

Evaluating Psychiatric Nursing Competencies Applied to Emergency Settings:
A Pilot Role Delineation Study

By

JOANNA J MELLO
B.S. (California State University Sacramento) 2006

THESIS

Submitted in partial satisfaction of the requirements for the degree of

MASTER OF SCIENCE

in

Nursing Science and Healthcare Leadership

in the

OFFICE OF GRADUATE STUDIES

of the

UNIVERSITY OF CALIFORNIA

DAVIS

Approved:

Janice F. Bell, PhD, MPH, MN

Elena O. Siegel, PhD, RN

Deborah Ward, PhD, RN, FAAN

Committee in Charge

2014

Evaluation of Psychiatric Nursing Competencies Applied to Emergency Settings

Abstract

Aims: 1) To examine emergency department (ED) nurses' reports of a) frequency b) importance and c) self-efficacy related to the application of recommended psychiatric nursing competencies in three domains (i.e., assessment, tasks, knowledge). 2) To test the extent to which frequency and importance independently predict ED nurses' self-efficacy related to the application of the competencies in their daily work.

Background: In the past 10 years, ED use has increased by 26% marked by a concomitant increase in the number of persons with psychiatric illness seeking ED services with ED nurses often the first-line care providers. Yet, studies suggest that ED nurses believe they lack the skills and knowledge to provide effective care to psychiatric patients, leading to a lack of confidence and negative attitudes that may affect the quality of patient care. At the same time, limited evidence exists to clearly identify the competencies required of ED nurses to care for this population.

Methods: ED nurses from a large tertiary care center (n=75) completed an online survey. Nurses were asked to rank, using Likert scales ranging from 0 to 4, the frequency, importance and self-efficacy of 15 recommended psychiatric nursing competencies across three domains: Assessment, Tasks and Knowledge. Survey responses to items in each of the three domains were summarized with descriptive statistics. Regression analysis was used to model each self-efficacy item with the corresponding frequency and importance rankings included as predictors and important socio-demographic factors (e.g., age, race/ethnicity, education, time in position) included as control variables.

Results: ED nurses rankings of importance and frequency of performing the competencies were higher than their rankings of self-efficacy for the same competencies. Scores ranged from means of 1.81 (SD=1.29) for ranking of importance and 0.64 (SD=1.06) for the ranking of frequency related to performing psychiatric tests to 3.67 (SD=0.60) for ranking of importance and 3.04 (SD=0.75) for ranking of frequency related to applying strategies to reduce patient harm to self and others. Scores were lowest for competencies in the knowledge domain, followed by those in the assessment domain and were highest

in the task domain. Greater frequency of performing competencies predicted higher self-efficacy scores in almost every domain. The importance ranking was associated with higher self-efficacy scores in most, but not all, models. Younger nurses (18 to 34 years of age) had lower self-efficacy scores for many competencies relative to older nurse (45 years and above). Those with less than 5 years of experience as an ED nurse had lower self-efficacy scores for performing psychiatric tests.

Implications: Although ED nurses perform recommended competencies frequently and rank them as important, their reports of self-efficacy related to these competencies are comparably low. We find performance frequency and perceived importance of psychiatric nursing competencies are associated with their self-efficacy; therefore, opportunities for practice as well as interventions to underscore the importance of specific competencies may improve self-efficacy. Younger and less experienced ED nurses might require more support and teaching in these competencies. Research in other samples and settings is needed to corroborate these results.

Introduction

Background

As the U.S. has experienced an estimated 8% rise in the number of persons suffering from psychiatric illness, hospital emergency departments (EDs) increasingly assume the burden of treating these individuals (Brown, 2007). These trends contribute to the problems of overcrowding and underfunding of the national emergency medical system as outlined in the 2006 Institute of Medicine report: *The Future of Emergency Care in the United States Health System* (Institute Of Medicine, 2006). In the past ten years, ED use has increased by 26%, marked by a concomitant increase in the number of persons with psychiatric illness seeking emergency services (APA, 2004). At the same time, the number of EDs nationwide has decreased by 14% due to cuts in reimbursement from Medicare and Medicaid, as well as denied insurance payments (National Center for Health Statistics, 2005).

Overall, 6% of ED visits nationwide are psychiatric emergencies (Pitts, Niska, Xu, & Burt, 2008). Between 2003 and 2008 the rate of psychiatric-related ED visits increased 19% (Pitts et al., 2008). Thus, EDs continue to serve as gateways through which patients receive psychiatric evaluations and treatment (Stefan, 2006), and emergency nurses are often the first-line care providers (Clarke, Dusome, & Hughes, 2007). In addition, emergency nurses often believe they lack the skills and knowledge to assess and treat psychiatric patients effectively (Marc Broadbent, 2006; Clarke, Hughes, Brown, & Motluk, 2005b; Smart, Pollard, & Walpole, 1999), leading to poor confidence and negative attitudes among nurses that may affect the quality of patient care (Crowley, 2000; Hunt, 1993; Indig, Copeland, Conigrave, & Rotenko, 2009). Despite increasing ED use for psychiatric emergencies, limited evidence exists to clearly identify the knowledge and competencies necessary for the emergency nurse to care for this population of patients (White, 2010b). While emergency nurses have specialized competencies and credentialing programs for trauma and pediatrics, there are no comparable programs for the care of psychiatric patients.

Purpose of the Study

Accurate information about the problems encountered in clinical practice, as well as the knowledge and skills needed to resolve problems are essential components of defining specialization in nursing (Pellino, Willens, Polomano, & Heye, 2002). One way to define the complexity of nursing specialties and to examine patterns of practice is to conduct a 'job analysis' or 'role delineation' study (Pellino et al., 2002). Role delineation studies (RDS) are performed to define the elements that comprise the role of particular practice specialties (McMillan, Heusinkveld, & Spray, 1995). Various fields of nursing utilize the role delineation approach in order to develop a blueprint for a specialty certification exam (McMillan, Heusinkveld, Chai, Miller Murphy, & Huang, 2002), for example. Information that is generated from an RDS is used as the basis to define the realm of clinical practice, develop care standards, guide nursing education and curriculum development, establish research priorities, and develop blueprints for examination (Pellino et al., 2002). In order to examine the scope of practice and the areas of knowledge that are critical to emergency nurses caring for psychiatric patients, an RDS approach will be used in this study.

This pilot RDS examined the extent to which emergency nurses view specific competencies as essential to providing safe, quality care to patients with psychiatric illness. Existing psychiatric nursing core competencies were ranked by emergency nurses to measure their perceived relevance to the ED setting and emergency nursing role. Specifically, the survey measured the frequency with which each competency is performed in the ED setting as well as the importance and perceived self-efficacy (i.e., belief in one's own ability to complete tasks and reach goals) of each competency from the perspectives of emergency nurses. While frequency and importance are standard measures in an RDS (Brown et al., 2012; Glover, Newkirk, Cole, Walker, & Nader, 2006; McMillan et al., 2002; Thompson & Lulham, 2007), self-efficacy was added to this pilot study in order to better understand how emergency nurses' confidence in performing specific psychiatric competencies.

Research Aims

The study has two specific aims, both referring to competencies in three domains (i.e., assessment, tasks, knowledge):

1. To examine emergency nurses' reports of a) frequency b) importance and c) self-efficacy related to the application of recommended psychiatric nursing competencies in their daily work.
2. To test the extent to which frequency and importance predict emergency nurses' self-efficacy related to performing recommended psychiatric nursing competencies.

Significance to the Field of Nursing

As an increasing number of patients with psychiatric emergencies are treated in hospital emergency departments, emergency nurses are charged with expanding their knowledge of yet another sub-specialty, psychiatric care. This study will begin to address the role of emergency nurses in caring for patients with psychiatric emergencies by examining the competencies needed to safely and effectively provide care to this population.

This study directly addresses one of the recommendations of the *2012 Institute of Medicine Report on The Mental Health and Substance Abuse Workforce*, specifically to identify, develop, and refine core competencies in mental health for the entire spectrum of personnel who care for this population, including direct care workers, peer support specialists, primary care physicians, and nurses (Institute of Medicine Report on The Mental Health and Substance Abuse Workforce, 2012).

