A PROCESS EVALUATION OF A REGISTERED NURSE LED PATIENT EDUCATION GROUP PROGRAM FOR PSYCHIATRIC INPATIENTS

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Abstract

Background: A Registered Nurse (RN) led patient education group program could be one intervention to help psychiatric inpatients make positive health choices and build stability and resilience to improve overall mental health and wellness. One such program is the *RN-Led Patient Education Group Program* that exists in an acute care psychiatric unit at a tertiary care setting in Newfoundland, Canada, but that program has not been evaluated. **Purpose:** The purpose of this practicum project was to conduct a process evaluation of that program. **Methods:** A literature review, consultations, and an environmental scan informed the process evaluation. **Results:** Key findings from the process evaluation included the need to revise the current program and develop an implementation and evaluation plan. **Conclusion:** The *RN-Led Patient Education Group Program* is an innovative mental health and wellness programs for this population but there is a need to develop a plan for future implementation and evaluation.

Key Words: mental health patient education; psychiatric inpatients; nurse-led groups.

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I would like to dedicate this practicum project to my Grandfather, John Rowe Sheppard, (August 29th, 1935 – July 21st, 2018). He had the warmest heart I've ever known, and I was blessed enough to be a recipient of his overwhelming love for 26 years. His belief and pride in his family was unwavering, and his excitement for me in getting this degree helped me to persevere. I love and miss you so much, Poppy.

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Introduction

Mental health and wellness education is an extremely important part of nursing care in all health care settings, but especially for adult patients who are experiencing acute psychiatric conditions (Chien, Kam, & Lee, 2001; Hätönen, Kuosmanen, Malkavaara, & Välimäki, 2008). A Registered Nurse (RN) led patient education program could be one intervention to help patients make positive health choices and build stability and resilience to improve overall mental health and wellness. Such health education programs could enhance the patients' ability to maintain a high level of mental health and wellness when they transfer from the acute care setting to the community. Once such program is a *RN-Led Patient Education Group Program* designed to facilitate RN-led patient education groups that focus on wellness-related topics such as improving communication, assertiveness, improving social relationships, motivation, sleep, conflict resolution, and making changes.

The plan for this practicum project was to design and conduct a process evaluation for the *RN-Led Patient Education Group Program* and develop recommendations for future implementation and evaluation of that program. The PRECEDE-PROCEED (PPM) model was used to guide this process evaluation. A comprehensive literature review was completed, (Appendix A), consultations occurred (Appendix B), and an environmental scan was conducted (Appendix C). A summary report on the process evaluation of the program is provided in (Appendix D). Each of these completed reports and activities demonstrate the successful completion of the practicum goal and objectives.

Goal and Objectives

The overall goal of the practicum project was to conduct a process evaluation of the *RN-Led Patient Education Group Program* designed for psychiatric inpatients and implemented by Registered Nurses (RNs) caring for adult inpatients on an acute care psychiatry unit. The practicum learning objectives included:

1. Demonstrate advanced nursing practice competencies through clinical, research, leadership, and educational activities.
2. Conduct a comprehensive review of the literature regarding RN-led patient education group programs and learning needs for adult psychiatric inpatients.
3. Conduct an environmental scan to determine what types of RN-led patient education group programs for adult psychiatric inpatients are being implemented within this setting and in other geographical areas.
4. Consult with key stakeholders regarding the quality and effectiveness of the *RN-Led Patient Education Group Program* being evaluated.
5. Design and conduct a process evaluation for the *RN-Led Patient Education Group Program* and based on that process evaluation, develop recommendations for future implementation and evaluation of the *RN-Led Patient Education Group Program*.
6. Disseminate the findings of the practicum.

The PRECEDE PROCEED Model

The PRECEDE-PROCEED Model (PPM) for health education diagnosis and planning provides a step-by-step guide for building and evaluating health promotion programs. PRECEDE stands for "predisposing, reinforcing, and enabling constructs in educational and environmental diagnosis and evaluation", and PROCEED stands for "policy, regulatory, and organizational constructs in educational and environmental development" (Crosby & Noar, 2011, p. S8). Overall, the model involves an ecological approach to health promotion education as it considers all of the many components of a specific population's environment, cognition, skills, and behaviour, and views these as potential intervention targets (Crosby & Noar, 2011). The PPM has been applied to this practicum with a focus on Phase 6: Process Evaluation (Appendix D-1).

