost, E., Goossens, P.J, Vandewalle, J., . . . Verhaeghe, S. (2022) Predictors of patient-reported outcomes from the nurse-patient relationship in mental health care: Results form a multicentric cross-sectional study in psychiatric inpatient hospitals . submitted for publication

Dickens, G. L., Ramjan, L., Endrawes, G., Barlow, E. M., & Everett, B. (2019). Effectiveness and experiences of mental health nurses in cases of medical emergency and severe physiological deterioration: A systematic review. International Journal of Nursing Studies, 95, 73-86. doi:10.1016/j.ijnurstu.2019.04.014

Dziopa, F., & Ahern, K. J. (2009). What makes a quality therapeutic relationship in psychiatric/mental health nursing: A review of the research literature. *Internet Journal of Advanced Nursing Practice, 10*(1), 7-7.

Elg, M., Engström, J., Witell, L., & Poksinska, B. (2012). Co-creation and learning in health-care service development. *Journal of Service Management*.

Felton, A., Repper, J., & Avis, M. (2018). Therapeutic relationships, risk, and mental health practice. *International Journal of Mental Health Nursing, 27*(3), 1137-1148. doi:10.1111/inm.12430

Forchuk, C. (2001). Evidence-based psychiatric/mental health nursing. *Evidence-based mental health, 4*(2), 39-40.

Forchuk, C., & Reynolds, W. (2001). Clients' reflections on relationships with nurses: comparisons from Canada and Scotland. *Journal of Psychiatric and Mental Health Nursing, 8*(1), 45-51. Retrieved from https://onlinelibrary.wiley.com/doi/pdfdirect/10.1046/j.1365-2850.2001.00344.x?download=true

Gabrielsson, S., Tuvesson, H., Wiklund Gustin, L., & Jormfeldt, H. (2020). Positioning psychiatric and mental health nursing as a transformative force in health care. *Issues in Mental Health Nursing, 41*(11), 976-984.

Gabrielsson, S., Salberg, J., & Bäckström, J. (2021). Zombies Wanted! Descriptions of Nurses in Psychiatric-Mental Health Care in Swedish Recruitment Advertisements. *Issues in Mental Health Nursing, 42*(10), 899-908.

Gallagher-Ford, L., & Melnyk, B. M. (2022). Evaluating outcomes of evidence-based practice initiatives versus research: Clarifying the confusion with a call to action. In (Vol. 19, pp. 258-259): Wiley Online Library.

Gottlieb, L. N. (2014). CE: Strengths-Based Nursing. *AJN The American Journal of Nursing, 114*(8), 24-32. doi:10.1097/01.NAJ.0000453039.70629.e2

Griep, E., Noordman, J., & Van Dulmen, S. (2016). Practice nurses mental health provide space to patients to discuss unpleasant emotions. *Journal of Psychiatric and Mental Health Nursing, 23*(2), 77-85.

Halldorsdottir, S. (2008). The dynamics of the nurse-patient relationship: introduction of a synthesized theory from the patient's perspective. *Scandinavian Journal of Caring Sciences, 22*(4), 643-652. doi:https://doi.org/10.1111/j.1471-6712.2007.00568.x

Hartley, S., Raphael, J., Lovell, K., & Berry, K. (2020). Effective nurse-patient relationships in mental health care: A systematic review of interventions to improve the therapeutic alliance. *International Journal of Nursing Studies, 102*, 103490. doi:https://doi.org/10.1016/j.ijnurstu.2019.103490

Hurley, J., & Lakeman, R. Making the case for clinical mental health nurses to break their silence on the healing they create: A critical discussion. International Journal of Mental Health Nursing, n/a(n/a). doi:https://doi.org/10.1111/inm.12836

Kam, C. C. S., & Meyer, J. P. (2015). How careless responding and acquiescence response bias can influence construct dimensionality: The case of job satisfaction. *Organizational Research Methods, 18*(3), 512-541.

Kelley, J. M., Kraft-Todd, G., Schapira, L., Kossowsky, J., & Riess, H. (2014). The influence of the patient-clinician relationship on healthcare outcomes: a systematic review and meta-analysis of randomized controlled trials. *PloS One, 9*(4), e94207.