Additionally, this study addresses recommendations from President Bush's New Freedom Commission on Mental Health, which emphasizes the need to transform our nation's mental health system (Cunningham et al., 2007; Hogan, 2003; "The President's New Freedom Commission on Mental Health," 2003). By identifying key competencies for psychiatric emergencies, this study will be useful to direct care providers, managers, educators and researchers who are interested in improving the quality of emergency care provided to patients with mental health disorders.

Review of the Literature

Providing appropriate, high quality healthcare to individuals with psychiatric illness in EDs has been a problem studied by researchers for decades, both nationally and internationally. A substantial body of literature addresses the often negative attitudes of emergency nurses in caring for patients with psychiatric disorders (Anderson, 1997; Bailey, 1998; Crowley, 2000; Mackay & Barrowclough, 2005; McAllister, Creedy, Moyle, & Farrugia, 2002; McLaughlin, 1994; Smart et al., 1999; Suokas, Suominen, & Lonnqvist, 2009). Additional studies have attempted to improve training to emergency nurses in the triage process for psychiatric patients presenting to emergency departments (Broadbent, 2006; Broadbent, Jarman, & Berk, 2002; Clarke, Brown, Hughes, & Motluk, 2006; Gerdtz, Weiland, Jelinek, Mackinlay, & Hill, 2012; Gleason, 2010; Happell, Summers, & Pinikahana, 2002; Sands, 2007; Wynaden et al., 2003), while others have implemented educational strategies to improve care of psychiatric patients in EDs (Baston & Simms, 2002; Crowley, 2000; Ewers, Bradshaw, McGovern, & Ewers, 2002; Jones & Lowe, 2003; Keogh, Doyle, & Morrissey, 2007; Kerrison & Chapman, 2007; Secker, Pidd, & Parham, 1999). Some research has supported the development of guidelines or clinical frameworks for emergency nurses to care for psychiatric patients (Hart, 2006; White, 2010a) or to implement specialized emergency psychiatric nursing programs (Clarke, Hughes, Brown, & Motluk, 2005a; Eppling, 2008). Only two studies have addressed the role of the registered nurse in non-psychiatric settings managing psychiatric patients (Fourie, McDonald, Connor, & Bartlett, 2005; Kudless & White, 2007), however, neither study addressed emergency nurses directly. There remains a critical need to define the competencies and roles of emergency nurses in caring for patients with psychiatric illness.

Negative Attitudes

The phenomenon of emergency nurses' negative attitudes toward psychiatric patients has been examined multiple times with consistent results. A study by McAllister, et al. (2002), found that caring for psychiatric patients in the ED evokes strong emotions and negative attitudes among nurses, resulting in nurses distancing themselves from such patients. A similar study showed that only 25% of emergency nurses reported that they were as cooperative and sympathetic toward psychiatric patients as toward

patients with other health conditions (Suokas et al., 2009). Additionally, where psychiatric patients were perceived by nurses to have symptoms potentially controllable by the patient, nurses were more likely to express higher levels of irritation and less helping behavior (Mackay & Barrowclough, 2005).

Inadequate Training & Educational Initiatives

Negative attitudes of emergency nurses have also been shown in the literature to be related to the nurses feeling unprepared and inadequately trained to care for psychiatric patients. McLaughlin (1994) points out that emergency nurses are trained to care mostly for patients with somatic illnesses. Another study corroborated these findings, showing that emergency nurses did not answer favorably when asked “I think my present training has provided me with adequate skill to take care of people who have deliberately self-harmed” (Mackay & Barrowclough, 2005). Additionally, emergency nurses answered positively to a statement “I am in need of further training to be able to work with psychiatric patients” (Mackay & Barrowclough, 2005). Lastly, McAllister, et al. (2002), found that if emergency nurses perceived themselves as skilled to address the needs of psychiatric patients, they were more likely to feel worthwhile working with such clients and less likely to demonstrate negative attitudes.

Several studies have attempted to address the problem of negative attitudes by implementing educational initiatives for emergency nurses in regards to caring for psychiatric patients. These studies posit that the delivery of such educational programs would help staff to acquire the appropriate attitudes, knowledge and competence to manage psychiatric disorders, thereby improving healthcare services and reducing work related stress (Keogh et al., 2007). Educational programs have been implemented with positive results. For example, one study found that when ED nurses attended a series of educational workshops on psychiatric problems, they reported an increase in their confidence and ability to assess levels of risk associated with psychiatric presentations (Holdsworth, Belshaw, & Murray, 2001). In other work, subsequent to an education program, staff reported a change in their confidence and approach and said that they felt less intimidated. Specifically, they felt much more confident to communicate effectively, conduct psychosocial assessments, handle aggressive patients, and understand different psychiatric medications (Hofmeyer & Stuhlmiller, 2002). It should be noted that none of these

educational programs occurred in the United States, leaving gaps in knowledge as to whether similar domestic programs would achieve the same results.

Unclear Roles & Guidelines

Several groups have come together to develop clinical frameworks for psychiatric emergency care. Recognizing the demands placed on EDs by an increasing number of patients with psychiatric and substance abuse conditions, the Illinois Behavioral Health Steering Committee established a Task Force in 2006 to consider and recommend best practices associated with treatment of patients with psychiatric and substance abuse illnesses in the ED (IHA, 2007). A multidisciplinary team of psychiatrists, emergency medicine physicians, psychiatric nurses, psychologists, social workers, counselors and hospital management executives agreed on best practices and formulated a report in 2007. The recommendations include a defined triage scale and “medical clearance” checklist (IHA, 2007, Appendix A) yet lack clear nursing role definitions or competencies.

In 2007, the Emergency Nurses Association (ENA) formed the Psychiatric Patients Work Team (PPWT) and, in 2008, convened a meeting of stakeholders to discuss the creation of a clinical framework for psychiatric emergency care (McCoy, 2010). Accepted by the ENA Board of Directors in 2009, the framework serves as a guideline for principles of practice for the care, assessment and treatment of emergency patients with psychiatric illnesses and/or substance use disorders (ENA, 2010). This document builds on the best practices set forth in the Illinois framework; however, it does not specify nursing clinical competencies. Further work is needed to understand the competencies required by emergency nurses to care for psychiatric patients.

White (2010) also discussed the development of a clinical algorithm at Duke University to assist nurses in decision-making regarding psychiatric care in the ED. While there are some similarities to the Illinois best practices and the ENA guidelines, neither of these prior documents recommended standardized orders or utilized clinical algorithms. The guidelines have helped emergency nurses make objective decisions related to patient placement and clinical interventions (White, 2010a), yet they do not define the competencies that emergency nurses need to care for psychiatric patients.

Nursing Competencies

Requirements for competent nursing practice have been established by national associations and agencies, including the American Nurses Association, the American Association of Critical Care Nurses' Standards for Nursing Care of the Critically Ill (Alspach, 1984). Furthermore, the Joint Commission for Accreditation of Health Care Organizations requires a clinical competence assessment for all nursing staff in healthcare agencies (JCAHO, 1997).

Competency assessment is outcome-oriented with the goal of evaluating performance for the effective application of knowledge and skill in the practice setting (Redman, Lenburg, & Hinton, 1999). Competency assessment techniques address psychomotor, affective and cognitive domains, and can be generic to clinical practice in any setting, specific to a clinical specialty, basic or advanced (Benner, 1982; Gurvis & Grey, 1995).

Emergency Nursing Psychiatric Competencies

Emergency Nursing Core Competencies vary from state to state based on each particular state's rules and regulations and practice environment, thus no two emergency facilities may require their nurses to have the same competencies. In 2008, The Emergency Nurses Association, a national authority on emergency nursing, developed recommended competencies for nurse practitioners in emergency care, but none have been developed for registered nurses (ENA, 2008). With the increase in the number of psychiatric patients seeking services in EDs, emergency nurses need more specific psychiatric competencies to define their role in this regard (Broadbent et al., 2002).