Methods

An integrative literature review, key informant consultations, and an environmental scan were completed in the process of meeting the overall goal of this practicum project. Each of these methods contributed information to designing and conducting the process evaluation of the *RN-Led Patient Education Group Program*.

Summary of Literature Review

A review of the literature was conducted using multiple research databases (i.e., CINAHL, PubMed, Google Scholar) to explore the health education needs of adult patients experiencing acute psychiatric conditions and existing RN-led education interventions being implemented for psychiatric inpatients (Appendix A). The review

focused on three major areas: the current needs of this patient population with regards to support and education, mental health education interventions and programs being implemented in practice, and existing competencies for psychiatric nurses, as presented in the research literature.

The review found that very little research exists in relation to the current mental health education learning needs of this population, and especially in the area of existing RN-led patient education interventions for psychiatric inpatients (Kristiansen et al., 2018), with only three research studies reporting on inpatient mental health education interventions in an acute psychiatric setting that had some focus on health promotion (Anttila, Valimaki, Hatonen, Luukkaala, & Kaila, 2012; Kuosmanen et al., 2009; Pitkanen et al., 2011). The fact that only three appropriate studies related to mental health patient education interventions in this setting could be found for this review was an important finding in itself, pointing to the need for more research in this area. This also supports the need for this innovative *RN-Led Patient Education Group Program.*

There is a need for more RN-led, innovative group approaches to psychiatric inpatient mental health and wellness education (Hatonen et al., 2008), as well as more research to explore the implementation and efficacy of innovative educational interventions (Pitkanen et al., 2011). Current research shows that no single type of educational intervention is more effective than another for this population (Pitkanen et al., 2011; Kristiansen et al., 2018; Kuosmanen et al., 2009), therefore, it is important to evaluate innovative programs to determine if they are being implemented as planned and are effectively meeting the learning needs of this population.

Psychiatric inpatients have a wide variety of learning needs including the need for information specific to their individual diagnoses and treatment (Hatonen et al., 2008; Kristiansen et al., 2018; Pollock et al., 2004;), as well as mental health promotion focused learning needs that could optimize coping and wellness (Burlingame et al., 2006; Chien et al., 2001; Knutson et al., 2013). Common themes arising from the review of the literature on the mental health learning needs of psychiatric inpatients included information on diagnosis, treatment, medications, and overall mental wellness and coping. Psychiatric inpatients want to be informed about their diagnosis, symptoms, and treatment so they can be active participants in making educated decisions for their recovery and care (Burlingame et al., 2006; Chien et al., 2001; Hatonen et al., 2008; Kristiansen et al., 2018; Pollock et al., 2004). Patients also identified the need for health education to focus on health promotion, holistic mental wellness, and coping, including coping with depression, anxiety, panic attacks and stigma (Burlingame et al., 2006; Chien et al., 2001).

In several studies, patients identified their number one learning need as medication information, which includes information on harm; strength and dosage; interactions with other drugs; and consequences of not taking medication (Chien et al., 2001; Burlingame et al., 2006; Pollock et al., 2004). Psychoeducation is one of the most common approaches in the inpatient psychiatric setting and it primarily focuses on a patient's understanding of their diagnosis including education about the illness and treatment plans (Zhao, Sampson, Xia, and Jayaram, 2015). However, psychoeducational interventions do not usually address health promotion, coping, or strategies to achieve general mental health and wellness.

Only four studies were found on existing RN-led mental health and wellness group education interventions for psychiatric inpatients. These studies fell into three different categories: (1) technology-based education, (2) conventional education, and (3) Recovery Education. Three of the studies were set in Finland and focused on Information Technology-based education as one of the interventions being tested, as compared to conventional education, and utilized the same sample of patients but collected and analysed different data (Anttila et al., 2012; Kuosamanen et al., 2009; Pitkanen et al., 2012). The education interventions included five learning topics: (1) illness, (2) treatment, (3) well-being, (4) support, and (5) patients' rights.

The program that was most similar to the program being evaluated in this practicum project was by Knutson et al. (2013), which outlined the development of a patient education program and tool for administration by RNs called "Recovery Education". That program was developed to fill a gap that existed in education interventions for psychiatric inpatients that focused on health promotion, coping, and recovery. Authors created their own recovery model to base the program on as they could not find one in the literature that accurately addressed their needs. It included seven different elements: (1) hope, (2) security, (3) support and managing symptoms, (4) empowerment, (5) relationships, (6) coping, and (7) finding meaning. Group sessions with psychiatric inpatients were conducted by nursing staff on a variety of topics that addressed these elements, and also included methods such as use of handouts, music, short videos, and "mindfulness breaks". The overall goal of that education program was to enhance patients' coping skills, teach them to utilize supports, and hopefully prevent relapse after discharge.