Kidd, S. A., McKenzie, K. J., & Virdee, G. (2014). Mental health reform at a systems level: widening the lens on recovery-oriented care. *Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie, 59*(5), 243-249. doi:10.1177/070674371405900503

Kilbourne, A. M., Beck, K., Spaeth-Rublee, B., Ramanuj, P., O'Brien, R. W., Tomoyasu, N., & Pincus, H. A. (2018). Measuring and improving the quality of mental health care: a global perspective. World psychiatry, 17(1), 30-38. Retrieved from https://deepblue.lib.umich.edu/bitstream/handle/2027.42/141815/wps20482_am.pdf?sequence=2

Kusk, K. H., & Groenkjaer, M. (2016). Effectiveness of primary nursing in the care and satisfaction of adult inpatients: a systematic review protocol. *JBI Evidence Synthesis, 14*(6).

Kynoch, K., Ameen, M., Ramis, M.-A., & Khalil, H. (2022). Use of Patient-Reported Data within the Acute Healthcare Context: A Scoping Review. *International Journal of Environmental Research and Public Health, 19*(18), 11160.

Lakeman, R., & Molloy, L. (2018). Rise of the zombie institution, the failure of mental health nursing leadership, and mental health nursing as a zombie category. *International Journal of Mental Health Nursing, 27*(3), 1009-1014.

Lorien, L., Blunden, S., & Madsen, W. (2020). Implementation of recovery-oriented practice in hospital-based mental health services: A systematic review. *International Journal of Mental Health Nursing, 29*(6), 1035-1048. doi:https://doi.org/10.1111/inm.12794

Macdonald, L. M. (2016). Expertise in everyday nurse-patient conversations: The importance of small talk. *Global qualitative nursing research, 3*, 2333393616643201.

Matsuoka, S. (2021). Recovery-oriented nursing care based on cultural sensitivity in community psychiatric nursing. *International Journal of Mental Health Nursing, 30*(2), 563-573.

Mattila, E., Pitkänen, A., Alanen, S., Leino, K., Luojus, K., Rantanen, A., & Aalto, P. (2014). The effects of the primary nursing care model: A systematic review.

McAllister, S., Robert, G., Tsianakas, V., & McCrae, N. (2019). Conceptualising nurse-patient therapeutic engagement on acute mental health wards: An integrative review. *International Journal of Nursing Studies, 93*, 106-118. doi:10.1016/j.ijnurstu.2019.02.013

Molin, J., Graneheim, U. H., Ringnér, A., & Lindgren, B. M. (2019). Patients' experiences of taking part in Time Together–A nursing intervention in psychiatric inpatient care. *International Journal of Mental Health Nursing, 28*(2), 551-559.

Moorhead, S., Johnson, M., Maas, M. L., & Swanson, E. (2018). *Nursing Outcomes Classification (NOC)-E-Book: Measurement of Health Outcomes*: Elsevier Health Sciences.

Moreno-Poyato, A. R., Montesó-Curto, P., Delgado-Hito, P., Suárez-Pérez, R., Aceña-Domínguez, R., Carreras-Salvador, R., . . . Roldán-Merino, J. F. (2016). The therapeutic relationship in inpatient psychiatric care: A narrative review of the perspective of nurses and patients. *Archives of Psychiatric Nursing, 30*(6), 782-787. Retrieved from http://diposit.ub.edu/dspace/bitstream/2445/132842/1/661466.pdf

Moura, E. C. C., Lima, M. B., Peres, A. M., Lopez, V., Batista, M. E. M., & Braga, F. d. C. S. A. G. (2020). Relationship between the implementation of primary nursing model and the reduction of missed nursing care. *Journal of Nursing Management, 28*(8), 2103-2112.

Myklebust, K. K., & Bjørkly, S. (2019). The quality and quantity of staff-patient interactions as recorded by staff. A registry study of nursing documentation in two inpatient mental health wards. *BMC Psychiatry, 19*(1), 1-12.