The International Society of Psychiatric Nursing (ISPN), The American Psychiatric Nurses Association (APNA) and the International Nurses Society on Addiction have also identified a core curriculum and terminal objectives for all entry-level professional nurses regarding psychiatric and mental health care ("Essential Psychiatric, Mental Health and Substance Use Competencies for the Registered Nurse," 2012). In the area of Registered Nursing Practice, there are twenty-two essential competencies listed, from focused psychiatric assessment to recognizing and managing common psychiatric syndromes. These competencies are more detailed and comprehensive than those proposed for emergency nurses, yet

further work is required to clarify the ways in which these competencies are applicable to the care of psychiatric patients in emergency settings.

Methods

Research Design

This study used a quantitative, cross-sectional survey design.

Setting

The study took place at an ED in a large tertiary care facility in Northern California. The ED is a level-one trauma center with 60 beds and over 120 nurses.

Sample/Participants

A convenience sample of emergency nurses was used for this study. Every full, part-time, travel, and per diem nurse currently working in the ED was invited to participate for a total of 122 invitations.

Data Collection

A short survey (see Figure 1, Appendix A), designed for completion in less than 20 minutes, was administered using SurveyMonkey™. Data were collected over a six-week period in the summer of 2013. Nurses completed the surveys from computers in the ED or at home, via the SurveyMonkey™ link sent to them through interoffice email.

Demographic and Employment Characteristics

The survey included questions designed to capture the participants' demographic and employment characteristics. Age was categorized as 18 – 34, 35-44 and 45 years or older (reference group). Other demographic variables included race/ethnicity: White (reference group), non-Hispanic, Hispanic or Latino, Black or African American, Native American or American Indian, Asian/Pacific Islander, Other; level of education: Associate Degree (reference group), Bachelor's Degree, Master's Degree, Professional Degree, Doctorate; employment status Full-time [career; reference group], Full-time [traveler], Part-time, Per-diem; number of years as a registered nurse: < 5 years, 5 years or more (reference group); length of time in current position: < 5 years, 5 years or more (reference group); percentage of time at work spent in direct patient care activities: < 25%, 26-75%, 76-100% (reference

group), and how often nurses care for patients with psychiatric illness: 0-1 per month (reference group), 2-5 per month, 6-10 per month, 11-20 per month) (see Figure 1).

Assessment of Competencies

Using existing psychiatric nursing competencies recommended for all entry-level RNs caring for patients with psychiatric disorders (Essential Psychiatric, Mental Health and Substance Use Competencies for the Registered Nurse, 2012), five items were assessed in each of three domains: Assessment, Tasks and Knowledge (see Figure 1). In total, fifteen competencies were assessed, each by asking nurses to rank, using 5-point Likert scales: a) the frequency with which the competency is conducted in the ED setting from 0 [rarely] to 4 [several times per week]; b) the importance to of the competency to the ED setting from 0 [minimal significance] to 4 [extreme significance]; and c) perceived self-efficacy in performing the competency from 0 [no confidence in performance] to 4 [very confident in performance].

Statistical Analysis

— Data were analyzed using Stata, Version 13 (College Station, TX) statistical software.

Descriptive statistics (means, standard deviations, medians, ranges, proportions) were used to summarize all survey items and the results were tabulated to describe frequency, importance and perceived self-efficacy associated with each competency in each of the three survey domains. For each competency in each domain, t-tests were used to compare the equality of means for frequency versus self-efficacy and for importance versus self-efficacy. Linear regression analysis was used to model each self-efficacy item with the corresponding frequency and importance rankings included as predictors and the demographic and employment variables included as control variables.

Results

Demographic and Employment Characteristics

Seventy-five nurses completed the questionnaire (61.5% response rate). Table 1 (Appendix A) describes demographic and employment characteristics of the respondents. More than 75% of the respondents identified as White/Non-Hispanic; 49% were under 34 years old; and most (73%) had Bachelor's Degrees and were working full-time (91%). Most respondents had been registered nurses between 1 and 10 years (67%), with the remainder having more than 10 years of nursing experience. Almost half of the nurses were in their current positions in the Emergency Department for longer than 5 years (47%). Most reported spending 76-100% of their time at work in direct patient care activities (83%), and reported caring for patients with psychiatric or mental illness frequently [5-10 times per month] (25%) or very frequently [10-20 times per month] (64%).

Frequency, Importance and Self-Efficacy of Competencies

The means and standard deviations (SD) of the nurses' rankings of frequency, importance and self-efficacy of each competency are summarized in Table 2 (Appendix A), along with the results of the t-tests comparing frequency and importance ranking with self-efficacy rankings.

Frequency

Nurses reported performing most of the items in the assessment domain as "sometimes" or "often." Items performed most frequently were assessing a patient's psychiatric history (49.3%) and assessing a patient's alcohol and/or substance abuse history (48%). The mean rankings on the frequency of assessments ranged from 0.64 (SD=1.06) for performing psychiatric tests, to 3.01 (SD=0.92) for assessing suicidal and/or homicidal ideation.

Tasks frequencies were also ranked highly, most being reported as "often" or "all of the time." The mean rankings for frequency of tasks ranged from 2.95 (SD=0.80) for administering psychotropic medications to 3.04 (SD=0.73) for applying strategies to reduce patient harm to self and others.

The knowledge domain had a wider range of responses, with fewer respondents reporting they performed the competencies "often" or "all of the time" and more respondents reporting "rarely" or

“sometimes.” The mean rankings for frequency of applying knowledge ranged from 0.99 (SD=1.10) for applying knowledge of evidence-based instruments to assess risk for common psychiatric problems, to 2.40 (SD=0.89) for applying knowledge of common psychiatric medications.

Importance

In the assessment domain, many competencies were reported as “very important” or “essential” to nurses’ work. The mean rankings for assessments ranged from 1.81 (SD=1.29) for performing psychiatric tests, to 3.44 (SD=0.86) for assessing for suicidal and/or homicidal ideation.

The task domain included more items rated as “essential” than any other domain in the importance rankings. More than 50% of nurses reported each task as being “essential” to their work. Mean rankings were similar in all domains, with 3.46 (SD=0.76) for identifying unusual changes in behavior and intervening appropriately, and 3.67 (SD=0.60) for applying strategies to reduce patient harm to self and/or others.

Competencies in the knowledge domain were mostly ranked as “very important” or “essential” to the emergency nurses. Almost 30% or more of respondents ranked each competency as “very important.” Mean rankings in this category ranged from 2.19 (SD=1.31) for applying knowledge of evidence-based instruments to assess risk for common psychiatric problems, to 3.03 (SD=0.85 & 0.90) for both applying knowledge of common psychiatric medications and applying knowledge of medication management of common psychiatric disorders, respectively.

Self-Efficacy

In the assessment domain, most emergency nurses ranked their perceived self-efficacy in performing the competencies as “good” or “very good.” Mean rankings in the assessment domain ranged from 0.89 (SD=1.12) for self-efficacy in performing psychiatric tests, to 3.13 (SD=0.78) for assessing for suicidal and/or homicidal ideation.

More than 29% of nurses reported being “good” at each of the five competencies in the task domain, with very few (maximum 1.3%) ranking their performance as “very poor” performance for any task. Mean self-efficacy rankings in the task domain ranged from 2.56 (SD=0.95) for managing

symptoms in patients who have psychiatric disorders, to 3.49 (SD=0.74) for administering psychotropic medications.

In the knowledge domain, most nurses ranked their performance of the competencies as “fair” or “good”. Mean rankings in the knowledge category ranged from 1.11 (SD=1.22) for applying knowledge of evidence-based instruments to assess risk for common psychiatric problems, to 2.23 (SD=0.99 & 1.04) for both applying knowledge of common psychiatric medications (including mechanism of action and side-effects) and applying knowledge of medication management of common psychiatric disorders.