Psychiatric RNs are competent health educators who are expected to ensure that patients are well educated and informed about concepts related to their mental health (Canadian Federation of Mental Health Nurses (CFMHN), 2014; Knutson et al., 2013; Koivunen, Huhtasalo, Makkonen, Valimaki, & Hatonen, 2012). Competencies of psychiatric RNs with regards to patient education include: collaboration with patients to determine learning needs; promoting recovery from illness through education; providing health promotion education in the context of a patient's individual needs, culture, and situation; helping patients to make informed health decisions; providing guidance, support, and relevant information; and engaging in patient education interventions and adapting to meet changing learning needs (CFMHN, 2014). These competencies support the fact that psychiatric RNs are completely qualified to identify the learning needs of psychiatric inpatients and appropriately implement mental health and wellness education interventions with this population.

The mental health education learning needs of psychiatric inpatients identified from this literature review include: health promotion; holistic mental wellness; coping with depression, anxiety, panic attacks, change, and stigma; improving social relationships; dealing with loneliness; improving communication skills, and enhancing independent living skills.

Upon completion of this review of the research literature, it became clear that more research is needed to study psychiatric inpatient mental health and wellness education and the learning needs of this population. Little is currently known about existing structured RN-led mental health and wellness education group interventions in the psychiatric inpatient setting. Additionally, more research is needed to confirm the

most valuable perceived information needs of different psychiatric inpatients at different stages of illness recovery in order to ensure that education interventions are meeting those needs (Kristiansen et al., 2018). The need for innovation in approaches to psychiatric inpatient mental health education was also identified (Hatonen et al., 2008), so more research exploring the implementation and evaluation of innovative interventions would be beneficial (Pitkanen et al., 2011).

Summary of Consultations

In order to complete the process evaluation of the *RN-Led Patient Education Group Program,* three key stakeholders were consulted to help answer the primary question: "Are we implementing the program as planned?" Information was gathered from one unit that had implemented the program on how implementation was carried out, any issues that existed with implementation of the program, and ways in which program implementation could be strengthened. Three consultations were conducted with key stakeholders who were familiar with the program, including: one nurse leader on the psychiatric inpatient unit where the program was implemented; one experienced staff RN familiar with the program; and one senior staff member who was familiar with the development of the program.

The findings from the consultations with key stakeholders indicated that there is a need to develop an implementation and evaluation plan for the program and provide adequate human resources to implement the program. Adequate resources are critical to the successful implementation of any health education program, including providing an adequate number of staff to meet the work demand, appropriate space to facilitate the

program, and time, training, and support in order for the program to be implemented effectively (Crosby & Noar, 2011). Key informants also recommended the development of ongoing orientation sessions for RNs assigned to implement the *RN-Led Patient Education Group Program*, helping to increase confidence and allowing RNs to feel more comfortable in implementing the program.

Summary of Environmental Scan

An environmental scan was conducted with the purpose of determining whether any RN-led patient education groups for this population existed within the province of Newfoundland and Labrador (NL), Ontario, or British Colombia. The environmental scan began with a comprehensive review of the *RN-Led Patient Education Group Program* as it currently exists. That program focuses on mental health and wellness education and is implemented in a small group setting with sessions led by the RNs on the inpatient unit. The program consists of a set of eight folders, each with a different topic related to psychiatric wellness and the promotion of mental health. The topics include the following: (1) conflict resolution, (2) emotions, (3) medication adherence, (4) assertiveness, (5) making changes, (6) sleep, (7) self-esteem, and (8) motivation.

Each of the eight folders of the program contains information for the RN and handouts for the patients. The information for the RN includes a "facilitator outline" with a script that can be followed to guide the group session, including prompts for when to give certain handouts, or to ask the group thought provoking questions about the session material to promote discussion. Each of these facilitator outlines have a brief description of acceptable and expected behaviours to be read to the participating patients before each

group, as well as brief objectives for each specific session. Sets of patient handouts are also included in the folders, with various forms of activity and fact sheets related to the learning topic.

This review was followed by a search of provincial health care organizations websites for any RN-led patient education group programs existing in Newfoundland (NL), Ontario (ON) or British Columbia (BC). No concrete evidence of any *RN-Led Patient Education Group Programs* for adult psychiatric inpatients could be found in any of the sites scanned. This in itself is an important finding and further confirms the need to conduct a process evaluation of any existing program to guide future implementation and evaluation of such a program.

