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Integrating Physical and Mental Health Concepts

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Abstract

Nurses frequently encounter patients with physical and mental health comorbidities and must be prepared to deliver appropriate care. The purpose of this integrated literature review was to explore best practices in prelicensure/undergraduate nursing education, for the integration of physical and mental health nursing skills. Seven quantitative and eight qualitative research studies were evaluated for this project, fourteen of which were published between 2012-2015 (one older study was included, from 1999). Nineteen additional articles and white papers related to concept and skills integration provided background and context. Gestalt theory was used to guide and interpret this exploration. A broad range of initiatives were found to improve mental health concept integration within undergraduate curricula. When combined, they suggest a comprehensive guide for the integration of physical and mental health concepts in prelicensure nursing education. The goal of prelicensure nursing education is to prepare nurses to practice competently in a variety of health settings; this includes addressing both physical and mental health needs with each patient encounter. Integrating these concepts during prelicensure education prepares nurses for this practice reality.

Keywords: prelicensure, undergraduate, mental health, psychiatric, integration, holistic, education

Dedication

This project is dedicated to my son, Arif James (AJ) Weiss, who lost his battle with opioid addiction on September 4, 2016, at the age of 26. My prayer is for the nursing community to demonstrate continued leadership in resisting the marginalization of addiction and mental health care needs in our communities.

Acknowledgment

I am writing this acknowledgment to express my sincere gratitude to everyone who has helped me along my graduate school journey. The support of my family was essential. My husband, Jeff, never stopped believing in me, nor permitted me to stop believing in myself. My parents, Marvin and Alice Weiss, provided help and encouragement in more ways than are possible to list here. I was also blessed to have amazing professors who transferred their passion for lifelong learning to me. Dr. Christine Miller's patience and guidance as both the course instructor and my assigned reader, made this final project truly come together. Thank you, all.

An Exploration of Best Practices in Prelicensure Nursing Education:

Integrating Physical and Mental Health Concepts

Introduction

Background

In 2008, the American Association of Colleges of Nursing (AACN) published The

Essentials of Baccalaureate Education for Professional Nursing Practice. This document

established a comprehensive framework for the prelicensure preparation of nurses. In its

introduction, it sets forth that "the baccalaureate generalist graduate is prepared to practice from

a holistic, caring framework" as well as to "practice in a variety of health care settings" (AACN,

2008, p. 8). Holistic care may be described as an approach which treats persons as whole beings,

while acknowledging their many dimensions – physical, psychological/psychiatric, social, and

spiritual (Zamanzadeh, Jasemi, Valizadeh, Keogh, & Taleghani, 2015). These statements affirm

the goal of educating nurses as generalists who enter practice with a broad range of knowledge

and skills. This paper will present current best practices in prelicensure nursing education,

relative to the integrated delivery of physical and mental health nursing care.

Relevance

Educating student nurses on a broad range of concepts and skills is essential to the goal of

preparing them to provide holistic care. It is also necessary for students to learn how to integrate

those skills competently in clinical practice. According to the AACN (2008), informed decision-

making requires newly-graduated baccalaureate nurses to synthesize knowledge from multiple

disciplines. Of particular importance is the ability for nurses to apply both physical and mental

health nursing skills to every patient encounter. Integrated care acknowledges the

interrelatedness of these realms: physical and mental well-being are interconnected, with

mentally healthy persons more likely to be physically healthy, and vice versa (Office of Disease Prevention and Health Promotion [ODPHP], 2016; World Health Organization [WHO], 2008).

Nurses encounter a variety of comorbid presentations in any specialty (Cavanaugh, 2014; Happell & McAllister, 2014; Kameg, Englert, Howard, & Perozzi, 2013). There are many factors contributing to this phenomenon. Data show that patients with a psychiatric diagnoses are more likely to engage in risky health behaviors (Robson, Haddad, Gray, & Gournay, 2013), and are less likely to take preventative or health-promotional measures (ODPHP, 2016). These behaviors may contribute to an increased prevalence of physical disease. People also specifically seek help for psychiatric symptoms within medically-based treatment settings, including acute care, due to the decline in availability of mental health treatment programs (Pharez, Walls, Roussel, & Broome, 2008). Given these circumstances it is easy to understand why nurses working in any specialty should anticipate encountering patients with physical and psychiatric comorbidities.

This clinical reality reflects a bidirectional need for competency in essential physical and mental health competencies that should exist upon entry into professional practice. Nurses choosing to work in medical, surgical, or other physical health specialties need the capability of applying mental health nursing concepts, and those specializing in psychiatric/mental health nursing must retain their physical assessment skills (Unsworth, McKeever, & Kelleher, 2012; Wand, 2011). Health promotion activities undertaken in any setting should incorporate strategies from both realms (Wand, 2011). Primary care also provides an important setting for patients with psychiatric distress to receive appropriate screenings, referrals, or treatment (Sokhela, 1999; WHO, 2008). Providing care in this comprehensive manner demonstrates great potential to significantly improve patient outcomes; yet, nurses are not consistently taught how to integrate their care. This writer sought to explore practices in prelicensure education that may be

contributing to this phenomenon.

Problem and Need

While the integration of these nursing skills appears to have significant merit as an effective approach to practice, it remains uncommon. Health care services continue to be structured around "hemispheres of care," a phenomenon viewed as an "artificial division" of physical versus mental health needs (Wand, 2011, p. 133). This division leads to suboptimal patient outcomes, and ultimately drives up costs (Kameg et al., 2013; Wand, 2011). Patients who present on a medical ward are subject to care driven by that unit's related specialty, such as cardiac, orthopedic, respiratory, oncology, or surgical. Mental health needs may not be properly identified in those settings without staff being trained to assess for them. Even if psychiatric distress is recognized, patients may simply be (physically) stabilized and then transferred elsewhere for their mental health needs. Similarly, when a mental health diagnosis is a patient's most prominent need, they may find themselves admitted to a psychiatric unit, where their physical concerns are not addressed (Hemingway, Clifton, Stephenson, & Edward, n.d.; Robson et al., 2013).

This lack of integration in practice may be rooted in deficits identified in prelicensure nursing education; particularly, a lack of emphasis on psychiatric/mental health nursing skills. According to Brown (2008), psychiatric nursing competencies often appear to be sidelined in undergraduate nursing programs. Most programs structure their curricula around a biomedical approach that minimizes the importance of mental health (Zamanzadeh et al., 2015) and prioritizes technical skills over therapeutic aptitude (Hewitt, 2009). This results in a significant lack of time and attention spent on mental health nursing. Students often receive brief didactic exposure to this topic, occurring late in their program; this may or may not be accompanied by a

small clinical component (Hunter, Weber, Shattell, & Harris, 2015; Kameg et al., 2012; Spence, Garrick, & McKay, 2012), conveying a sense of diminished value of these skills (Hunter et al., 2015). In programs where students have the advantage of clinical training to augment theoretical teaching, "exposure to 'classic' clinical examples is sporadic," and faculty are challenged to evaluate student learning due to the random nature of experiences (Brown, 2008, p. 640). Innovative strategies, such as simulation, that increase clinical exposure to psychiatric/mental health nursing skills, hold potential to fill part of this training gap; however, they may be resisted by faculty due to misconceptions about their usefulness in portraying holistic care.

In addition to an overall deficiency of mental health content in prelicensure curricula, such concepts are rarely taught in tandem with physical health and illness; rather, they are presented completely separately (Kameg et al., 2013). This strategy overlooks the interrelatedness of physical and mental health. Furthermore, it does not convey the need for nurses to maintain essential skills across multiple domains of nursing when they begin professional practice. Students who are not taught to integrate these concepts graduate ill-prepared and unmotivated to provide holistic care.

Integrative Review

Purpose

The goal of this integrative review was to identify and present current best practices in prelicensure nursing education, relative to the integrated delivery of physical and mental health nursing care. Existing literature was searched regarding educational strategies that have been successful in preparing new nurses to practice from a more holistic approach. Training programs which were created for the continuing education of staff nurses were also considered in the context of their potential to inform or adapt to prelicensure nursing education. The results of this

exploration of the literature led to discoveries of various initiatives to successfully integrate these concepts for student nurses.

The questions which guided this review are: what constitutes best practice in teaching mental health nursing concepts and skills? What teaching-learning strategies might improve holistic integration of physical and mental health concepts and skills? And, what do these findings suggest in regards to adjustments needed in prelicensure nursing education?

Methods

A literature search was conducted in three databases accessed through the online library at Cardinal Stritch University: the Nursing Reference Center, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), and PubMed. Key words and phrases used include the following: holistic nursing education, holistic nursing practice, mental health nursing education, best practice in prelicensure education, integrated undergraduate education, integrated mental and physical health nursing, and mental health nursing.