Multivariable Regression of Self-Efficacy

Assessment

In the linear regression models of emergency nurses’ self-efficacy in performing specific assessment competencies, greater frequency in performing the assessments was consistently associated with significantly higher rankings of self-efficacy in all models examined, with the exception of assessment of suicidal ideation (Table 3). The magnitude of the increase in self-efficacy associated with greater frequency ranged from 0.44 – 0.65 in the remaining four models (psychiatric history, alcohol substance abuse, psychiatric tests, psychiatric medications). In two of the models, higher importance rankings of assessment competencies were also associated with significantly higher rankings of self-efficacy (alcohol/substance abuse assessment: $\beta=0.18$; 95% CI: 0.01, 0.35; psychiatric tests: $\beta=0.25$; 95% CI: 0.10-0.40). In the model of assessment with evidence-based psychiatric tests, younger nurses and those in their position for less than five years had significantly lower rankings of self-efficacy.

Tasks

Frequency of performing specific tasks, with the exception of administering psychotropic medications, was significantly associated with higher rankings of self-efficacy in four the five models (β 's ranging from 0.28 – 0.58; Table 4). In the models of administering psychotropic medications, applying strategies to reduce self-harm and managing symptoms, the nurses’ rankings of the importance of the tasks was also significantly associated with higher self-efficacy in performing the tasks. Compared to

nurses aged 45 years and older, those who were 18 to 34 years old, had significantly lower rankings of their self-efficacy in performing all tasks except administering psychotropic medications. Relative to the older age group, those 35-44 years of age group had similar rankings of self-efficacy in performing tasks, with the exception of tasks to reduce patient harm to self and others for which their rankings were significantly lower ($\beta=-0.50$; 95% CI: -1.01, -0.01).

Knowledge

Frequency of performing knowledge-based competencies was associated with higher rankings of self-efficacy in all five models (Table 5). The magnitude of the increase in self-efficacy ranged from $\beta=0.46$ to 0.72 across all models. Nurses' importance rankings were also associated with higher self-efficacy scores in four of the five models, with the exception of knowledge of psychiatric medications ($\beta=0.18$; 95% CI: -0.06, 0.41). In the remaining four models (knowledge of medication management of common psychiatric disorders, knowledge of pathophysiology of psychiatric disorders, knowledge of evidence-based instruments to assess risk for common psychiatric problems, and knowledge of motivational interviewing techniques), higher importance scores predicted higher self-efficacy scores with the magnitude of the association ranging from $\beta=0.24$ to 0.36. Younger nurses (18-34 years) compared to those 45 years and older again had significantly lower rankings of their self-efficacy in two of the five models (knowledge of psychiatric medications and knowledge of pathophysiology of psychiatric disorders) with the magnitudes of the associations ranging from -0.63 (95% CI: -1.23-0.03) to -0.65 (95% CI: -1.34-0.04).

Discussion

In this survey of experienced emergency nurses in a large Northern California tertiary care center, respondents ranked key competencies required for the care of patients with psychiatric illness as important; however, they provided consistently lower rankings of performance frequency and self-efficacy corresponding to the same competencies. In multivariable analysis, both the rankings of

importance and frequency of performing most competencies were significant drivers of rankings of self-efficacy; however, the frequency rankings were more consistently associated with self-efficacy across the models. Further research to understand what factors influence emergency nurses' rankings of importance of specific competencies could be key to improving nurses' self-efficacy through interventions designed to underscore their importance. We found no prior emergency nursing studies that have identified importance rankings as significant predictors of self-efficacy in performance of psychiatric competencies, highlighting the need for continued research in this area.

Higher frequency of performing competencies was also associated with significantly higher self-efficacy rankings in almost every model, suggesting that more experience in performing a competency leads to increased confidence. This finding is supported by prior research suggesting that emergency nurses have higher confidence in caring for psychiatric patients if they are provided with more education and practice (Stuhlmiller, 2005). Frequency of performance was not a predictor of higher self-efficacy in assessing for suicidal ideation and administering psychotropic medications, possibly because these are relatively simple activities that do not require much practice to attain mastery.

Age was a significant factor in predicting some self-efficacy rankings. When compared to older nurses, those of younger age tended to have lower self-efficacy rankings in models controlling for time in their positions, particularly for competencies in the task domain. In addition, shorter length of time in the position (< 5 years) had a significant independent negative effect on self-efficacy, but only for performance of psychiatric tests. These findings suggest that other factors associated with age—perhaps life experience, self-confidence, and maturity—may play important roles in the development of self-efficacy over and above the role of position-specific experience. Length of time in the position might work independently to improve self-efficacy through exposure to the care of psychiatric patients with increasing frequency over time. Education interventions tailored to younger, less experienced nurses may be a promising avenue to improve their self-efficacy in some psychiatric competencies.

Rankings of frequency in performing psychiatric nursing competencies varied widely in this study. Not surprisingly, assessment of suicidal ideation, using techniques to de-escalate an agitated

patient, and applying strategies to reduce patient harm to self and/or others were the most frequent practices performed by emergency nurses caring for psychiatric patients. Performing psychiatric tests for assessment (e.g. Mini-Mental State Examination or Beck Depression Inventory) and applying knowledge of Motivational Interviewing techniques were ranked as occurring least frequently, likely because emergency nurses lack knowledge or training in these practices. Interestingly, frequency rankings of administering psychiatric medications were fairly low, possibly because not all psychiatric patients require medications to manage their symptoms. Competencies for which nurses reported low frequency rankings (e.g. performance of psychiatric tests, applying knowledge of Motivational Interviewing techniques) were also ranked lower in importance and self-efficacy, suggesting that these competencies may not be valid to the emergency nursing role and should be reframed. As this was a pilot RDS with a small sample size in a single center, it is unlikely that these rankings are entirely representative of all emergency nurses, and a multi-center study would help to further define the psychiatric component of the emergency nursing role.

Competencies in the knowledge domain received consistently low rankings of frequency, importance and self-efficacy, corroborating prior research suggesting that emergency nurses need specialized education in caring for this unique population (Baston & Simms, 2002; Clarke et al., 2006; Clarke et al., 2005a; Keogh et al., 2007). Systematic and ongoing efforts to improve emergency nurses' education in the knowledge performance domain are recommended to improve their confidence in performing these competencies.

Competencies in the task domain were, on average, ranked higher on frequency, importance and self-efficacy than were competencies in the assessment and knowledge domains. This finding is consistent with the popular notion that emergency nurses are relatively task-oriented, as supported in the literature (Hobgood, Villani, & Quattlebaum, 2005; Hollingsworth, Chisholm, Giles, Cordell, & Nelson, 1998) and anecdotally among various nursing specialties. Our findings suggest that higher task-related self-efficacy may be due both to the nurses' higher frequency of performing the tasks and their higher ranking of importance of the task.

The results of this RDS provide a snapshot of psychiatric competencies among emergency nurses and lend further evidence in support of identifying and developing specific psychiatric competencies within a more comprehensive framework of the emergency nursing role. For educational purposes, the findings of this role delineation survey identify areas in which emergency nurses are frequently involved such as applying strategies to reduce patient harm to self and/or others, and using techniques to de-escalate an agitated patient. Although emergency nurses may report less involvement in such areas as applying knowledge of evidence-based instruments to assess risk for common psychiatric problems, this may reflect knowledge or confidence deficits in this area, and further education may promote increased involvement. In interpreting these findings, it is important to bear in mind that the study does not outline ideal practice, it merely describes current practice.

Limitations

This study is unique in that very little research has been carried out focusing specifically on the competencies related to emergency nurses caring for psychiatric patients. However, one major limitation of the study was that it utilized a convenience sample limited to one ED in northern California—a sample that was subsequently identified to represent a relatively experienced group of nurses. Given the depth of professional experience in our sample, our findings may over-estimate nurses' self-efficacy in performing the competencies we measured. In addition, most respondents were white and under 44 years old, and may not reflect the population of emergency nursing nationwide. Finally, the survey did not assess gender, and there is a possibility that gender may have additional effects on self-efficacy. The emergency nurse population at this study site, however, is approximately 30% male, but it is unknown what percentage participated in the study. Future studies are needed to corroborate our findings in other samples and settings and to test the role of gender in emergency nurses' self-efficacy in performing psychiatric nursing competencies.