It is interesting to note that, although no clear evidence of other RN-led patient education group programs for this population were found within the organizations searched, each website displayed information stating that health promotion and education was a priority for their organization (CAMH, 2018; Eastern Health, 2017; Fraser Health Authority, 2018b); therefore, a mental health education group program would be supported by the values and goals of these organizations. Unfortunately, because no other RN-led patient education group programs were uncovered through this environmental scan, the process evaluation relied heavily on the literature review and consultations.

Process Evaluation of the RN-Led Mental Health Education Program

The main desired product from a process evaluation is a clear, comprehensive picture of the quality of the program and its elements being implemented (Green & Kreuter, 1991). Unfortunately, due a lack of available evaluation data on the program, a

clear comprehensive picture of the quality of this program could not be created. Typical process evaluation data that would be considered includes the schedule of education sessions, a record of who taught the program, patient attendance records, patient satisfaction surveys, and budget. Very little consistent data on the implementation of the program was available, therefore this process evaluation is limited. Additionally, a process evaluation focuses on whether a program is being implemented as intended, but this program had no specific guidelines included for how it should be implemented, further limiting the evaluation.

Despite these limitations, it is clear that the *RN-Led Patient Education Group Program* is an important and innovative approach to promoting mental health and wellness in an inpatient setting because it focuses on health promotion and mental wellness rather than solely on psychoeducation. It is in keeping with the elements of recovery model for mental health, which includes hope, security, support and managing symptoms, empowerment, relationships, coping and finding meaning (Knutson et al., 2013). However, there is a need to plan for the future implementation and evaluation of this innovative mental health education program for psychiatric inpatients. This will involve updating and revising the current program as well as preparing to collect the data that will be needed to evaluate the program in the future. There is a need to develop a clear evaluation plan to assist with the successful implementation of the program, along with guidelines for implementation in general.

The findings from this process evaluation support the need to critically examine the content of the program, develop an overall program goal and specific learning objectives, design and implement an orientation session for RNs teaching the program,

review the patient education materials for health literacy, and develop a monthly program schedule with an assigned location for teaching. Finally, the successful implementation of the program is linked to the workload of RNs who are assigned to implement the program and consideration should be given to adjusting that workload within the resources of the organization.

Recommendations for Future Implementation and Evaluation of the Program

The recommendations for the future implementation and evaluation of the program include the following:

1. Assign a senior psychiatric RN to develop an implementation and evaluation plan in consultation with key informants on the unit.
2. Develop a statement of purpose, goals, and learning objectives for the program.
3. Establish a plan for the implementation of the program including:
    a. dedicated space and schedule
    b. consideration of the RN workload when teaching
    c. guidelines for group size
    d. data collection tools e.g. RN and patient survey
    e. inclusion criteria for patient groups
    f. an orientation program for RNs, and
    g. a program schedule with dates and time.
4. Establish a plan for the evaluation of the program including:
    a. RN assignment sheet,
    b. room booking schedule,

c. patient attendance records,

d. patient and staff satisfaction surveys and

e. budget reviews.

5. Assess, update, and revise program contents in accordance with current and reliable research literature and evidence for practice.
6. Explore expanding and updating the contents of the program to include:
    a. early signs of relapse,
    b. coping with mental health stigma, depression and anxiety,
    c. coping with persistent negative emotions,
    d. strategies for coping with emotions and change,
    e. life challenges and changes,
    f. early signs of relapse,
    g. loneliness and
    h. independent living skills.
7. Design and implement ongoing education sessions for RNs as the program content is revised and updated on a regular basis.

Advanced Nursing Practice Competencies

The advanced nursing practice (ANP) competencies have been met in the process of completing this practicum project, including: clinical competencies, education competencies, research competencies, and leadership competencies (Canadian Nurses Association (CNA), 2008). The following is a discussion of examples of behaviors and activities that demonstrate the successful achievement of the practicum objectives.

Clinical Competencies

This project has enhanced my personal clinical competencies and skill in psychiatric nursing practice through the extensive learning that has occurred while comprehensively assessing the needs and appropriate care for this patient population. For example, by collaborating and communicating with nursing staff on the unit about the *RN-Led Patient Education Group Program*, I have engaged them in helping to create an awareness of some of the concerns they have with the program that could affect their own unit, and potentially the psychiatric inpatient care and education provided at the organizational level in the future (CNA, 2008). Additionally, I have learned more about the specific learning needs of adult psychiatric inpatients, including the content and information they feel would be beneficial for them to learn; one of the most significant needs being coping in general, whether that be with specific mental illnesses and symptoms, or with more universal issues like change and life challenges.