Search efforts which included the term "holistic" returned few applicable results, as most were too broad. The best results relative to nursing education came from the Nursing Reference Center, using various combinations of the following words: integrated, mental health, nursing, prelicensure, undergraduate, and education. Most of the articles which informed this exploration came from that database. CINAHL provided a few worthy articles on education initiatives being used after entry into professional practice. PubMed did not yield anything beyond what was already found in the other two databases.

A total of fifteen research studies were evaluated for this integrative review. Research-based sources were initially sorted onto evidence tables. These included seven quantitative studies (Appendix A) and eight qualitative studies (Appendix B). Customized grading

instructions and scales were provided by the Capstone course instructor. Quantitative studies were rated against twelve criteria, and qualitative studies used ten; up to three points were awarded per item. To be considered good evidence, or level QIII, quantitative studies needed to earn between 26-36 points, and qualitative needed scores falling between 22-30 points, demonstrating that 75-100% of criteria were met. The next ranking, fair quality or level QII, was assigned to quantitative studies earning 18-25 points, and qualitative with 15-21 points, representing 50-75% of criteria being met. The majority of the research reviewed for this paper qualified as good evidence, with five quantitative and six qualitative studies ranked at level QIII. The remaining four studies were graded at QII. Fourteen of those studies were published between 2012 and 2015; one older study, circa 1999, also warranted inclusion. An additional nineteen articles and white papers were used to inform this project, for a total of thirty-four sources.

Theoretical Framework

Gestalt theory contributed the framework for exploration of this topic. One of the tenets of Gestalt learning theory is that the brain attempts to fill gaps in perceptions (Learning-Theories.com, 2016). A simple example of this in action is the phenomenon which occurs when a person is presented with fragments of a picture: the brain works to fill those voids, drawing from relevant knowledge and experience to see the picture as a whole. The brain also functions this way when presented with pieces of a broader concept – it attempts to make logical sense of partial data. Knowledge that the brain stores as closely linked or related will be retrieved first when attempting to fill such gaps. In this way, Gestalt theory suggests that synthesizing physical and mental health nursing concepts as they are learned helps the human brain integrate the information rather than treating it as unrelated (Cook, 2013).

Adapting undergraduate nursing curricula to capitalize on this phenomenon means teaching physical and mental health concepts congruently, to permit the brain to synthesize the information during both storage and retrieval. Nurses taught this way during their prelicensure education may exhibit improved clinical reasoning skills in practice. It would enable them to exercise a more holistic approach to care, resulting in more efficient, accurate, clinical assessments on complex patients (Cook, 2013).

While Gestalt theory helps validate the integration of physical and mental health concepts as a successful teaching strategy, it also informs the synthesis of findings from this literature search. The results yielded a wide variety of different educational approaches or instructional enhancements that have contributed to successful concept integration. These could be combined to suggest a comprehensive, best-practice approach to prelicensure nursing instruction. Gestalt theory states that "the whole is greater than the sum of its parts" (Learning-Theories.com, 2016). This aligns well with the goal of incorporating multiple, evidence-based, teaching-learning strategies to create one robust approach.

This review of the literature sought to identify best practices in the integration of physical and mental health concepts in nursing education, in order to propose a comprehensive, cohesive, conceptual framework for prelicensure curricula.

Results

The literature search yielded a wide variety of strategies being used to increase the content, scope, and effective integration of mental health concepts into biomedical models of prelicensure nursing curricula. Several health care organizations have published results of related projects designed to improve their care delivery models, bridging the gap between their staff nurses' prelicensure training and the movement toward a more holistic practice philosophy.

Though originally designed for practicing nurses, rather than for nursing students, some of those innovations also deserve attention. The literature supports three successful elements to guide necessary improvements to curricula: increase mental health content throughout undergraduate nursing programs; teach the interrelatedness of physical and mental health through both concept and skills integration; and, use proven, innovative, teaching methodologies to deliver this content.

Students need more exposure to mental health concepts and skills. Both students and practicing nurses have identified receiving minimal education on mental health concepts and skills during their prelicensure education. Simply increasing the amount of time spent on psychiatric nursing concepts appears to improve nurses' abilities to apply such skills, regardless of eventual specialization (Moxham, McCann, Usher, Farrell, & Crookes, 2011). One quantitative study found strong support among lecturers for ramping up the inclusion of mental health concepts throughout undergraduate curricula, touting the benefits of incremental learning that comes from earlier – and increased – allocation of time to such content (Spence et al., 2012). That study also emphasized the importance of following up with clinical application and reinforcement.

Adding content to curricula may require lengthening the duration of prelicensure programs. Happell and McAllister (2014) found that programs shorter than three years in length allowed insufficient time to train nurses as true generalists, as mental health ended up sidelined in favor of purely biomedical content. Increased time could permit both more and better quality exposure to concepts, allowing for complex presentations that demonstrate integration. New graduates responding to one survey agreed that in addition to more mental health content, adequate time to thoroughly explore it would help them build confidence in using a holistic

approach to care (Hunter et al., 2015). Earlier inclusion was also found to favorably influence nurses' perceptions of psychiatric/mental health nursing overall (McCann et al., 2009, as cited in Neville & Goetz, 2014; Moxham et al., 2011; Spence et al., 2012). It may be concluded that simply granting these concepts a more prominent place within curricula fosters an awareness of their importance among student nurses, while also helping them cultivate the skill set.

Physical and mental health concepts and skills lack integration in nursing education. Results of this review indicate that physical and mental health concepts are usually taught in isolation. Respondents to Zamanzadeh et al. (2015) study estimated that "more than 90% of [their] lessons were about the physical problems of patients" (p.217). Those students felt their experiences did not help them address patients as whole beings. Adding mental health content in general may offset this circumstance somewhat; however, researchers believe that the key to preparing nurses to provide holistic care really lies in the integrated teaching of physical and mental health concepts.

Many programs have centered efforts in this regard on revisions to their clinical training components. Simulation appears to be gaining favor as an effective method to improve both quantity and quality of integrated physical and mental health skills training. Recently, the National Council of State Boards of Nursing (NCSBN) sanctioned the increased use of simulation in prelicensure education when it published its randomized, controlled study showing no difference in clinical competence among students having up to 50% of their traditional clinical experiences replaced by simulation (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014). The ability to control for standardized content, and to permit faculty observation of student-patient interactions, are additional benefits of simulation that may be difficult to achieve with traditional clinical placements (Brown, 2008). Multiple methods of simulation have

been adapted to fit a more holistic vision. Each is distinguished by the method used to portray the patient, and each has both advantages and disadvantages.

Simulation with standardized patients (SPs) uses trained actors to fill the patient role. It offers structured, safe encounters that allow students to practice assessing body language, affect, mood, and various psychiatric symptoms. Students respond favorably to SP simulation. According to Bartlett and Butson (2014), students polled after SP encounters felt it was realistic and engaging, and helped them feel better prepared to perform assessment skills such as mental status exams in practice. Key to the success of this approach is using well-trained actors, capable of accurately reflecting symptoms while keeping scenarios aligned with learning objectives (Bartlett & Butson, 2014). Drawbacks of SPs may include the logistics of hiring, training, scheduling, and paying actors repeatedly; also, scenarios may lack integration if mental health is emphasized without incorporation of biomedical concepts.

Virtual patients (VPs) are a newer innovation in the world of clinical simulation. Actors replace both the patient and the nurse(s) in VP simulation. Scripted nurse-patient encounters are acted out and recorded. Students then view these vignettes online and periodically have to choose a response or action as each scenario unfolds. Their choices customize the experience, while also maintaining standardized, quality-controlled content. Guise, Chambers, & Valimaki (2012) assert that VPs offer many advantages in simulation-based nursing education. In addition to being able to view patients' body language, students also benefitted from being able to evaluate behaviors exhibited by the nurses in each scene. Therapeutic communication, therapeutic use of self, maintaining professional boundaries, applying de-escalation techniques, and avoiding the influence of bias or stigma, are a few such examples. It also greatly reduced inauthentic portrayals and was ultimately found to be more affordable than other forms of

simulation (Guise et al., 2012). Simulation using VPs has the benefit of being able to portray

patient encounters in any specialty and to integrate both physical and mental health needs.