Finally, as with all studies based on self-reported survey data, we were unable to account for the complexity of the concepts of self-rated 'importance' and 'self-efficacy' and the nuances associated with

their rankings. A more in-depth investigation into the various dimensions of how nurses rank importance and self-efficacy could be gained in future studies based on direct observation and interviews with nurses.

Implications for Emergency Nursing

This study provides insight into the competencies most frequently used by emergency nurses in caring for psychiatric patients, as well as some of the factors that might influence self-efficacy in their performance. Taken together, the findings add to the current body of knowledge for professional emergency nursing practice, highlighting areas for future research as well as critical target areas for educational intervention to improve emergency nurses' preparedness to effectively care for psychiatric patients. Based on the study findings as well as the current literature on this topic, we have the following recommendations: Firstly, further research with larger samples across multiple emergency settings is needed to identify the competencies that most closely reflect the nursing care of psychiatric patients in the ED. Secondly, our findings suggest that opportunities exist for nurse educators to support the assessment, tasks, and knowledge competencies necessary to care for psychiatric patients—especially in light of the increasing prevalence of psychiatric patients in EDs, and further investigation into these competencies is warranted. Our findings that frequency and perceived importance of performance leads to improved self-efficacy, can guide educators in developing educational opportunities to bolster emergency nurses' confidence associated with psychiatric nursing competencies. Finally, interventions targeted toward younger emergency nurses and those recently in their positions—possibly including education, hands-on practice, and mentored experiences—may be justified as findings suggest that younger age and shorter time in the position were associated with lower rankings of self-efficacy for some competencies.

Conclusion

The purpose of this study was to examine emergency nurses' rankings of frequency, importance and self-efficacy related to the application of recommended psychiatric nursing competencies in their daily work, and to test the extent to which frequency and importance predict emergency nurses' self-efficacy related to performing recommended psychiatric nursing competencies. The results of this study reflect current emergency nursing practice with regards to caring for psychiatric patients in one

emergency setting. Nurses ranked most competencies as important, but their rankings of frequency and self-efficacy of the same competencies were consistently lower. In multivariable models, frequency and importance were significantly and positively associated with self-efficacy for most of the competencies we examined. Older age and greater time in the position were also significant predictors in some, but not all, models. Educators may use this evidence to develop interventions to improve emergency nurses' self-efficacy in caring for psychiatric patients. Further research is recommended to corroborate these results in other emergency settings to identify the psychiatric nursing competencies that more comprehensively reflect the practice of emergency nurses.

References

- Alspach, J. G. (1984). Designing a competency-based orientation for critical care nurses. *Heart and Lung, 13*(6), 655-662.
- Anderson, M. (1997). Nurses' attitudes towards suicidal behaviour-a comparative study of community mental health nurses and nurses working in accidents and emergency department. *Journal of Advanced Nursing, 25*, 1283-1291.
- APA. (2004). *Psychiatric News, 39*(21), 1021-1026.
- Bailey, S. R. (1998). An exploration of critical care nurses' and doctors' attitudes towards psychiatric patients. *Australian Journal of Advanced Nursing, 15*(3), 8-14.
- Baston, S., & Simms, M. (2002). Mental health nursing developing effective education in A&E. *Emergency Nurse, 10*(2), 15-18.
- Benner, P. (1982). Issues in competency-based testing. [Case Reports Research Support, U.S. Gov't, P.H.S.]. *Nursing Outlook, 30*(5), 303-309.
- Broadbent, M. (2006). Improving emergency mental health triage. *Australian Nursing Journal, 14*(6), 35.
- Broadbent, M., Jarman, H., & Berk, M. (2002). Improving competence in emergency mental health triage. *Accident and Emergency Nursing, 10*(3), 155-162.
- Brown, C. G., Cantril, C., McMullen, L., Barkley, D. L., Dietz, M., Murphy, C. M., & Fabrey, L. J. (2012). Oncology nurse navigator role delineation study: an oncology nursing society report. *Clinical Journal of Oncology Nursing, 16*(6), 581-585. doi: 10.1188/12.CJON.581-585
- Brown, J. F. (2007). A survey of emergency department psychiatric services. *General Hospital Psychiatry, 29*(6), 475-480. doi: 10.1016/j.genhosppsy.2007.05.003
- Clarke, D. E., Brown, A. M., Hughes, L., & Motluk, L. (2006). Education to improve the triage of mental health patients in general hospital emergency departments. *Accident and Emergency Nursing, 14*(4), 210-218. doi: 10.1016/j.aen.2006.08.005
- Clarke, D. E., Dusome, D., & Hughes, L. (2007). Emergency department from the mental health client's perspective. *International Journal of Mental Health Nursing, 16*(2), 126-131.

- Clarke, D. E., Hughes, L., Brown, A. M., & Motluk, L. (2005a). Psychiatric emergency nurses in the emergency department: the success of the Winnipeg, Canada experience. *Journal of Emergency Nursing*, 31(4), 351-356. doi: 10.1016/j.jen.2005.03.008
- Clarke, D. E., Hughes, L., Brown, A. M., & Motluk, L. (2005b). Psychiatric emergency nurses in the emergency department: the success of the Winnipeg, Canada experience. *Journal of Emergency Nursing*, 31(4), 351-356. doi: 10.1016/j.jen.2005.03.008
- Crowley, J. J. (2000). A clash of cultures: A&E and mental health. *Accident and Emergency Nursing*, 8(1), 2-8. doi: 10.1054/aaen.1999.0061
- Cunningham, D., Stephan, S. H., Paternite, C., Schan, S., Weist, M., Adelsheim, S., & Flaspohler, P. (2007). Stakeholders' perspectives on the recommendations of the President's New Freedom Commission on Mental Health. [Research Support, U.S. Gov't, Non-P.H.S. Research Support, U.S. Gov't, P.H.S.]. *Psychiatric Services*, 58(10), 1344-1347. doi: 10.1176/appi.ps.58.10.1344
- ENA. (2008). Competencies for nurse practitioners in emergency care. *Emergency Nurses Association*.
- ENA. (2010). Emergency Care Psychiatric Clinical Framework: Emergency Nurses Association.
- Eppling, J. (2008). First encounters: a psychiatric emergency program. *Journal of Emergency Nursing*, 34(3), 211-217. doi: 10.1016/j.jen.2007.04.020
- Essential Psychiatric, Mental Health and Substance Use Competencies for the Registered Nurse. (2012) (Vol. 26, pp. 80-110): Psychiatric Mental Health Substance Abuse Essential Competencies Taskforce.
- Ewers, P., Bradshaw, T., McGovern, J., & Ewers, B. (2002). Does training in psychosocial interventions reduce burnout rates in forensic nurses? *Journal of Advanced Nursing*, 37(5), 470-476.
- Fourie, W. J., McDonald, S., Connor, J., & Bartlett, S. (2005). The role of the registered nurse in an acute mental health inpatient setting in New Zealand: perceptions versus reality. *Int J Ment Health Nurs*, 14(2), 134-141. doi: 10.1111/j.1440-0979.2005.00370.x

- Gerdtz, M. F., Weiland, T. J., Jelinek, G. A., Mackinlay, C., & Hill, N. (2012). Perspectives of emergency department staff on the triage of mental health-related presentations: Implications for education, policy and practice. *Emerg Med Australas*, 24(5), 492-500. doi: 10.1111/j.1742-6723.2012.01592.x
- Gleason, S., Holloman, H., McLeod, W., Schumacher, J., Whitfield, J. (2010). Using a single-item rating scale as a psychiatric behavioral management triage tool in the emergency department. *Journal of Emergency Nursing*, 36(5), 434-438.
- Glover, D. E., Newkirk, L. E., Cole, L. M., Walker, T. J., & Nader, K. C. (2006). Perioperative clinical nurse specialist role delineation: a systematic review. [Review]. *AORN Journal*, 84(6), 1017-1030. doi: 10.1016/S0001-2092(06)63999-9
- Gurvis, J. P., & Grey, M. T. (1995). The anatomy of a competency. *Journal of Nursing Staff Development*, 11(5), 247-252.
- Happell, B., Summers, M., & Pinikahana, J. (2002). The triage of psychiatric patients in the hospital emergency department: a comparison between emergency department nurses and psychiatric nurse consultants. *Accident and Emergency Nursing*, 10(2), 65-71.
- Hart, B. (2006). ENA: Advocating care for psychiatric emergency patients. *Journal of Emergency Nursing*, 34(4), 383-391.
- Hobgood, C., Villani, J., & Quattlebaum, R. (2005). Impact of emergency department volume on registered nurse time at the bedside. *Annals of Emergency Medicine*, 46(6), 481-489. doi: 10.1016/j.annemergmed.2005.07.014
- Hofmeyer, A., & Stuhlmiller, C. (2002). Mental Health in Emergency Departments. External Evaluation Report. Adelaide: Department of Human Services.
- Hogan, M. F. (2003). The President's New Freedom Commission: recommendations to transform mental health care in America. *Psychiatric Services*, 54(11), 1467-1474.