It has also become clear that although health care providers' perspectives on patients' learning needs can provide valuable insight, patients are the most reliable source when it comes to their own learning, and focusing on their perspectives will contribute to less resistance and more successful education efforts (Burlingame et al., 2006; Kristiansen et al., 2018). I also gained valuable insight into patients' desires with regards to nurses' approaches to teaching; like how they placed high value on being an active partner in the learning process and receiving information through open and engaged discussions with staff who checked in to see whether information was understood or if patients had any questions or concerns (Hatonen et al., 2008). This range of client responses I explored regarding health and learning needs allowed me to make

recommendations for action to inform the future care and education of patients in this same population (CNA, 2008), and this wide array of information has expanded my clinical knowledge and competencies, all of which I will apply to my future practice.

Education Competencies

This project has enhanced my advanced nursing practice competencies in education through the specific focus on RN-led education interventions for psychiatric inpatients, expanding my understanding and ability to facilitate learning in others. Gaining an understanding of the PPM for health education planning has provided me with a more structured idea of how a program like this should be developed, implemented, and evaluated, providing a step-by-step guideline of this process from the very beginning. The issues that exist with the current *RN-Led Patient Education Program* and the way in which it was established could be remedied through the use of this model to ensure that the program contains appropriate content for the population being served that addresses their specific learning needs. It could also allow for more effective evaluation of the program in the future. Additionally, with regards to education competencies, I expanded my knowledge of the specific education needs of this patient population through completing the literature review that explored these needs, including the information patients felt they should learn about, as well as desirable approaches to patient education and how it should be delivered. Moving forward I will be able to take this new knowledge and evidence and incorporate it into my practice.

Research Competencies

This project has enhanced my research competencies and skill through the process of conducting a comprehensive review and analysis of the current research literature on the proposed topic, as well as collecting and analyzing qualitative data from key informant interviews. Through my literature review I was able to assess large volumes of literature, synthesize the data found, and utilize that evidence to inform the process evaluation and the recommendations to move forward with the program (CNA, 2008). Through the key informant interviews I was able to analyze responses to specific questions for common themes and apply that analysis to the design and implementation of the process evaluation of the program.

More specifically, I gained new skills and confidence in working with large amounts of literature, determining what articles were appropriate and had supportive data and information that was needed in answering my research questions. I also expanded my knowledge in how to extract appropriate evidence from various research articles in order to synthesize these findings and support the ideas put forth in the literature review. Additionally, I was able to utilize the research findings I compiled in order to evaluate current nursing practice on an individual unit level. Finally, I was able to meet the competency of disseminating new knowledge through presenting my project findings at a local level in my final practicum presentation (CNA, 2008).

Leadership Competencies

This project has enhanced my skills and competency in taking on an advanced practice nursing leadership role through the process of working to enact change in

nursing practice and care, and in collaborating with colleagues in this process from a position of guidance and leadership. The *RN-Led Education Group Program* is innovative with a unique focus that is not being addressed in many other areas, making it a valuable resource that should continue to be implemented. By completing this practicum project, I have developed skills in nursing leadership through being an agent of initial change that might not have otherwise occurred (CNA, 2008). I have identified the potential value and benefit of this program for patient wellness and addressing unmet patient needs, and have taken the first steps in the beginning phases of creating change, identifying areas for modification and assessment going forward in order for this to be an effective program in the future.

I have also demonstrated leadership competencies by advocating for a vulnerable and sometimes neglected patient population by evaluating a program that will hopefully contribute to improving the care and education psychiatric inpatients receive, as well as their overall quality of life. Finally, through completing this project I have: conducted an evaluation of a health education program; identified major gaps in mental health care and education; and identified recommendations for change to an existing program to enhance the successful implementation of the program in the future. Each of these behaviors are examples of leadership competencies I have demonstrated through completing my practicum project, while also enhancing and developing my experience as a whole as an advanced practice nurse.