Interestingly, high-fidelity simulation (HFS) was cited frequently in the literature as a

successful strategy to provide integrated medical-psychiatric training experiences. This was

surprising, given the inability of mannequins to display body language such as facial

expressions, posture, affect and mood. Those are some of the nonverbal communication

indicators which provide important mental health assessment data to nurses (Brown, 2008; Fay-

Hillier, Regan, & Gordon, 2012). The power of HFS in providing an integrated experience may

lie in its ability to overlay psychiatric distress atop physical deterioration more effectively than

other types of simulation. Positive results have been found in the ability of HFS to emphasize the

interrelatedness of physical and mental health conditions and for students to employ an

integrated approach to care. Kameg et al. (2013) used a quantitative, pre-test/post-test approach

to measure knowledge gain and retention after students participated in three, integrated patient

encounters: acute alcohol withdrawal; a wrist injury linked to intimate partner violence; and

identification of postpartum depression in a recently delivered mother. Results showed that at-

risk students had a significant improvement of relevant knowledge and skills following

participation in these exercises. A weakness of this study is that it did not provide comparative

testing on students exposed solely to traditional clinical training methods.

One unique simulation scenario, designed to employ HFS technology, challenged

students to recognize signs and symptoms of physical deterioration in a psychiatric patient

(Unsworth et al., 2012). Students participated in three simulated patient encounters: alcohol

intoxication; drug-induced psychosis; and, chest infection in a patient with Alzheimer's disease.

Focus groups later expressed that the integrated presentation of concepts helped them bridge the

divide between physical and mental health concepts, while also highlighting potential outcomes that had not previously been considered. Additional feedback from students stressed their desire to debrief on both technical and non-technical skills they used when navigating the encounters. This affirms their sense that they drew upon more than just physical assessment knowledge and skills, and had been challenged to use their mental health nursing knowledge as well.

Researchers also paid attention to student engagement with simulation activities. Murray (2014) specifically set out to evaluate HFS from the standpoint of student satisfaction. This qualitative study found a high level of enthusiasm for HFS as an integrated clinical training method, a sentiment matching responses to a follow-up survey conducted by Kameg et al. (2012) after their experiment. A desire for more use of simulation was also expressed by students in Unsworth et al. (2012) study. Student receptiveness further supports the potential for simulation to be both useful, and successful, as a strategy to increase student exposure to integrated clinical training opportunities.

The growing confidence in simulation as a best-practice strategy for holistic clinical training is reflected in a recent undertaking by the Open University of Hong Kong. They established a simulation center with the specific goal to integrate medical, psychiatric, and health maintenance training for their nursing students (Lee, Lee, Wong, Tsang, & Li, 2010). The project incorporates multiple varieties of simulation, including low-fidelity, high-fidelity, and a type of virtual reality. Nurse-educators from many regional countries have visited the center since its inception, to gain practical information on launching similarly integrated initiatives.

Of course, traditional clinical experiences still play a role in educating nurses about integrated care. Direct-care training opportunities occasionally took place at rehabilitation centers (Cavanaugh, 2014), though acute care still appeared to be the most common setting

(Cavanaugh, 2014; Spence et al., 2012). Community-based experiences appeared to be gaining

favor as an option for their ability to provide robust, integrated care experiences (Cavanaugh,

2014; Pharez et al., 2008; Spence et al., 2012). Pharez et al. (2008) found that students placed in

community settings were exposed to a wider range of concurrent psychosocial and general health

issues than in acute care or rehabilitation venues. The decline in number of inpatient psychiatric

facilities may further support the movement toward community settings for direct-care clinical

experiences, as data show more patients being diverted to those sites for care (Pharez et al.,

2008).

The most comprehensive example of such an initiative to integrate physical and mental

health nursing education might be a program created by the Western Institute of Technology at

Taranaki (WITT) in New Zealand (Bingham, 2015). In recognition of the inadequate mental

health content in their three-year, prelicensure, nursing degree program, WITT created a

curriculum they dubbed a "modern apprenticeship." It exposes students to mental health

concepts beginning their first week in the program, in both didactic *and* clinical settings. Every

health and illness topic is conceptualized in the context of both physical and mental health. Each

academic paper assigned requires integration of either a mental health or addiction component,

and clinical experiences include simulation to provide students with consistent opportunities to

practice skills integration. WITT has found improved clinical competency among their students;

however, they acknowledge that longer-term research would help validate the benefits of their

unique program.

Higher education would benefit from adopting innovative teaching-learning

strategies. Multiple studies in the literature explored the merits of newer, innovative strategies

for teaching holistic care. In addition to the integrated clinical simulation options described

earlier, a recurrent theme was to focus on who is doing the teaching, rather than just revising the

content or activity. Characteristics of the educator are shown to have significant influence on the

quality of student experiences; specifically, the use of educators with lived experience as

consumers of mental health services was hailed as a very effective approach (Byrne, Happell,

Welch, & Moxham, 2013; Hunter et al., 2015; Moxham et al., 2011; Pharez et al., 2008; Stacey

& Aubeeluck, 2015). Students taught by such educators consistently reported greater

understanding of mental illness, and enhanced self-awareness in relation to biased thinking

(Byrne et al., 2013; Stacey & Aubeeluck, 2015). The approach was also found to successfully

highlight both recovery-focused and consumer-driven care concepts in psychiatric/mental health

care, which were new paradigms for study participants (Byrne et al., 2013). The unique

interactions that occur between student and educator, when that educator has been a mental

health patient, were shown to help students see patients through a more holistic lens, resulting in

their improved ability to understand the interrelatedness of physical and mental wellness (Stacey

& Aubeeluck, 2015). Providing students with authentic, accurate, and consistent portrayals of

psychiatric patients may be the basis for placing such a high value on involving consumers as

educators. One theme in Unsworth et al. (2012) study was that authenticity of patient

presentations was critically important to achieving program objectives related to skills

competency. Results of another qualitative analysis categorized the use of consumers to inform,

design, and deliver undergraduate nursing education as essential (Moxham et al., 2011). The

concept of using educators with lived experience was evaluated on a broader basis within one

study. Student appreciation for holistic nursing improved when they were taught by faculty

members who had been patients in any setting, not just psychiatric, when compared to being

taught by persons who had never been on the receiving end of nursing care (Zamanzadeh et al.,

2015). Each of these studies acknowledged the inherent benefits associated with consumer-driven, authentic, design and delivery of holistic prelicensure nursing education.

Recruitment of educators with particular life experiences to teach specific courses may be impractical; accordingly, some focus has shifted to improving the educational approaches of existing faculty. Addressing behaviors that may perpetuate stigma was discussed frequently within the literature. Health care professionals often have misconceptions about mental health patients, that stem from stigma (Hardy & Kingsnorth, 2015; Spence et al., 2012; Stacey & Aubeeluck, 2015; Van der Kluit & Goossens, 2011), while a related phenomenon, stigma-by-association, directs similar bias against health professionals that work with these populations (Hunter et al., 2015). Higher education is not immune to these phenomena. Stigma, and stigma-by-association, are believed to contribute to a devaluation of psychiatric/mental health nursing skills among nurse-educators which then carries over to their students. This may explain why mentoring faculty to model a commitment to care integration was found to positively influence student attitudes about integrating physical and mental health skills. Students were more likely to exhibit a holistic approach to patient care when lecturers and clinical preceptors role-modeled integrated practice in an ethical way (Zamanzadeh et al., 2015).

Discussion and Recommendations

This integrative review sought to determine what constitutes best practice in teaching mental health concepts in prelicensure nursing education, including effective strategies for integrating physical and mental health nursing skills for holistic practice. Findings affirm that psychiatric/mental health nursing concepts are currently underrepresented within undergraduate nursing curricula. Complex patient presentations require nurses to have clinical competence that draws from multiple realms of nursing knowledge. According to Robson et al. (2013), changes in

prelicensure nursing curricula will be necessary in order to transition holistic care models into

practice. These changes may be summarized as: increasing content of mental health concepts

overall; integrating physical and mental health concepts throughout nursing education; and, using

innovative teaching-learning strategies that show promise in preparing nurses to provide holistic

care.

Increasing overall content requires introducing mental health content earlier and

incorporating it regularly throughout undergraduate programs. Programs need to be of adequate

length to accommodate such increases without losing necessary biomedical focus (Happell &

McAllister, 2014; Hunger et al., 2015). Simply increasing the amount of students' exposure to

mental health concepts throughout prelicensure curricula appears to improve the ability of nurses

to retain and apply such skills in an integrated way (Henderson et al., 2009, as cited in Neville &

Goetz, 2014; Moxham et al., 2011).

Accreditation standards may need to be adjusted to help drive an increased emphasis on

mental health concepts in prelicensure nursing education. Content standardization would help

ensure all new graduates enter practice with adequate exposure to integrated physical and mental

health concepts (Guise et al., 2012; Fiedler et al., 2012, as cited in Neville & Goetz, 2014).