- Holdsworth, N., Belshaw, D., & Murray, S. (2001). Developing A&E nursing responses to people who deliberately self-harm: the provision and evaluation of a series of reflective workshops. *Journal of Psychiatric and Mental Health Nursing*, 8(5), 449-458.
- Hollingsworth, J. C., Chisholm, C. D., Giles, B. K., Cordell, W. H., & Nelson, D. R. (1998). How do physicians and nurses spend their time in the emergency department? [Comparative Study Research Support, Non-U.S. Gov't]. *Annals of Emergency Medicine*, 31(1), 87-91.
- Hunt, E. (1993). On avoiding "psych" patients. *Journal of Emergency Nursing*, 19(5), 375-376.
- IHA. (2007). Best Practices for the Treatment of Patients with Mental and Substance Use Illnesses in the Emergency Department.: Illinois Hospital Association Behavioral Health Steering Committee.
- Indig, D., Copeland, J., Conigrave, K. M., & Rotenko, I. (2009). Attitudes and beliefs of emergency department staff regarding alcohol-related presentations. [Research Support, Non-U.S. Gov't]. *International emergency nursing*, 17(1), 23-30. doi: <http://dx.doi.org/10.1016/j.ienj.2008.08.002>
- Institute Of, M. (2006). IOM report: the future of emergency care in the United States health system. *Academic Emergency Medicine*, 13(10), 1081-1085. doi: 10.1197/j.aem.2006.07.011
- Institute of Medicine Report on The Mental Health and Substance Abuse Workforce (2012): Institute of Medicine.
- JCAHO. (1997). Joint Commission on Accreditation of Healthcare Organizations. Comprehensive Accreditation Manual for Hospitals: the Official Handbook, Management of the Environment of Care chapter. (Revisions appear in italics and become effective Jan. 1, 1998.). *Joint Commission Perspectives*, 17(1), EC7-9.
- Jones, J., & Lowe, T. (2003). The education and training needs of qualified mental health nurses working in acute adult mental health services. *Nurse Education Today*, 23(8), 610-619.
- Keogh, B., Doyle, L., & Morrissey, J. (2007). Suicidal behaviour. A study of emergency nurses' educational needs when caring for this patient group. *Emergency Nurse*, 15(3), 30-35.

- Kerrison, S. A., & Chapman, R. (2007). What general emergency nurses want to know about mental health patients presenting to their emergency department. *Accident and Emergency Nursing*, 15(1), 48-55.
- Kudless, M. W., & White, J. H. (2007). Competencies and roles of community mental health nurses. *Journal of Psychosocial Nursing and Mental Health Services*, 45(5), 36-44.
- Mackay, N., & Barrowclough, C. (2005). Accident and emergency staff's perceptions of deliberate self-harm: attributions, emotions and willingness to help. *British Journal of Clinical Psychology*, 44(Pt 2), 255-267. doi: 10.1348/014466505X29620
- McAllister, M., Creedy, D., Moyle, W., & Farrugia, C. (2002). Nurses' attitudes towards clients who self-harm. [Research Support, Non-U.S. Gov't]. *Journal of Advanced Nursing*, 40(5), 578-586.
- McCoy, E. (2010). Development of Emergency Care Psychiatric Clinical Framework. *ENA Connection*, 28.
- McLaughlin, C. (1994). Casualty nurses' attitudes to attempted suicide. *Journal of Advanced Nursing*, 20(6), 1111-1118.
- McMillan, S. C., Heusinkveld, K., Chai, S., Miller Murphy, C., & Huang, C. Y. (2002). Revising the blueprint for the Oncology Certified Nurse (OCN) examination: a role delineation study. *Oncology Nursing Forum*, 29(9), E110-117. doi: 10.1188/02.ONF.E110-E117
- McMillan, S. C., Heusinkveld, K. B., & Spray, J. (1995). Advanced practice in oncology nursing: a role delineation study. *Oncology Nursing Forum*, 22(1), 41-50.
- Pellino, T. A., Willens, J., Polomano, R. C., & Heye, M. (2002). The American Society of Pain Management Nurses practice analysis: role delineation study. *Pain Manag Nurs*, 3(1), 2-15.
- Pitts, S. R., Niska, R. W., Xu, J., & Burt, C. W. (2008). National Hospital Ambulatory Medical Care Survey: 2006 emergency department summary. *Natl Health Stat Report*(7), 1-38.
- The President's New Freedom Commission on Mental Health. (2003).
- Redman, R., Lenburg, C., & Hinton, P. (1999). Competency Assessment: Methods for Development and Implementation in Nursing Education. *The Online Journal of Issues in Nursing*, 4(2).

- Role delineation of the registered nurse in a staff position in gastroenterology. (2001). [Guideline Practice Guideline]. *Gastroenterology Nursing*, 24(4), 202-203.
- Sands, N. (2007). Mental health triage: towards a model for nursing practice. *Journal of Psychiatric and Mental Health Nursing*, 14(3), 243-249. doi: 10.1111/j.1365-2850.2007.01069.x
- Secker, J., Pidd, F., & Parham, A. (1999). Mental health training needs of primary health care nurses. *Journal of Clinical Nursing*, 8(6), 643-652.
- Smart, D., Pollard, C., & Walpole, B. (1999). Mental health triage in emergency medicine. *Australian and New Zealand Journal of Psychiatry*, 33(1), 57-66; discussion 67-59.
- Stefan, S. (2006). Emergency department assessment of psychiatric patients: Reducing inappropriate inpatient admissions.
- Stuhlmiller, C., Tolchard, B., Thomas, L. (2005). Increasing confidence of emergency department staff in responding to mental health issues: An educational initiative. *Australian Emergency Nursing Journal*, 7(1).
- Suokas, J., Suominen, K., & Lonnqvist, J. (2009). The attitudes of emergency staff toward attempted suicide patients: a comparative study before and after establishment of a psychiatric consultation service. *Crisis*, 30(3), 161-165. doi: 10.1027/0227-5910.30.3.161
- Thompson, P., & Lulham, K. (2007). Clinical nurse leader and clinical nurse specialist role delineation in the acute care setting. *Journal of Nursing Administration*, 37(10), 429-431. doi: 10.1097/01.NNA.0000285154.81774.14
- White, A. (2010a). An evidence-based clinical guideline for initial management of behavioral emergencies. *Journal of Emergency Nursing*, 36(5), 450-454. doi: 10.1016/j.jen.2008.12.012
- White, A. (2010b). Managing behavioral emergencies: striving toward evidence-based practice. *Journal of Emergency Nursing*, 36(5), 455-459. doi: 10.1016/j.jen.2008.12.013
- Wynaden, D., Chapman, R., McGowan, S., McDonough, S., Finn, M., & Hood, S. (2003). Emergency department mental health triage consultancy service: a qualitative evaluation. *Accident and Emergency Nursing*, 11(3), 158-165.

Appendix A

Figure 1. Survey Items

1. How frequently do you perform the following nursing functions at your job? (i.e. Never, Rarely, Sometimes, Often, All of the Time)

Assessment

Assess for suicidal and/or homicidal ideation in a patient?

Assess a patient's psychiatric history?

Assess a patient's alcohol and/or substance abuse history?