Naef, R., Ernst, J., & Petry, H. (2019). Adaption, benefit and quality of care associated with primary nursing in an acute inpatient setting: A cross-sectional descriptive study. *Journal of Advanced Nursing, 75*(10), 2133-2143.

Nicaise, P., Dubois, V., & Lorant, V. (2014). Mental health care delivery system reform in Belgium: The challenge of achieving deinstitutionalization whilst addressing fragmentation of care at the same time. *Health Policy, 115*(2), 120-127. doi:https://doi.org/10.1016/j.healthpol.2014.02.007

Norman, I., & Ryrie, I. (2013). *The Art And Science Of Mental Health Nursing: Principles And Practice: A Textbook of Principles and Practice*: McGraw-Hill Education.

Paul, L., & Healy, K. (2018). Transformative treatments. *Noûs, 52*(2), 320-335.

Peplau, H. E. (1991). *Interpersonal relations in nursing: A conceptual frame of reference for psychodynamic nursing*: Springer Publishing Company.

Pincus, H. A., Spaeth-Rublee, B., Sara, G., Goldner, E. M., Prince, P. N., Ramanuj, P., . . . Patton, L. (2016). A review of mental health recovery programs in selected industrialized countries. *International Journal of Mental Health Systems, 10*(1), 73. doi:10.1186/s13033-016-0104-4

Polit, D. F., & Beck, C. T. (2012). Nursing Research: Generating and Assessing Evidence for Nursing Practice: Wolters Kluwer Health/Lippincott Williams & Wilkins.

Prentice, D., Moore, J., & Desai, Y. (2021). *Nursing care delivery models and outcomes: A literature review.* Paper presented at the Nursing Forum.

Santangelo, P., Procter, N., & Fassett, D. (2018). Seeking and defining the 'special' in specialist mental health nursing: A theoretical construct. *International Journal of Mental Health Nursing, 27*(1), 267-275. doi:10.1111/inm.12317

Santos, J. C., & Cutcliffe, J. R. (2018). *European psychiatric/mental health nursing in the 21st century: a person-centered evidence-based approach*: Springer.

Scheid, T. L., & Wright, E. R. (2017). *A handbook for the study of mental health: Social contexts, theories, and systems*: Cambridge University Press.

Siegel, D. J. (2006). An interpersonal neurobiology approach to psychotherapy. *Psychiatric Annals, 36*(4), 248.

Stickley, T., & Wright, N. (2013). *Theories for mental health nursing: a guide for practice*: Sage.

Stuart, S. R., Tansey, L., & Quayle, E. (2017). What we talk about when we talk about recovery: a systematic review and best-fit framework synthesis of qualitative literature. *Journal of Mental Health, 26*(3), 291-304. Retrieved from https://www.tandfonline.com/doi/full/10.1080/09638237.2016.1222056

Truijens, F. L., Desmet, M., De Coster, E., Uyttenhove, H., Deeren, B., & Meganck, R. (2019). When quantitative measures become a qualitative storybook: A phenomenological case analysis of validity and performativity of questionnaire administration in psychotherapy research. *Qualitative Research in Psychology*.

van Weeghel, J., van Zelst, C., Boertien, D., & Hasson-Ohayon, I. (2019). Conceptualizations, assessments, and implications of personal recovery in mental illness: A scoping review of systematic reviews and meta-analyses. *Psychiatric rehabilitation journal, 42*(2), 169.

Vandewalle, J., Van Bos, L., Goossens, P., Beeckman, D., Van Hecke, A., Deproost, E., & Verhaeghe, S. (2020). The perspectives of adults with suicidal ideation and behaviour regarding their interactions with nurses in mental health and emergency services: a systematic review. *International Journal of Nursing Studies*, 103692.