Revising accreditation guidelines would also align with the call for undergraduate education to

prepare nurses capable of delivering integrated care.

Presenting concepts in an integrated manner is key to preparing nurses capable of

providing holistic care. As supported by Gestalt theory, concepts learned concurrently are stored

in the memory as interrelated (LearningTheories.com, 2016). This improves the learners'

capacity to retrieve and apply such skills in a holistic, integrated way. Making this integrated

approach a top priority in prelicensure education may require educators to modify both content

and methodologies, in both theoretical and clinical courses, to be effective.

  Several white papers in the literature identified specific theoretical subjects with a heavy biomedical emphasis, that could benefit from integration of mental health perspectives. Wand (2011) provides the example of health promotion courses focusing on physical concepts such as nutrition, exercise, and smoking cessation, while overlooking mental wellness and mental health promotion. Similarly, gaps were mentioned in the realms of psychopharmacology (Owen, 2016) and the pathophysiological basis of psychiatric diseases (Bingham, 2015; Owen, 2016). Additional examples of specific competencies that could be integrated throughout nursing curricula include therapeutic communication, therapeutic use of self, and interdisciplinary collaboration (Brown, 2008). Nurses would benefit from being taught to identify and respond to psychological distress, signs and symptoms of mental illness, and risk factors for common problems like anxiety and depression, among patients encountered in medical settings (Hardy & Kingsnorth, 2015). Developing innovative educational experiences such as integrated lectures, written assignments, or clinical simulation encounters, can reinforce how these concepts interrelate in both theory and practice. A shared repository of teaching-learning strategies related to these suggestions would provide additional support for educators to put concept integration into practice (Moxham et al., 2011).

  Attention must also be paid to the overall quality of the educational experience. Using people with lived experience (consumers of mental health services) to either conduct trainings, or to inform curriculum or course development, can add authenticity and counteract stigma (Byrne et al., 2013; Hunter et al., 2015; Moxham et al., 2011; Pharez et al., 2008; Stacey & Aubeeluck, 2015). Encouraging educators and preceptors to model a holistic philosophy in all student-teacher encounters fosters a positive attitude toward psychiatric nursing among those students

(Zamanzadeh et al., 2015). Changing the nursing industry's approach to mental health care also includes introducing new paradigms, such as recovery-focused care (Byrne et al., 2013; Stacey & Aubeeluck, 2015). Eliminating the misconception that mental illness is permanent has the potential to change the way mental health nursing is viewed by both students and practicing nurses, further reducing the impact of bias and stigma.

The findings from this integrative review demonstrate that educational institutions have the power to increase the capacity of our future nursing workforce to respond to patients' physical and mental health care needs in an integrated approach. Producing nurses that value psychiatric/mental health nursing concepts is fundamental to achieving this goal. When prelicensure nursing programs consistently integrate holistic care paradigms throughout their curricula, they produce nurses with an appreciation and capacity for treating the whole person. Such an approach would begin the shift toward integrated nursing care becoming the standard rather than the exception.

Limitations

This integrative review brought together studies and white papers from various countries, including, but not limited to, the U.S.A. Some findings may not be transferable to the educational structure in this country. Longer-term research on patient outcomes would be needed to validate the benefits of an integrated approach to prelicensure nursing education.

References

American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice.* Washington, D.C.: American Association of Colleges of Nursing.

Bartlett, S., & Butson, R. (2014). Trained actors help students learn mental health nursing skills. *Kai Tiaki Nursing New Zealand*, *21*(8), 17-19.

Bingham, H. (2015). Weaving mental health into WITT's undergraduate curriculum. *Kai Tiaki Nursing New Zealand*, *21*(8), 26-28.

Brown, J. F. (2008). Applications of simulation technology in psychiatric mental health nursing education. *Journal of Psychiatric and Mental Health Nursing*, *15*, 638-644.

Byrne, L., Happell, B., Welch, T., & Moxham, L. J. (2013). Things you can't learn from books: Teaching recovery from a lived experience perspective. *International Journal of Mental Health Nursing*, *22*, 195-204. http://dx.doi.org/10.1111/j.1447-0349.2012.00875.x

Cavanaugh, S. (2014). Emphasizing mental health in nursing education. *Canadian Nurse*, *110*(4), 26-28.

Cook, C. (2013). Is clinical gestalt good enough? *The Journal of Manual & Manipulative Therapy, 17*(1), 6-7.

Fay-Hillier, T. M., Regan, R., & Gordon, M. G. (2012). Communication and patient safety in simulation for mental health nursing education. *Issues in Mental Health Nursing, 33,* 718-726. http://dx.doi.org/10.3109/01612840.2012.709585

Guise, V., Chambers, M., & Valimaki, M. (2012). What can virtual patient simulation offer mental health nursing education? *Journal of Psychiatric and Mental Health Nursing*, *19*, 410-418.

Happell, B., & McAllister, M. (2014). Back to the future? Views of heads of schools of nursing

    about undergraduate specialization in mental health nursing. *International Journal of*

    Mental Health Nursing, *23*, 545-552. http://dx.doi.org/10.1111/inm.12082

Hardy, S. A., & Kingsnorth, R. (2015). Mental health nurses can increase capability and capacity

    in primary care by educating practice nurses: An evaluation of an education programme

    in England. *Journal of Psychiatric and Mental Health Nursing*, *22*, 270-277.

    http://dx.doi.org/10.1111/jpm.12208

Hayden, J. K., Smiley, R. A., Alexander, M., Kardong-Edgren, S., & Jeffries, P. R. (2014). The

    NCSBN national simulation study: A longitudinal, randomized, controlled study

    replacing clinical hours with simulation in prelicensure nursing education. *Journal of*

    Nursing Regulation, 5(2), S1-S64.

Hemingway, S., Clifton, A., Stephenson, J., & Edward, K.-L. (n.d.). Facilitating knowledge of

    mental health nurses to undertake physical health interventions: A pre-test/post-test

    evaluation. *Journal of Nursing Management*, *22*, 383-393.

    http://dx.doi.org/10.1111/jonm.12220

Hewitt, J. (2009). Redressing the balance in mental health nursing education: Arguments for a

    values-based approach. *International Journal of Mental Health Nursing*, *18*, 368-379.

    http://dx.doi.org/10.1111/j.1447-0349.2009.00633.x

Hunter, L., Weber, T., Shattell, M., & Harris, B. A. (2015). Nursing students' attitudes about

    psychiatric mental health nursing. *Issues in Mental Health Nursing*, *36*, 29-34.

    http://dx.doi.org/10.3109/01612840.2014.935901

Kameg, K. M., Englert, N. C., Howard, V. M., & Perozzi, K. J. (2013). Fusion of psychiatric and

    medical high fidelity patient simulation scenarios: Effect on nursing student knowledge,

retention of knowledge, and perception. *Issues in Mental Health Nursing*, *34*, 892-900.

http://dx.doi.org/10.3109/01612840.2013.854543

Learning-Theories.com. (2016). *Learning theories: Gestalt theory (von Ehrenfels).* Retrieved

November 16, 2016 from: https://www.learning-theories.com/gestalt-theory-von-

ehrenfels.html.

Lee, L. Y. K., Lee, J. K. L., Wong, K. F., Tsang, A. Y. K., & Li, M. K. (2010). The

establishment of an integrated skills training centre for undergraduate nursing education.

International Nursing Review, 359-365.

Moxham, L., McCann, T., Usher, K., Farrell, G., & Crookes, P. (2011). Mental health nursing

education in preregistration nursing curricula: A national report. *International Journal of

Mental Health Nursing*, *20*, 232-236. http://dx.doi.org/10.1111/j.1447-

0349.2010.00735.x

Murray, B. A. (2014). The use of high-fidelity simulation in psychiatric and mental health

nursing clinical education. *International Journal of Health Sciences Education*, *2*(1.3), 1-

12.

Neville, C., & Goetz, S. (2014). Quality and substance of educational strategies for mental health

in undergraduate nursing curricula. *International Journal of Mental Health Nursing*, *23*,

128-134. http://dx.doi.org/10.1111/inm.12025

Office of Disease Prevention and Health Promotion. (2016). Mental health and mental disorders.

In *Healthy People 2020.* Retrieved November 20, 2016 from:

https://www.healthypeople.gov/2020/topics-objectives/topic/mental-health-and-mental-

disorders

Owen, K. (2016). Imagining the future of mental health teaching in undergraduate nursing

    education. *Kai Tiaki Nursing New Zealand*, *22*(8), 28.