Perform psychiatric tests (For example, Mini-Mental State Examination MMSE or Beck Depression Inventory BDI)?

Assess and/or review psychiatric medications with a patient?

Tasks

Administer psychotropic medications?

— Use techniques to de-escalate an agitated patient?

Apply strategies to reduce patient harm to self and/or others?

Manage symptoms in patients who have psychiatric disorders?

Identify unusual changes in behavior and intervene appropriately?

Knowledge

Apply knowledge of common psychiatric medications, including mechanism of action, side-effects and client education needs?

Apply knowledge of medication management of common psychiatric disorders?

Apply knowledge of pathophysiology of common psychiatric diagnoses?

Apply knowledge of evidence-based instruments to assess risk for common psychiatric problems (e.g. Mini-Mental Status Exam, MMSE and Suicide Scales)?

Apply knowledge of Motivational Interviewing techniques to express empathy, avoid argument and support self-efficacy?

2. How important are the following nursing functions at your job? (i.e. Not Important, Somewhat Important, Indifferent, Very Important, Essential)

Assessment

Assess for suicidal and/or homicidal ideation in a patient?

Assess a patient's psychiatric history?

Assess a patient's alcohol and/or substance abuse history?

Perform psychiatric tests (For example, Mini-Mental State Examination MMSE or Beck Depression Inventory BDI)?

Assess and/or review psychiatric medications with a patient?

Tasks

Administer psychiatric medications?

Use techniques to de-escalate an agitated patient?

Apply strategies to reduce patient harm to self and/or others?

Manage symptoms in patients who have psychiatric disorders?

Identify unusual changes in behavior and intervene appropriately?

Knowledge

Apply knowledge of common medications, including mechanism of action, side-effects and client education needs?

Apply knowledge of medication management of common psychiatric disorders?

Apply knowledge of pathophysiology of common psychiatric diagnoses?

Apply knowledge of evidence-based instruments to assess risk for common psychiatric problems (e.g. Mini-Mental Status Exam, MMSE and Suicide Scales)?

Apply knowledge of Motivational Interviewing techniques to express empathy, avoid argument and support self-efficacy?

3. How would you rate your ability in the following nursing functions at your job? (i.e. Very Poor, Poor, Fair, Good, Very Good)

Assessment

Assess for suicidal and/or homicidal ideation in a patient?

Assess a patient's psychiatric history?

Assess a patient's alcohol and/or substance abuse history?

Perform psychiatric tests (For example, Mini-Mental State Examination MMSE or Beck Depression Inventory BDI)?

Assess and/or review psychiatric medications with a patient?

Tasks

Administer psychiatric medications?

Use techniques to de-escalate an agitated patient?

Apply strategies to reduce patient harm to self and/or others?

— Manage symptoms in patients who have psychiatric problems?

Identify unusual changes in behavior and intervene appropriately?

Knowledge

Apply knowledge of common medications, including mechanism of action, side-effects and client education needs?

Apply knowledge of medication management of common psychiatric disorders?

Apply knowledge of pathophysiology of common psychiatric diagnoses?

Apply knowledge of evidence-based instruments to assess risk for common psychiatric illnesses (e.g. Mini-Mental Status Exam, MMSE and Suicide Scales)?

Apply knowledge of Motivational Interviewing techniques to express empathy, avoid argument and support self-efficacy?

Demographic Questions

- 1. Are you currently a licensed and practicing Emergency RN?**
- 2. Age: What is your age?**
 - a. 18-24 years old
 - b. 25-34 years old
 - c. 35-44 years old
 - d. 45-54 years old
 - e. 55-64 years old
 - f. 65-74 years old
 - g. 75 years or older
- 3. Please specify your race/ethnicity:**
 - a. White
 - b. Hispanic or Latino
 - c. Black or African American
 - d. Native American or American Indian
 - e. Asian/Pacific Islander
 - f. Other
 - g. Prefer not to answer
- 4. Education: What is the highest degree or level of school you have completed? If currently enrolled, what is the highest degree received?**
 - a. Associate Degree (e.g. AA, AS)
 - b. Bachelor's Degree (e.g. BA, BS)
 - c. Master's Degree (e.g. MA, MS)
 - d. Professional Degree (e.g. MD, DDS, LLB, JD)
 - e. Doctorate (e.g. PhD, EdD)
 - f. Prefer not to answer

5. Employment status: Are you currently working?

- a. Full-time
- b. Part-time
- c. Per-diem
- d. Prefer not to answer

6. How long have you been a registered nurse?

- a. < 1 year
- b. 1-5 years
- c. 6-10 years
- d. 11-15 years
- e. 16-20 years
- f. 21-25 years
- g. > 25 years

7. How long have you been in your current position?

- a. < 6 months
- b. 6 months-1 year
- c. 2-3 years
- d. 4-5 years
- e. > 5 years

8. How much of your work time is spent in direct patient care activities?

- a. No patient care
- b. < 25%
- c. 26-50%
- d. 51-75%
- e. 76-100%

9. How often do you care for patients with psychiatric or mental illness?

- a. Rarely, 0-1 per month
- b. Sometimes, 2-5 per month
- c. Frequently, 5-10 per month
- d. Very Frequently, 10-20 per month

Table 1: Sample Demographic Characteristics

Characteristic	n = 75	%
Currently a licensed and practicing Emergency RN	75	100.0
What is your age?		
18-34 years old	37	49.3
35-44 years old	22	29.3
45 years and older	16	21.3
Race/Ethnicity		
White, non-Hispanic	57	78.1
Hispanic or Latino	3	4.1
Black or African American	0	0.0
Native American or American Indian	1	1.4
Asian/Pacific Islander	3	4.1
Other	3	4.1
Prefer not to answer	6	8.2
Highest degree or level of school completed		
Associate Degree	13	17.6
Bachelor's Degree	54	73.0
Master's Degree	7	9.5
Are you currently working?		
Full-time (career)	68	90.7
Full-time (traveler)	1	1.3
Part-time	4	5.3
Per-diem	2	2.7
How long have you been a registered nurse?		
< 5 years	22	29.3
5 years or more	53	70.7
How long have you been in your current position?		
< 5 years	39	52.0
5 years or more	35	46.7
Prefer not to answer	1	1.3
How much of your work time is spent in direct patient care activities?		
< 25%	7	9.3
26-75%	5	6.7
76-100%	62	82.7
Prefer not to answer	1	1.3
How often do you care for patients with psychiatric or mental illness?		
Rarely, 0-1 per month	2	2.7
Sometimes, 2-5 per month	6	8.0
Frequently, 5-10 per month	19	25.3
Very Frequently, 10-20 per month	48	64.0

Table 2: Emergency Nurses' Performance Rankings of Psychiatric Nursing Competencies

Performance Domain	Frequency		Importance		Self-Efficacy		p1	p2
	Mean	SD	Mean	SD	Mean	SD		
Assessment								
Assess for suicidal and/or homicidal ideation in a patient	3.01	0.92	3.44	0.86	3.13	0.78		*
Assess a patient's psychiatric history	2.83	0.83	3.16	0.87	2.79	0.92		*
Assess a patient's alcohol and/or substance abuse history	2.89	0.80	3.05	1.03	2.79	0.81		
Perform psychiatric tests ¹	0.64	1.06	1.81	1.29	0.89	1.12		*
Assess and/or review psychiatric medications with a patient	2.09	1.02	2.66	1.02	2.21	1.06		*
Tasks								
Administer psychotropic medications	2.95	0.80	3.47	0.74	3.49	0.74		
Use techniques to de-escalate an agitated patient	3.03	0.77	3.65	0.53	2.76	0.93	*	*
Apply strategies to reduce patient harm to self and/or others	3.04	0.73	3.67	0.60	2.91	0.84		*
Manage symptoms in patients who have psychiatric disorders	3.01	0.85	3.47	0.68	2.56	0.95	*	*
Identify unusual changes in behavior and intervene appropriately	2.95	0.84	3.46	0.76	2.84	0.84		*
Knowledge								
Apply knowledge of common psychiatric medications	2.40	0.89	3.03	0.85	2.23	0.99	*	*
Apply knowledge of medication management	2.31	0.96	3.03	0.90	2.23	1.04		*
Apply knowledge of pathophysiology of common psychiatric diagnoses	1.96	0.87	2.60	1.23	1.89	1.08		*
Apply knowledge of evidence-based instruments ¹	0.99	1.10	2.19	1.31	1.11	1.22		*
Apply knowledge of Motivational Interviewing techniques	1.72	1.20	2.58	1.27	1.85	1.14		*

p1=difference in mean scores for frequency and self-efficacy; p2=difference in mean scores for importance and self efficacy; * = difference in mean scores are significant at p<0.05