Conclusion

Through completing this practicum project, I have learned so much and gained a significant amount of experience in many different areas that I did not have before this

process. Firstly, I worked to meet each of the ANP competences discussed previously, and I feel that I have gained so much with regards to growing as a nurse and learning what it means to take on an advanced practice role. This practicum provided me with the opportunity to expand my ANP competencies in the areas of clinical practice, research, leadership, and education through several activities (i.e., literature review, environmental scan, stakeholder consultations, and process evaluation). I was able to take on an ANP role through collaborating with unit stakeholders and acting as a role model, demonstrating the importance of utilizing evidence and modeling actions of an advanced practice nurse such as exploring and disseminating research, initiating change, collecting data, and conducting an evaluation of existing practice and programs.

Several methods were used to inform the final product of this practicum project, the process evaluation of the *RN-Led Patient Education Group Program.* Firstly, a comprehensive review of the literature was conducted exploring the learning needs of adult psychiatric inpatients, existing RN-led education group programs for this population, and the competencies of mental health nurses. It showed that there was a wide array of learning needs identified by this population, few similar education programs existed, and mental health nurses are competent and capable to design, implement and evaluate mental health education programs for inpatients. Additionally, an environmental scan was conducted to determine what types of RN-led patient education group programs were being implemented within this and in other geographical areas. The environmental scan showed that, although the organizations' policies contained support this type of program, there was no definitive proof that similar education programs

existed. Finally, key stakeholder consultations showed there is a need to update the contents of the program.

The final product of the practicum project was the process evaluation of the *RN-Led Patient Education Group Program.* It was designed and conducted based on guidelines from the PRECEDE-PROCEED Model and results were utilized to develop recommendations for future implementation and evaluation of the program. Recommendations arising from the process evaluation included the need to develop a program goal and learning objectives, as well as a plan for implementation and evaluation. The program contents should be revised and updated in consultation with key informants and an orientation session developed for RNs implementing the program. In summary, the *RN-Led Patient Education Group Program* is an innovative mental health and wellness program for this population that is helping to close the gap between the identified learning needs of psychiatric inpatients and existing programs and should continue to be implemented with this population.

References

Anttila, M., Valimaki, H., Hatonen, H., Luukkaala, T., & Kaila, M. (2012). Use of web-based patient education sessions on psychiatric wards. *International Journal of Medical Informatics, 81*(6), 424-433. doi:10.1016/j.ijmedinf.2012.02.004

Burlingame, G., Ridge, N., Matsuno, J., Hwang, A., & Earnshaw, D. (2006). Educational needs of inpatients with severe & persistent mental illnesses: A partial replication. *Journal Of Psychosocial Nursing And Mental Health Services, 44*(5), 38-43. Retrieved from https://search-proquest-com.qe2a-proxy.mun.ca/docview/225540201?rfr_id=info%3Axri%2Fsid%3Aprimo

Canadian Federation of Mental Health Nurses. (2014, March). *Canadian standards for psychiatric-mental health nursing: Standards of practice (4th ed.).* [PDF file]. Toronto, ON: Author. Retrieved from http://cfmhn.ca/professionalPractices?f=7458545122100118.pdf&n=212922-CFMHN-standards-rv-3a.pdf&inline=yes

Canadian Nurses Association. (2008). *Advanced nursing practice: A national framework.* Ottawa, ON: Canadian Nurses Association.

Centre for Addiction and Mental Health. (2018). *About CAMH.* Retrieved from http://www.camh.ca/en/driving-change/about-camh

Chien, W. T., Kam, C. W., & Lee, I. F. K. (2001). An assessment of the patients' needs in mental health education. *Journal of Advanced Nursing, 34*(3), 304-311. doi:10.1046/j.1365-2648.2001.01759.x

Crosby, R. & Noar, S. M. (2011). What is a planning model? An introduction to PRECEDE-PROCEED. *Journal of Public Health Dentistry, 71,* S7-S15. doi:10.1111/j.1752-7325.2011.00235.x

Eastern Health. (2017, July 5). *Population health.* Retrieved from http://www.easternhealth.ca/WebInWeb.aspx?d=2&id=2380&p=2377

Fraser Health Authority. (2018). *Mental wellness.* Retrieved from https://www.fraserhealth.ca/health-topics-a-to-z/mental-health-and-substance-use/mental-wellness#.W_JFKC_MxsM

Green, L. W. & Kreuter, M. W. (1991). *Health promotion planning: An educational and environmental approach* (2nd ed.). Mountain View, CA: Mayfield Publishing Company.