Pharez, M. C., Walls, N. D., Roussel, L. A., & Broome, B. A. (2008). Combining creativity and

    community partnership in mental health clinical experiences. *Nursing Education*

    Perspectives, *29*(2), 100-104.

Robson, D., Haddad, M., Gray, R., & Gournay, K. (2013). Mental health nursing and physical

    health care: A cross-sectional study of nurses' attitudes, practice, and perceived training

    needs for the physical health care of people with severe mental illness. *International*

    Journal of Mental Health Nursing, *22*, 409-417. http://dx.doi.org/10.1111/j.1447-

    0349.2012.00883.x

Sokhela, N. E. (1999). The integration of comprehensive psychiatric/mental health care into the

    primary health system: Diagnosis and treatment. *Journal of Advanced Nursing*, *30*(1),

    229-237.

Spence, D., Garrick, H., & McKay, M. (2012). Rebuilding the foundations: Major renovations to

    the mental health component of an undergraduate nursing curriculum. *International*

    Journal of Mental Health Nursing, *21*, 409-418. http://dx.doi.org/10.1111/j.1447-

    0349.2011.00806x

Stacey, G., & Aubeeluck, A. (2015). Combining lived experience with the facilitation of

    enquiry-based learning: A 'trigger' for transformative learning. *Journal of Psychiatric and*

    Mental Health Nursing, *22*, 522-528. http://dx.doi.org/10.1111/jpm.12228

Unsworth, J., McKeever, M., & Kelleher, M. (2012). Recognition of physical deterioration in

    patients with mental health problems: The role of simulation in knowledge and skill

development. *Journal of Psychiatric and Mental Health Nursing*, *19*, 536-545.

http://dx.doi.org/10.1111/j.1365-2850.2011.01828.x

Van der Kluit, M. J., & Goossens, P. J. J. (2011). Factors influencing attitudes of nurses in

general health care toward patients with comorbid mental illness: An integrative literature

review. *Issues in Mental Health Nursing*, *32*, 519-527.

http://dx.doi.org/10.3109/01612840.2011.571360

Wand, T. (2011). Real mental health promotion requires a reorientation of nursing education,

practice and research. *Journal of Psychiatric and Mental Health Nursing*, *18*, 131-138.

http://dx.doi.org/10.1111/j.1365-2850.2010.01634.x

World Health Organization. (2008). Integrating mental health services into primary health care.

In *The WHO MIND Project: Mental Improvement for Nations Development.* Retrieved

from Department of Mental Health & Substance Abuse, WHO Geneva, website:

http://www.who.int/mental_health/policy/services/3_MHintoPHC_Infosheet.pdf

Zamanzadeh, V., Jasemi, M., Valizadeh, L., Keogh, B., & Taleghani, F. (2015). Effective factors

in providing holistic care: A qualitative study. *Indian Journal of Palliative Care*, *21*(2),

214-224. http://dx.doi.org/10.4103/0973-1075.156506

APPENDIX A
NRS 552 Evidence Based Nursing Project
Quantitative Research Evidence Table

Article Number (number sequentially)	1	2	3
Reference (APA Format)	Hardy, S. A. & Kingsnorth, R. (2015). Mental health nurses can increase capability and capacity in primary care by educating practice nurses: An evaluation of an education programme in England. *Journal of Psychiatric and Mental Health Nursing, 22,* 270-277.	Hayden, J. K., Smiley, R. A., Alexander, M., Kardong-Edgren, S., & Jeffries, P. R. (2014). The NCSBN national simulation study: A longitudinal, randomized, controlled study replacing clinical hours with simulation in prelicensure nursing education. *Journal of Nursing Regulation, 5*(2), S1-S64.	Hemingway, S., Clifton, A., Stephenson, J., & Edward, K. L. (2014). Facilitating knowledge of mental health nurses to undertake physical health interentions: A pre-test/post-test evaluation. *Journal of Nursing Management, 22,* 383-393.
Study Purpose	To test the use of mental health nurses, trained as educators, in the delivery of mental health education; to improve holistic care. To develop accessible and sustainable education program.	To examine whether time and activities in a simulation laboratory could effectively substitute for traditional clinical hours in the prelicensure nursing curriculum.	To develop/test/deliver an evidence-based educational package with an integrated physical and mental health focus, to clinicians working in mental health settings.
Research Question(s)	Implied (not stated): Does the use of trained mental health nurses to deliver mental health nursing education improve practice nurses' mental health knowledge, skills, and attitudes?	Does substituting clinical hours with 25% and 50% simulation impact educational outcomes assessed at the end of the undergraduate nursing program? Are there course by course differences in nursing knowledge, clinical competency, and perception of learning needs being met among undergraduate students when traditional clinical hours are	Study was born from the need for mental health nurses to gain physical health care competency; identifies the issue of a "binary" system vs. a holistic approach to pre-licensure education.

		substituted with 25% and 50% simulation? Are there differences in first-time NCLEX pass rates between students that were randomized into a control group, 25%, and 50% of traditional clinical substituted with simulation?	
Study Design (Type of Evidence)	Pre- and post-test; Likert-scale self-evaluation of efficacy.	Comparison study using randomized, controlled, longitudinal, multisite design.	Pre- and post-test design; day workshops created; knowledge scores tested on 5 physical health groupings (specific areas were chosen after polling mental health nurses about physical health issues for which they felt they needed training)
Sampling type (Size, Age Range, Etc.)	Twenty-four mental health nurses and one psychologist trained to deliver content; 199 practice nurses received training.	847 students enrolled in prelicensure-RN programs (ADN or BSN).	204 total participants (89 registered and 115 student nurses); response rate was 88% (n=180)
Setting (eg., School, Clinic, Country)	North Central, East London, England Nurses from four "trusts" were recruited to serve as educators; learners were within mental health practice settings.	United States Prelicensure nursing programs (ADN and BSN) were invited to participate; 10 nursing programs chosen (5 each) from geographically diverse areas representing rural and urban communities; included both community colleges and large universities.	England Participants were recruited through the University network, and Clinical Skills network, to reach both practicing nurses and student nurses; ultimately only one university and one NHS Trust participated
Tools Used (Identify Only)	Active learning modules; train the trainer guidelines; Likert scale pre- and post-tests used.	ATI Comprehensive Predictor and Content Mastery series exams; Creighton Competency Evaluation Instrument; New Graduate Nurse	Interactive education and training packages developed for the project; delivered in day workshop format; Likert scale pre- and post-tests used

		Performance Survey; and Global Assessment of Clinical Competency and Readiness for Practice. Follow-up surveys also used.	
Intervention Tested (If Appropriate)	Trained by mental health nurses who had been trained to be an educator for this purpose; also one psychologist	Simulation replacing either 25% or 50% of traditional clinical hours.	Training on 5 physical health issues delivered to mental health nurses or nursing students; knowledge levels tested
Finding #1:	Mutually beneficial; improved trainers' skills as well as students.	No significant differences among end-of-program outcomes (grade-point-averages, exam scores) for students with simulation replacing traditional clinical experiences.	Knowledge of diabetes, oral health, wound care, IM injections, and Health Improvement Profiles all significantly increased
Finding #2:	Improved sense of self-efficacy, knowledge and attitudes regarding caring for mental health patients.	Students rated themselves higher on clinical competence, critical thinking, and readiness for practice.	Improved sense of self-efficacy in providing care to mental health patients for these physical health needs
Finding #3:	Improved collaborative care; practice nurses more likely to contact a mental health nurse with questions regarding a patient's status or needs.	Important to ensure high-quality simulation through incorporation of best practices, including: terminology, professional integrity of participants, participant objectives, facilitation, facilitator, debriefing, and participant assessment and evaluation.	Targeted education and training can inspire nurses to include previously absent interventions in their routine practice
Limitations?	Authors: Program has not yet evaluated impact on patient care/outcomes. Reviewer: Study was approached from trainers' standpoint more than learners' end; also, training was aimed at practicing nurses instead of undergraduate or	Authors: Students were randomly assigned, but universities were not randomly selected; preceptors and clinical instructors were not blinded as to which group students were in; ratings could be biased by raters' personal experiences with clinical training or simulation. Lower	Authors: Delivered in day workshop format so may not transfer readily to practice; included participants from a single University and NHS Trust; pre- and post-test tools "not psychometrically developed"; student knowledge evaluated immediately after workshops and