Vanhaecht, K., De Ridder, D., Seys, D., Brouwers, J., Claessens, F., Van Wilder, A., . . . Lachman, P. (2021). The History of Quality: From an Eye for an Eye, Through Love, and Towards a Multidimensional Concept for Patients, Kin, and Professionals. *European Urology Focus*. doi:https://doi.org/10.1016/j.euf.2021.09.001

Van Wilder, A., Bruyneel, L., De Ridder, D., Seys, D., Brouwers, J., Claessens, F., . . . Vanhaecht, K. (2021). Is a hospital quality policy based on a triad of accreditation, public reporting and inspection evidence-based? A narrative review. International journal for quality in health care : journal of the International Society for Quality in Health Care, 33(2). doi:10.1093/intqhc/mzab085

Waldemar, A. K., Esbensen, B. A., Korsbek, L., Petersen, L., & Arnfred, S. (2019). Recovery-oriented practice: Participant observations of the interactions between patients and health professionals in mental health inpatient settings. *International Journal of Mental Health Nursing, 28*(1), 318-329.

Wampold, B. E., Baldwin, S. A., & Imel, Z. E. (2017). What characterizes effective therapists? Weldring, T., & Smith, S. M. (2013). Article commentary: patient-reported outcomes (pros) and patient-reported outcome measures (PROMs). Health services insights, 6, HSI. S11093.

Wand, T., Glover, S., & Paul, D. (2022). What should be the future focus of mental health nursing? Exploring the perspectives of mental health nurses, consumers, and allied health staff. International Journal of Mental Health Nursing, 31(1), 179-188.

Wheeler, K. (2013). Psychotherapy for the advanced practice psychiatric nurse: A how-to guide for evidence-based practice: Springer Publishing Company.

Winship, G., Bray, J., Repper, J., & Hinshelwood, R. D. (2009). Collective biography and the legacy of Hildegard Peplau, Annie Altschul and Eileen Skellern; the origins of mental

health nursing and its relevance to the current crisis in psychiatry. *Journal of Research in Nursing, 14*(6), 505-517.

Zugai, J. S., Stein-Parbury, J., & Roche, M. (2015). Therapeutic alliance in mental health nursing: an evolutionary concept analysis. *Issues in Mental Health Nursing, 36*(4), 249-257.

TABLES

TABLE 1: Descriptive characteristics, numbers (n) and valid percentages (%) (n=296)

		N	*(%)*
Age (years)			
	Mean (SD)	44.4	-
	SD	15.7	
	Minimum	18.0	-
	Maximum	96.0	-
Gender			
	Female	152	*(51.4)*
	Male	144	*(48.6)*
Number of hospital admissions during the lifetime			
	1	105	*(35.5)*
	2	56	*(18.9)*
	3	48	*(16.2)*
	4	25	*(8.4)*
	5	18	*(6.1)*
	≥ 6	42	*(14.2)*
	Missing	2	*(0.7)*
Current admission time (month)			
	< 1	51	(17.2)
	1 - < 2	45	(15.2)
	2 - < 3	48	(16.2)
	3 - < 4	37	(12.5)
	≥ 4	113	(38.2)
	Missing	2	(0.7)

Hospital		
A	102	*(34.5)*
B	70	*(23.6)*
C	39	*(13.2)*
D	47	*(15.9)*
E	38	*(12.8)*
Having an assigned nurse		
Yes	241	*(81.4)*
No	55	*(18.6)*
My most 'meaningful' nurse-patient relationship is		
Assigned nurse	200	*(67.6)*
Ward-nurse(s)	96	*(32.4)*

Table 2 results of the Mental Health Nurse-Sensitive Patient Outcome-Scale Total participants (n=296) are presented as number of individuals (n) and valid percentages (%)