Hatonen, H., Kuosmanen, L., Malkavaara, H., & Valimaki, M. (2008). Mental health: Patients' experiences of patient education during inpatient care. *Journal of Clinical Nursing, 17*(6), 752-762. doi:10.1111/j.1365-2702.2007.02049.x

Knutson, M., Newberry, S., & Schaper, A. (2013). Recovery Education: A tool for psychiatric nurses. *Journal of Psychiatric and Mental Health Nursing, 20*(10), 874-881. doi:10.1111/jpm.12043

Koivunen, M., Huhtasalo, J., Makkonen, P., Valimaki, M., & Hatonen, H. (2012). Nurses' roles in systematic patient education sessions in psychiatric nursing. *Journal of Psychiatric and Mental Health Nursing, 19*(6), 546-554. doi:10.1111/j.1365-2850.2011.01833.x

Kristiansen, S.T., Videbech, P., Kragh, M., Thisted, C. N., & Bjerrum, M. B. (2018). Patients' experiences of patient education on psychiatric inpatient wards; A systematic review. *Patient Education and Counseling., 101*(3), 389-398. doi:10.1016/j.pec.2017.09.005

Kuosmanen, L., Valimaki, M., Joffe, G., Pitkanen, A., Hatonen, H., Patel, A., & Knapp, M. (2009). The effectiveness of technology-based patient education on self-reported deprivation of liberty among people with severe mental illness: A randomized controlled trial. *Nordic Journal of Psychiatry, 63*, 383-389. doi:10.1080/08039480902825241

Pitkanen, A., Valimaki, M., Kuosmanen, L., Katajisto, J., Koivunen, M., Hatonen, H., . . . Knapp, M. (2012). Patient education methods to support quality of life and functional ability among patients with schizophrenia: A randomised clinical trial. *Quality of Life Research, 21*(2), 247-256. doi:10.1007/s11136-011-9944-1

Pollock, K., Grime, J., Baker, E., & Mantala, K. (2004). Meeting the information needs of psychiatric inpatients: Staff and patient perspectives. *Journal of Mental Health, 13*(4), 389-401. doi:10.1080/09638230410001729834

Zhao, S., Sampson, S., Xia, J., & Jayaram, M. (2015). Psychoeducation (brief) for people with serious mental illness. *Cochrane Database of Systematic Reviews, 4*(4). doi:10.1002/14651858.CD010823.pub2

Appendix A

Literature Review

Patient education is an important component of treatment in any health setting, and because of the complex nature of mental illness, the associated symptoms, and its impact on daily life, Registered Nurses (RNs) caring for inpatients with psychiatric disorders should prioritize patient learning needs and education as a vital part of providing quality care (Chien et al., 2001; Burlingame et al., 2006; Kristiansen et al., 2018; Pollock et al., 2004). Health education interventions for psychiatric inpatients in acute care could provide patients with relevant health information to address their learning needs and promote their mental health and wellness. Psychiatric inpatients can have a wide array of complex education learning needs, many of which can be addressed by RNs through nurse-led health education interventions.

Health and wellness education interventions for psychiatric inpatients have been shown to contribute to an array of positive health outcomes such as improved coping, resilience, and an ability to live independently while preventing relapse (Burlingame, Ridge, Matsuno, Hwang, & Earnshaw, 2006; Hatonen, Kuosmanen, Malkavaara, & Valimaki, 2008; Knutson, Newberry, & Schaper, 2013; Kristiansen, Videbech, Kragh, Thisted, & Bejerrum, 2018). Unfortunately, only a small amount of research has been published on nurse-led health education group programs for psychiatric inpatients in acute care, including the efficacy and benefits of this type of intervention for this population (Hatonen et al., 2008; Kristiansen et al., 2018). Additionally, psychiatric inpatients have identified health education as an important treatment need that often goes unaddressed (Kristiansen et al., 2018). Therefore, a review of the research literature is warranted in order to understand the complex learning needs of this patient population

and how those needs can be addressed by implementing nurse-led, specially designed health education group interventions.

Background

Patient health education group interventions are complex processes (Hatonen et al., 2008), and there are many different educational approaches and topics appropriate to include in health education interventions designed for psychiatric inpatients in an acute care setting (Kristiansen et al., 2018). Most of the research on education interventions for psychiatric inpatients identify learning needs related to psychiatric diagnoses and treatment including the associated symptoms, treatment options, and prognosis associated with the diagnosis. This type of educational intervention is known as "psychoeducation," as examined in the Cochrane systematic review by Zhao, Sampson, Xia, & Jayaram (2015). That review identified psychoeducation as a common approach in the inpatient psychiatric setting and it primarily focuses on a patient's understanding of their diagnosis, including education about the illness and treatment plans. However, psychoeducational interventions do not usually address health promotion, coping, or strategies to achieve general mental wellness. This is despite research that shows addressing these topics can provide positive outcomes with regards to behavioural changes, motivation, and patients' ability to cope effectively (Knutson et al., 2013). Patient health education interventions designed for psychiatric inpatients should address not only psychoeducation, but also include the topics of health promotion, coping, and strategies to achieve mental health wellness.