	prelicensure nurses	participation rates in the longitudinal portion of the study.	not reevaluated at a later date; need follow up studies to determine impact on service users Reviewer: Discussion and intro both mention psychotropic medications being an area of concern (as nurses may assume physical health issues are simply medication reactions); however, this was not directly addressed in any of the 5 categories
Other Comments	Includes WHO recommendations regarding integrating mental health services into primary care. Presents an important area to explore – the influence of the person(s) conducting the training, on overall quality of education.	Mental Health Nursing knowledge assessments show that the 50% group scored higher overall compared with the 25% group and control group. (See Figure 11.) Total ATI scores were significantly higher for the 50% group than the control group (p = 0.011; d = 0.30). However, there is less than a 3-point difference between the scores. Both the 25% and 50% groups had the highest scores in the categories and dimensions of the Mental Health Nursing assessment	Discusses that nurse education in the U.K. is delivered in a "binary" fashion, separating physical health and mental health, instead of integrating the two. Mental health nurses often incorrectly ascribe symptoms to psychotropic medications due to a lack of physical assessment skills and knowledge. They also "adopt a defeatist approach" as a holistic approach was never taught.
Reviewer Comments: Reactions of study participants. Is this a feasible intervention in an educational or	Participants felt increased/improved knowledge and attitudes that carried over to practice, ultimately benefitting patients. They also were more likely to collaborate with mental health nurses. Relevant to nursing education as	Outstanding, thorough study that contributes significant evidence to nursing science on the benefits of simulation as an alternative clinical training strategy.	Keywords: holistic, integrated care, bidirectional need, collaboration, health literacy, mental wellness This is relative to nursing education also as it responds to a deficit in the mental health nurses' preparation for delivering holistic care; specifically references the education

health care organizational setting in relation to cost, personnel, structure? How are the findings relevant to nursing education or nursing leadership?	they are responding to a deficit in their practice nurses' preparation (thus it is being addressed in practice, when it could or should be addressed more thoroughly in the undergraduate programs)		system as setting up this challenge that arises in practice Mental health nurses feel unprepared to offer even basic physical health screenings
Quality of Evidence Rating	QIII	QIII	QII

Article Number (number sequentially)	**4**	**5**	**6**
Reference (APA Format)	Hunter, L., Weber, Tayler, Shattell, M., & Harris, B. A. (2015). Nursing students' attitudes about psychiatric mental health nursing. *Issues in Mental Health Nursing, 36,* 29-34.	Kameg, K. M., Englert, N. C., Howard, V. M., & Perozzi, K. J. (2013). Fusion of psychiatric and medical high fidelity patient simulation scenarios: Effect on nursing student knowledge, retention of knowledge, and perception. *Issues in Mental Health Nursing, 34,* 892-900.	Sokhela, N. E. (1999). The integration of comprehensive psychiatric/mental health care into the primary health system: Diagnosis and treatment. *Journal of Advanced Nursing, 30*(1), 229-237.
Study Purpose	To describe recent graduate nurses' (entering a Master's program) attitudes about psychiatric/mental health nursing	To measure knowledge retention and explore perceptions among nursing students who receive training via integrated, high-fidelity simulation.	To test the ability of primary care nurses to diagnose and treat common mental health conditions, or appropriately refer patients; to

	clinical experiences and preparedness to care for these patients; also addresses stigma and reluctance of graduates to specialize		implement these functions into their primary health care practice.
Research Question	None explicitly stated.	Does high-fidelity patient simulation improve student knowledge, and retention of knowledge, of concepts learned through integrated (medical/mental health) simulation encounters? And, what are student perceptions of this learning strategy?	Can nurses be trained to deliver appropriate mental health nursing care and treatment in a primary health care setting (or should these services remain largely segregated)? Research aim was to design, implement and evaluate an approach to integrating comprehensive mental health care into primary health care services.
Study Design (Type of Evidence)	Quantitative descriptive.	Quasi-experimental; study also asked students about perceptions, so had a Qualitative element.	Quantitative with some qualitative components; case study design using observation, record review, and also interviews to evaluate outcomes; criterion-referenced testing mentioned.
Sampling type (Size, Age Range, Etc.)	95 potential participants recruited via email; total of 32% (n=30) students completed questionnaire; mostly females in their mid-20's to early 30's	Convenience sample; 37 senior-level nursing students	Twenty nurses from 6 clinics and 1 province were trained; record reviews on 54 patients followed after 6 months, and another 54 patients after a subsequent 6 month period
Setting (eg., School, Clinic, Country)	USA, Midwest, a "large university" Participants recruited via email; students had Bachelor degrees in other disciplines, enrolled in a direct-entry, pre-licensure, MSN	USA – Pennsylvania Robert Morris University, School of Nursing and Health Sciences	South Africa – Cape Town Sponsored by University of Natal

	program		
Tools Used (Identify Only)	Nursing Students' Attitudes about Psychiatric Mental Health Nursing Questionnaire; 3-point Likert scale	Three HFPS scenarios, medically-based with psychiatric concerns infused; corresponding HFPS equipment; three custom HESI exams in pre- and post-test format; a simulation evaluation survey to evaluate student perceptions.	Training program on six psychiatric conditions; establishment of functional referral networks; followed by patient record review to evaluate results. Four instruments developed for these purposes.
Intervention Tested (If Appropriate)	None.	Integrated high-fidelity scenarios (3)	Training program; focus on four areas: history taking, diagnosis, pharmacological treatment, and referral
Finding #1:	100% of students felt psychiatric/mental health nursing skills were important and relevant to other practice areas	No statistically significant difference in knowledge gain or retention among non-at-risk students	Performance improved greatly among skills evaluated (quality/completeness of mental health history, accurate diagnosis, correct treatment prescriptions, quality of referrals made)
Finding #2:	Disconnect identified between nursing students' claims of understanding and valuing essential mental health skills, and percentages who report feeling prepared to apply the skills	Statistically significant improvement in knowledge gain and retention among at-risk students	
Finding #3:	Mental health clinical experiences were roughly half the hours of critical care clinical experiences (other med/surg or specialty clinical experiences not mentioned)	Students were all "highly satisfied" with these learning experiences and felt more capable of understanding nursing concepts.	
Limitations?	Authors: Small sample size; convenience sample from one university in one region;	Authors: Simulation mannequins are unable to display nonverbal behavior, which limits students'	Authors: Reviewer: (In regards to this literature review) – Nurses in the

	quantitative format may not capture other attitudes not addressed in the Likert questionnaire Reviewer: Study did not provide a method to follow up with students regarding the identified disconnects between various responses, nor to explore the basis for existing stigma; no solutions suggested other than asserting that this area of nursing education needs more attention	ability to establish rapport and interpret body language signals; variables such as different students' questions in each session cannot be accounted for; and, post-test A was done after a full/long day of simulation and debriefing, where participant fatigue could impact results. Reviewer: Study did not administer same HESI tests to students receiving traditional (non-integrated, medical) simulation training and didactic psychiatric nursing education; it would have been good to compare those traditional approaches to this integrated one.	USA do not diagnose conditions nor prescribe medications; however, they are often allowed to decide on using STAT meds (as was the focus of the pharmacological aspect of this study). They also do need to complete health histories and understand conditions well enough to recognize them. Combination of quantitative data (numerical ratings) plus qualitative (questions regarding motivation for approaching a patient's care a certain way, for example) were used. Also, comparing outcomes from nurses filling a role often performed by doctors, required "criterion-based" testing of some of the data.
Other Comments	Mentions that nurses are the ones spending the most time with patients (more than physicians); discuss ways that undergraduate nursing education can help reduce stigma, stigma by association, and prepare nurses to specialize in mental health (or improve general competency)	Outlines of all 3 scenarios used, were provided.	WHO concepts of primary health care approach discussed
Reviewer Comments: Reactions of study participants.	Statistics included on prevalence of mental illness; also discusses importance of positive clinical experiences during undergraduate	Study participants were "highly satisfied" and felt increased confidence in understanding practical nursing concepts.	This study speaks to the need for generalist nurses to be better prepared to recognize, treat, or refer patients in a primary health care

| Is this a feasible intervention in an educational or health care organizational setting in relation to cost, personnel, structure?