¹ e.g., Mini-Mental State Examination MMSE or Beck Depression Inventory BDI), Suicide Scales

Table 3: Linear Regression of Emergency Nurses' Self-Efficacy in Performing Specific Assessments (n=75)^a

Independent Variables	Suicidal Ideation			Psychiatric History			Alcohol Substance Abuse History		
	B	95% CI	p	B	95% CI	p	B	95% CI	p
Frequency Performing Assessment	0.10	[-0.12, 0.31]	0.39	0.44	[0.17-0.72]	<0.01 **	0.47	[0.25-0.68]	<0.01 **
Importance of Assessment	0.19	[-0.03, 0.41]	0.09	0.12	[-0.14-0.38]	0.35	0.18	[0.012-0.35]	0.04 *
Age									
18 - 34 years	-0.24	[-0.81, 0.32]	0.39	-0.20	[-0.86-0.47]	0.56	-0.18	[-0.7-0.33]	0.47
35 - 44 years	0.12	[-0.39, 0.62]	0.65	-0.23	[-0.83-0.36]	0.44	<0.01	[-0.46-0.45]	0.96
45 years and older	-----	-----	-----	-----	-----	-----	-----	-----	-----
Length of Time in Position									
Less than 5 years	-0.30	[-0.80, 0.20]	0.23	-0.30	[-0.85-0.25]	0.28	-0.23	[-0.68-0.21]	0.29
5 years or more	-----	-----	-----	-----	-----	-----	-----	-----	-----

Independent Variables	Psychiatric Tests			Psychiatric Medication		
	B	95% CI	p	B	95% CI	p
Frequency Performing Assessment	0.65	[0.47-0.83]	<0.01 **	0.50	[0.24-0.75]	<0.01 **
Importance of Assessment	0.25	[0.10-0.40]	<0.01 **	0.21	[-0.04-0.45]	0.10
Age						
18 - 34 years	-0.57	[-1.11--0.01]	0.04 *	-0.22	[-0.94-0.51]	0.55
35 - 44 years	-0.53	[-1.0--0.50]	0.03 *	-0.44	[-1.1-0.22]	0.19
45 years and older	-----	-----	-----	-----	-----	-----
Length of Time in Position						
Less than 5 years	-0.64	[-1.12--0.17]	<0.01 **	-0.18	[-0.82-0.46]	0.58
5 years or more	-----	-----	-----	-----	-----	-----

^aAll Models controlled for race/ethnicity, degree (associates, bachelor, masters), hours worked, length of time as registered nurse, frequency of caring for psychiatric patients. None of these covariates were significant in any of the models.

Table 4: Linear Regression of Emergency Nurses' Self-Efficacy in Performing Specific Tasks (n=75)^a

Independent Variables	Administer psychotropic medications			De-escalation Techniques			Strategies to reduce patient harm to		
	B	95% CI	p	B	95% CI	p	B	95% CI	p
	Frequency Performing Task	0.11	[-0.15, 0.37]	0.41	0.58	[0.29, 0.86]	<0.01 **	0.28	[-0.01, 0.56]
Importance of Task	0.34	[0.07, 0.62]	0.02 *	0.33	[-0.07, 0.72]	0.10	0.42	[0.1, 0.74]	0.01 *
Age									
18 - 34 years	-0.37	[-0.94-0.21]	0.21	-0.07	[-1.36--0.09]	0.03 *	-0.69	[-1.27,-0.11]	0.02 *
35 - 44 years	-0.26	[-0.75, 0.24]	0.30	-0.48	[-1.05, 0.08]	0.09	-0.50	[-1.01,-0.01]	0.05 *
45 years and older	-----	-----	-----	-----	-----	-----	-----	-----	-----
Length of Time in Position									
Less than 5 years	-0.05	[-0.52-0.42]	0.83	-0.23	[-0.78-0.32]	0.41	-0.34	[-0.84-0.16]	0.18
5 years or more	-----	-----	-----	-----	-----	-----	-----	-----	-----

Independent Variables	Manage Symptoms			Identify unusual changes in behavior		
	B	95% CI	p	B	95% CI	p
	Frequency Performing Task	0.39	[0.12-0.65]	0.01 *	0.50	[0.26, 0.74]
Importance of Task	0.37	[0.06-0.67]	0.02 *	0.11	[-0.13-0.36]	0.35
Age						**
18 - 34 years	-0.64	[-1.29-0.01]	0.05 *	-0.72	[-1.23,-0.23],	<0.01
35 - 44 years	-0.29	[-0.85, 0.27]	0.31	-0.41	[0.87,0.04]	0.08
45 years and older	-----	-----	-----	-----	-----	----- **
Length of Time in Position						
Less than 5 years	-0.03	[-0.59-0.52]	0.90	-0.21	[-0.66-0.24]	0.36
5 years or more	-----	-----	-----	-----	-----	-----

^aAll Models controlled for race/ethnicity, degree (associates, bachelor, masters), hours worked, length of time as registered nurse, frequency of caring for psychiatric patients. None of these covariates were significant in any of the models.

Table 5: Linear Regression of Emergency Nurses' Knowledge-related Self-Efficacy (n=75)^a

	Medications			Medication Management			Pathophysiology		
	B	95% CI	p	B	95% CI	p	B	95% CI	p
Independent Variables									
Frequency of Knowledge Application	0.58	[0.35-0.81]	<0.01 **	0.55	[0.34-0.76]	<0.01 **	0.52	[0.26-0.78]	<0.01 **
Importance of Knowledge Application	0.18	[-0.06-0.41]	0.14	0.36	[0.15-0.58]	<0.01 **	0.33	[0.16-0.51]	<0.01 **
Age									
18 - 34 years	-0.63	[-1.23--0.03]	0.04 *	-0.32	[-0.91-0.27]	0.29	-0.65	[-1.34-0.04]	<0.01 **
35 - 44 years	-0.15	[-0.69-0.38]	0.56	-0.13	[-0.66-0.4]	0.63	-0.23	[-0.85-0.38]	0.06
45 years and older	-----	-----	-----	-----	-----	-----	-----	-----	-----
Length of Time in Position									
Less than 5 years	-0.21	[-0.73-0.31]	0.42	-0.18	[-0.7-0.33]	0.48	-0.09	[-0.67-0.5]	0.80
5 years or more	-----	-----	-----	-----	-----	-----	-----	-----	-----
<hr/>									
	Use of evidence-based instruments			Motivational Interviewing					
	B	95% CI	p	B	95% CI	p			
Independent Variables									
Frequency of Knowledge Application	0.72	[0.51-0.93]	<0.01 **	0.46	[0.26-0.66]	<0.01			
Importance of Knowledge Application	0.24	[0.07-0.41]	<0.01 **	0.26	[0.08-0.44]	<0.01			
Age									
18 - 34 years	0.49	[-0.15-1.13]	0.13	-0.45	[-1.1-0.2]	0.17 **			
35 - 44 years	0.34	[-0.21-0.9]	0.22	-0.26	[-0.84-0.32]	0.37 **			
45 years and older	-----	-----	-----	-----	-----	-----			
Length of Time in Position									
Less than 5 years	-0.34	[-0.87-0.2]	0.21	-0.29	[-0.86-0.28]	0.31			
5 years or more	-----	-----	-----	-----	-----	-----			

^aAll Models controlled for race/ethnicity, degree (associates, bachelor, masters), hours worked, length of time as registered nurse, frequency of caring for psychiatric patients. None of these covariates were significant in any of the models.