Items	(1) Fully Disagree	(2) Disagree	(3) Partially Disagree	(4) Partially agree	(5) Agree	(6) Fully agree	Missing	Not applicable	
DUE TO THE NURSE	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	Mean (SD)
Growth									**4.45 (0.99)**
I get hope again to continue	8 (2.7)	21 (7.1)	15 (5.1)	70 (23.6)	116 (39.2)	66 (22.3)	-		4.56 (1.24)
I can set personal goals	6 (2.0)	20 (6.8)	18 (6.1)	67 (22.6)	127 (42.9)	58 (19.6)	-		4.56 (1.19)
I can pursue my personal goals step by step	7 (2.4)	17 (5.7)	18 (6.1)	65 (22.0)	127 (42.9)	62 (20.9)	-		4.60 (1.19)
I can achieve my personal goals	8 (2.7)	24 (8.1)	30 (10.1)	77 (26.0)	101 (34.1)	55 (18.6)	1 (0.3)		4.37 (1.28)
I have insight in my strengths and possibilities	6 (2.0)	17 (5.7)	30 (10.1)	92 (31.1)	112 (37.8)	39 (13.2)	-		4.36 (1.14)
I have insight in my limitations and pitfalls	9 (3.0)	18 (6.1)	19 (6.4)	95 (32.1)	112 (37.8)	42 (14.2)	1 (0.3)		4.39 (1.18)
I can further develop my strengths and possibilities	6 (2.0)	17 (5.7)	23 (7.8)	92 (31.1)	111 (37.5)	46 (15.5)	1 (0.3)		4.43 (1.14)
I can cope with my limitations and pitfalls	9 (3.0)	18 (6.1)	28 (9.5)	95 (32.1)	106 (35.8)	40 (13.5)	-		4.32 (1.19)
Expression									**4.59 (1.06)**
I can cope with my emotions	11 (3.7)	25 (8.4)	25 (8.4)	90 (30.4)	93 (31.4)	51 (17.2)	1 (0.3)		4.29 (1.30)
I can speak openly about my daily problems	6 (2.0)	14 (4.7)	17 (5.7)	47 (15.9)	131 (44.3)	81 (27.4)	-		4.78 (1.17)
I can speak openly about my emotional problems	10 (3.4)	11 (3.7)	20 (6.8)	59 (19.9)	116 (39.2)	79 (26.7)	1 (0.3)		4.68 (1.23)
I can speak openly about my relational problems (with my partner of others)	11 (3.7)	15 (5.1)	20 (6.8)	56 (18.9)	111 (37.5)	77 (26.0)	6 (2.0)		4.63 (1.29)
Control									**4.09 (1.20)**
I behave in a way that does not put my own safety at risk	16 (5.4)	20 (6.8)	26 (8.8)	52 (17.6)	84 (28.4)	58 (19.6)	-	40 (13.5)	4.34 (1.45)
I behave in a way that does not put safety of others at risk	16 (5.4)	17 (5.7)	14 (4.7)	36 (12.2)	92 (31.1)	57 (19.3)	-	64 (21.6)	4.47 (1.46)
I know which situations are riskful to react impulsively	10 (3.4)	29 (9.8)	21 (7.1)	55 (18.6)	93 (31.4)	41 (13.9)	-	47 (15.9)	4.27 (1.37)
I can keep control over my impulsive reactions	12 (4.1)	41 (13.9)	22 (7.4)	64 (21.6)	81 (27.4)	27 (9.1)	-	49 (16.6)	3.98 (1.40)
I build valuable contacts with others	30 (10.1)	43 (14.5)	46 (15.5)	66 (22.3)	85 (28.7)	26 (8.8)	-		3.71 (1.49)
Motivation									**4.61 (1.08)**
I am motivated to take my medication	19 (6.4)	24 (8.1)	11 (3.7)	38 (12.8)	100 (33.8)	94 (31.8)	10 (3.4)		4.60 (1.51)
I am motivated to follow my therapy program	12 (4.1)	13 (4.4)	11 (3.7)	46 (15.5)	123 (41.6)	89 (30.1)	2 (0.7)		4.78 (1.27)
I remain committed to my treatment	9 (3.0)	12 (4.1)	8 (2.7)	36 (12.2)	114 (38.5)	114 (3805)	3 (1.0)		4.97 (1.22)
I succeed to carry out the daily activities	21 (7.1)	32 (10.8)	30 (10.1)	72 (24.3)	101 (34.1)	39 (13.2)	1 (0.3)		4.07 (1.43)
TOTAL SCORE									**4.42 (0.89)**

Table 3 results Chronbach's Alpha

Total score MH-NURSE-POS	0.938
'growth'	0.935
'expression'	0.858
'control'	0.840
'motivation'	0.802