How are the findings relevant to nursing education or nursing leadership? | education | This is a feasible intervention in a nursing school setting where HFPS is already in place, or if funding to invest in a HFPS program is available. HFPS is expensive (mannequins, simulated hospital environments, recording equipment, faculty support, and more). Nurses are unlikely to only face patients with one diagnosis; evidence shows that medical and psychiatric diagnoses often present together. It is important to prepare student nurses to treat patients holistically. At minimum, it is important for student nurses to anticipate being faced with psychiatric illnesses on medical units, and vice versa – and to understand how to provide basic cares as well as to coordinate care from additional providers. | setting, who present with mental health conditions. It also demonstrates the ability for mental health skills to be more seamlessly integrated into primary health care settings rather than remaining a separate entity. Its inclusion of referral as a nursing skill acknowledges that the goal is for essential skills acquisition versus specialization at a higher level. |
| **Quality of Evidence Rating** | QII | QIII | QIII |

Article Number (number sequentially)	7		
Reference (APA Format)	Spence, D., Garrick, H., & McKay, M. (2012). Rebuilding the foundations: Major renovations to the mental health component of an		

	undergraduate nursing curriculum. *International Journal of Mental Health Nursing, 21,* 409-418.		
Study Purpose	To test a revised curriculum which included additional courses on mental health science, inpatient practice, and community-based mental health practice.		
Research Question	The researchers sought to determine whether enhanced mental health content and integration of concepts would result in better knowledge of this realm of nursing		
Study Design (Type of Evidence)	Appreciative inquiry approach; compared scores on SEP scores before and after changes to program (between 2008 and 2009); also a qualitative element		
Sampling type (Size, Age Range, Etc.)	Purposive sampling; 3 lecturers, 4 acute care RNs, 4 community-based mental health RNs, and 54 2nd-year BSN students participated		
Setting (eg., School, Clinic, Country)	New Zealand University setting (BSN program)		
Tools Used (Identify Only)	Student evaluation of papers (SEP) surveys; clinical placement feedback (CPF) feedback forms; and interviews. The papers evaluated for the SEP scores were mental health theory and mental health practice		

Intervention Tested (If Appropriate)	Three new courses added to curriculum		
Finding #1:	Statistically significant improvement in the papers assigned to assessment competency		
Finding #2:	Increased ability to transfer knowledge to other clinical settings		
Finding #3:	Improved clinical training results in more students considering mental health nursing as a specialization option		
Limitations?	Authors: The renovated curriculum was only rolled out in one university/school of nursing; students' clinical experience was restricted to one large service region vs. several regions Reviewer:		
Other Comments			
Reviewer Comments: Reactions of study participants. Is this a feasible intervention in an educational or health care organizational setting in relation	Keywords: integration Concerns about fragmented education vs. integrating mental health better; need increased content and emphasis, including reinforcement and application in other settings/courses.		

to cost, personnel, structure? How are the findings relevant to nursing education or nursing leadership?			
Quality of Evidence Rating	QIII		

APPENDIX B
NRS 552 Evidence Based Nursing Project
Qualitative Research Evidence Table

Article Number (number sequentially)	1	2	3
Reference (APA format)	Byrne, L., Happell, B., Welch, T., & Moxham, L. J. (2013). Things you can't learn from books: Teaching recovery from a lived experience perspective. *International Journal of Mental*	Happell, B., & McAllister, M. (2014). Back to the future? Views of heads of schools of nursing about undergraduate specialization in mental health nursing. *International Journal of Mental Health Nursing,*	Moxham, L., McCann, T., Usher, K., Farrell, G., & Crookes, P. (2011). Mental health nursing education in preregistration nursing curricula: A national report. *International Journal of Mental*

	Health Nursing, 22, 195-204.	*23,* 545-552.	*Health Nursing, 20,* 232-236.
Study Purpose & Phenomenon of Interest (or Problem Identified)	To evaluate students' views and opinions at having been taught by a person with a lived experience of significant mental health challenges	To explore the views of heads of nursing schools about the potential to return to undergraduate specialization (versus generalist/comprehensive preparation)	To develop a framework for including mental health concepts and skills in future curricula.
Research Question(s)			
Philosophical Basis or Framework Specified		Study mentions that the approach was guided by the work of Stebbens but provides no details as to what that means.	
Research Methods and Researcher's Role	Qualitative exploratory approach; interviews conducted, taped, and transcribed verbatim, before coding for themes. Students were encouraged to comment freely without limiting responses to the questions that were asked.	Qualitative exploratory approach; telephone interviews taped and transcribed verbatim, then coded to determine themes.	
Sampling & Sample Description	Students enrolled in the course "Recovery for Mental Health Nursing" were emailed; 11 students responded and were interviewed		
Setting (School, Clinic, Country)	Australia University – undergraduate nursing program	Australia Queensland	
Data Source/ Methods (Interview, Documents, Observations,	Interviews; taped, then transcribed	Telephone interviews; taped, then transcribed	

Participation)			
Method of Data Analysis	Colaizzi method of analysis applied to recorded interview data	Braun and Clarke thematic framework.	Content analysis – tool to determine the presence of certain words or concepts
Validation of Study Provided (Trustworthiness, Neutrality, Applicability, Auditability)			
Findings: (Themes, Categories, Concepts, Theoretical Statements)	Themes: (1) Looking through fresh eyes – what it means to have a mental illness: participants felt they were challenged to rethink their assumptions about mental illness, recognizing the importance of therapeutic relationships, and consumers being involved in directing their own care. (2) It's all about the teaching: It opened up a "new world" of understanding, to hear directly from a person with mental health issues. It greatly enhanced their understanding of mental illness.	Themes: (1) Specialization tracks could attract more students with a specific interest in mental health and keep them in that track; (2) Disadvantages include deciding what parts of the curriculum would have to go, to be replaced with specialty content; also a "historic reversion" and getting away from holistic care; eliminates workforce flexibility for graduates and for supply/demand in general (3) Would improve quality of mental health care for consumers (4) Graduates could be highly employable, due to this specialty training, though only in limited positions (5) Uncertainty as to whether it would be attractive to students	Themes: (1) Increased mental health content in curricula: accreditors have a responsibility to ensure adequate content in undergraduate programs; increased content will help nurses specialize or use these skills in other settings; (2) Strengthen mental health nursing leadership: influences retention of mental health nurses; also contributes to quality care and positive patient outcomes; (3) Increase consumer participation: involve consumers with development, implementation, and evaluation of the mental health curricula; (4) Establish a teaching resource repository: develop a clearing house of teaching resources related to mental health; design this to increase mental health literacy;

			include database of journals, websites, best-practice guidelines, audio-visual resources; this would also increase visibility; additionally, recruit experienced mental health nurses to contribute to this as well as to teach.
Limitations?	Author: Small number of students from only one university; students used had already chosen mental health as their specialization; one academic with a lived experience was used, and it may produce different results with a different individual. Reviewer:	Author: Results may not transfer to other regions/settings. Reviewer: Does not address the impact of regressing to this model, it only states that it is considered a regression.	Author: Reviewer:
Other Comments			
Reviewer Recommendation Reactions of study participants. Is this a feasible intervention in an educational or health care organizational setting in relation to cost, personnel, structure? How are the findings relevant	Keywords: lived experience, consumer, who does the teaching Participants felt very positive about the experience. It helped them view people with mental illness in a much more positive light. Having somebody with mental illness teach a course or be a guest lecture is very possible. Findings are relevant as it helps us look beyond the what/where/when/how to teach, and begin to look at the "who"	Keywords: specialization, undergraduate Heads of nursing like the idea. But there is hesitation – it gets away from the need for all nurses to have a general competency which crosses the physical/mental health realms. This would not solve the related issue of mental health nurses being insufficiently skilled in physical health nursing, nor of general nurses working in medical/surgical areas being inadequately prepared to care for mental health comorbidities. It	Keywords: integration, increased content Good study to indicate where curricula can help prepare nurses to provide holistic care in any setting, while also potentially encouraging more nurses to enter mental health settings as their primary areas of practice.

to nursing education or nursing leadership?	(should do the teaching). That may be a key element for this unique discipline/specialty.	would only make mental health specialty nurses more qualified immediately upon graduation. The same level of expertise would likely be achieved once working and being immersed in it. It seems like a lot of work to revamp curricula to do this, when so much could be lost, and very little gained. Thus far the ideas have had little support in this region.	
Quality of Evidence Rating	QIII	QIII	QIII

Article Number (number sequentially)	**4**	**5**	**6**
Reference (APA format)	Murray, B. A. (2014). The use of high-fidelity simulation in psychiatric and mental health nursing clinical education. *International Journal of Health Sciences Education, 2*(1), 1-12.	Robson, D., Haddad, M., Gray, R., & Gournay, K. (2013). Mental health nursing and physical health care: A cross-sectional study of nurses' attitudes, practice, and perceived training needs for the physical health care of people with severe mental illness. *International Journal of Mental Health Nursing, 22,* 409-417.	Stacey, G., Oxley, R., & Aubeeluck, A. (2015). Combining lived experience with the facilitation of enquiry-based learning: A 'trigger' for transformative learning. *Journal of Psychiatric and Mental Health Nursing, 22,* 522-528.
Study Purpose & Phenomenon of Interest (or Problem Identified)	To measure satisfaction and feelings of self-efficacy among students participating in a high-fidelity simulation designed to teach mental health/integrated nursing concepts	To examine mental health nurses' attitudes toward providing physical health care to their patients, and to explore associations with their practice and training.	

Research Question(s)			
Philosophical Basis or Framework Specified	Experiential learning theory and social constructivism		Constructivist learning theory and enquiry-based learning
Research Methods and Researcher's Role	Descriptive, post-test design	Descriptive, via questionnaires	Questionnaires distributed after a case study facilitated by somebody with lived experience
Sampling & Sample Description	19 undergraduate students and 1 graduate student	1130 mental health nurses recruited; 585/1130 responded; recruited from a NHS Mental Health Trust	190 questionnaires distributed; 112 returned; pre-licensure nursing students
Setting (School, Clinic, Country)		United Kingdom	United Kingdom – Nottingham School of Nursing
Data Source/ Methods (Interview, Documents, Observations, Participation)	Post-test, Likert-scale questionnaire; no pre-test for comparison or analysis	Physical Health Attitude Scale for Mental Health Nurses (PHASe – a validated tool), plus an additional questionnaire; results gathered anonymously	Questionnaires
Method of Data Analysis		Descriptive statistics to identify associations among participant variables	Deductive analysis of open-ended questionnaire responses
Validation of Study Provided (Trustworthiness, Neutrality, Applicability, Auditability)	Questionnaire not tested for reliability; developed for this study only		
Findings: (Themes,	Simulation resulted in high level of expressed confidence in	Themes: (1) Current practice trends: general	Themes: (1) Assimilation of new

| **Categories, Concepts, Theoretical Statements)** | practicing mental health skills | physical support (diet/nutrition/exercise) were common; more advanced physical health care was less common (smoking cessation, bowel habits, glucose checks, contraception, dental health, blood pressure mentioned); (2) Perceived training needs: over 80% expressed desire for traiing for diabetes, cardiovascular health, nutrition; 69% and 67% (respectively) also wanted smoking cessation and reproductive health training. (3) Attitudes and confidence: Generally positive about role in physical care of people with mental illness, particularly with health promoting activities (nutrition, etc.); lower confidence areas correlate with expressed training needs. Some nurses felt that smoking with their patients helped build a therapeutic relationship. (4) Associations between responses and prior training: post-graduate continuing education or adult nurse trainings were linked to positive ratings in attitudes and confidence as well as implementation. | understandings: students felt their preconceptions had been challenged; recognized ability of mental health patients in achieving quality of life; better understanding of implications of receiving, and living with, a psychiatric diagnosis. (2) Understanding of relatedness of information previously felt to be irrelevant: students thought differently about their practices, to look at the psychological impact of illness and not just treat patients as having an isolated physical problem with a matching cure (but as people who may also have different levels of mental wellness) (3) Questioning of prior understanding: the experience enhanced learning from prior content which had been mostly text book descriptions of symptoms or behaviors; the individuality of mental distress was recognized (4) Discomfort with the learning environment: many students were slightly uncomfortable with the facilitator having lived experience sharing such personal details; mental health specialty students restricted their level of engagement somewhat. Clear evidence of "transformative" |

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			learning taking place
Limitations?	Author: Small sample size, lack of a pre-test, students from a rural setting Reviewer:	Author: Reviewer:	Author: Reviewer:
Other Comments	Though data was quantified with Likert-scale questionnaire, there was no pre-test data to compare with; results are more qualitative as improvement cannot be measured.	People with mental illness are not benefitting from advances in general health care to the same extent as others	Threshold concepts are central to mastery of a subject; transformative in that they create new understandings, expose hidden relatedness of phenomena which may have originally appeared disconnected or irrelevant; requires students to reposition their thinking (puts them outside of their prior comfort zones)
Reviewer Recommendation Reactions of study participants. Is this a feasible intervention in an educational or health care organizational setting in relation to cost, personnel, structure? How are the findings relevant to nursing education or nursing leadership?	Keywords: simulation High-fidelity simulation can help student nurses practice therapeutic communication and other "soft" skills related to mental health nursing	Keywords: holistic, integrated, bidirectional need Mental health nurses have a key role to play in providing more holistic care, and adapting mental health nursing practice to deliver integrated care will require changes in education and in practice. Also – in the ethos of care. Indicates that they are trying to correct a gap in care delivery identified in practice. Relevant to informing undergraduate curriculum development, as cross-training and integration may prevent this gap from occurring.	Keywords: recovery model, lived experience, case studies

Quality of Evidence Rating	QIII	QII	QIII

Article Number (number sequentially)	**7**	**8**	
Reference (APA format)	Unsworth, J., McKeever, M., & Kelleher, M. (2012). Recognition of physical deterioration in patients with mental health problems: The role of simulation in knowledge and skill development. *Journal of Psychiatric and Mental Health Nursing, 19,* 536-545.	Zamanzadeh, V., Jasemi, M., Valizadeh, L., Keogh, B., & Taleghani, F. (2015). Efective factors in providing holistic care: A qualitative study. *Indian Journal of Palliative Care, 21*(2), 214-224.	
Study Purpose & Phenomenon of Interest (or Problem Identified)	Describes the use of simulation with mental health nursing students to help teach them to recognize physical deterioration/symptoms	To evaluate the effective factors in nurses' provision of holistic care, in order to learn how to enhance and encourage it; to study these factors from the point of view of nurses	
Research Question(s)			
Philosophical Basis or Framework Specified			
Research Methods and Researcher's Role	Educational evaluation – illuminative approach.	Qualitative descriptive	
Sampling & Sample		14 nurses from university hospitals in Iran were interviewed; purposive	

Description		sampling used; 11 female, 3 male	
Setting (School, Clinic, Country)		Iran University hospitals	
Data Source/ Methods (Interview, Documents, Observations, Participation)	Intermediate-fidelity simulation exercise followed by focus groups and analysis of video footage using objective structured clinical examination (OSCE) score sheets	Interviews (unstructured)	
Method of Data Analysis	Tesch's 8-stage data analysis process	MAXQDA program used for conventional qualitative content analysis	
Validation of Study Provided (Trustworthiness, Neutrality, Applicability, Auditability)			
Findings: (Themes, Categories, Concepts, Theoretical Statements)	Themes: (1) Bridging the gap: simulation provided a way to gain experience and develop/refine needed skills that are not used often in their specialty (2) Learning inter-professionally: using inter-professional groups during the exercise helped each group learn about the other's specialty (3) Authenticity: Use of real case information to develop the simulations helped it feel more	Themes: (1) Structure of educational system: content, teaching methods, and educators' competence all need improvement. Most education focused on routine tasks without anybody modeling holistic care approach. (2) Professional environment: including workload, management, and the gap between clinical performance and their academic learning; this theme encompasses how prelicensure education may not	

	authentic, along with real-time narration (4) Reflection and learning: Through discussion afterward, students learned about alternative possible outcomes (fatality); this was not necessarily a scenario they had considered; some had seen patients who had taken drugs and alcohol be sent to bed to "sleep it off" (for example) without really understanding the dangers of that. Additional comments included the feeling that simulation should occur more frequently throughout the program rather than just toward the end. Also, debriefing should focus on both technical and non-technical skills.	fit the realities of practice. (3) Motivational factors: sociability and sensitivity to people's needs are influential in how nurses approach their work. One conclusion was the need for closer attention to the compatibility of the educational system with the concepts of holistic care provision, including revising contents and methods of education (followed by modifications in the working environment to support this care approach).	
Limitations?	Author: Reviewer:	Author: Reviewer:	
Other Comments		Mind and spirit affect the body; biological, social, psychological, and spiritual aspects are interdependent	
Reviewer Recommendation Reactions of study participants. Is this a feasible intervention in an educational or	Keywords: integrated care, simulation, bidirectional need This shows the need for mental health nurses to maintain essential physical health assessment skills; it demonstrates the bidirectional need. This indicates to me that it	Keywords: holistic care As stated in the background, most nurses educated with biomedical allopathic focus and do not understand holistic care concepts. Patients' corporeal needs are the focus while other needs and often	

health care organizational setting in relation to cost, personnel, structure? How are the findings relevant to nursing education or nursing leadership?	is not simply the need for medical/surgical nurses to learn a little bit about mental health nursing, but for generalist nursing skills to provide graduates with a more robust, integrated, holistic care approach.	serious problems are not addressed. Mental, spiritual, and social needs are neglected while patients are viewed as biological machines.	
Quality of Evidence Rating	QIII	QIII	