Psychiatric inpatients with acute mental illness are an important population with which to address patient education and learning needs because of the severity of their illness and the need for acute interventions. Examples of acute psychiatric diagnoses could include illnesses like severe mood disorders (e.g., anxiety, depression, and bipolar disorder), schizophrenia, and other disorders with psychotic and delusional elements (National Alliance on Mental Illness (NAMI), 2018). This review will focus on psychiatric inpatients as its target population, exploring studies that implement nurse-led health education group interventions and determining what learning needs have been identified in this population. The review will also identify the expected health education competencies for psychiatric RNs caring for this population.

For the purposes of this literature review, patient health education interventions will be defined as structured, nurse-led group education interventions, or programs that provide psychiatric inpatients with relevant health information and promote an understanding of illness, treatment, and health promotion strategies in order to encourage behaviour that maximizes mental health and overall wellness (Chien, Kam, & Lee, 2001). Patient learning needs are defined as patients' unique perspectives on the specific areas of health information that they feel are a priority and where understanding would potentially contribute to achieving wellness and recovery (Burlingame et al., 2006). Additionally, health professionals' perspectives on patients' learning needs will be discussed in an effort to explore a more holistic and informative perspective on the learning needs of this population (Pollock, Grime, Baker, & Mantala, 2004).

It is clear that a gap exists between the identified learning needs of psychiatric inpatients' and existing patient health education interventions. This literature review will

explore the health education learning needs of adult inpatients in acute care psychiatric settings, and examine existing nurse-led educational group interventions being implemented within this population. The review will focus on three major areas: the experiences and learning needs of this patient population with regards to support and education, the types of interventions and programs that are being implemented in practice and their level of efficacy, and existing health education practice competencies for psychiatric nurses, as presented in the research literature.

Methods and Exclusion Criteria

The literature review was initiated with literature searches using the following databases: CINAHL, Google Scholar, PubMed, and the Memorial University of Newfoundland (MUN) libraries database. Search phrases such as "patient education intervention mental health," "inpatient education psychiatry," and "learning needs mental health" were utilized in the Google scholar and MUN libraries database. As well, the search terms of "information needs AND psychiatric patients" and "nurse led patient education" were used in CINAHL. Parameters were set to only include articles from scholarly journals that were written in the English language. Additionally, the references lists of identified relevant articles were searched for appropriate studies using the search phrases. Criteria for year of publication for the included studies was extended further than originally intended because of a lack of research in these areas. However, any articles published before the year 2000 were excluded to ensure that the studies used provided the most current and relevant evidence possible.

Studies that utilized a sample of psychiatric outpatients were excluded from the review, specifically for articles implementing patient education interventions, as the target population was identified as psychiatric inpatients. However, an exception was made if the article explored the learning needs of patients who had acute psychiatric illnesses but were being treated in the community at the time of the study. This would ensure important data and viewpoints related to the learning needs of this population were not missed. Studies focusing solely on psychoeducation were excluded from the review, as they did not meet the definition of patient education interventions used in this project and review. Articles were included if the intervention discussed included at least one topic related to holistic mental wellness and coping, as opposed to exclusively psychoeducation.

Results

Titles of articles were screened first and the ones that appeared to fit the outlined criteria were collected and set aside for further investigation. Next, study abstracts were scanned to determine if they met criteria for inclusion in the review, significantly cutting down the total number of articles. Finally, the full texts of the remaining studies were examined and any that did not meet the set criteria were discarded. This resulted in a total of nine research articles that were deemed appropriate for inclusion in the literature review. They varied greatly in research designs and methods, including one systematic review (Kristiansen et al., 2018), one article outlining the development of a new education program (Knutson et al., 2008), and seven research articles. Of the seven research articles, one was considered qualitative research (Pollock et al., 2004), four were quantitative research (Burlingame et al., 2006; Chien et al., 2001; Kuosmanen et al.,

2009; Pitkanen et al., 2011), and two had mixed method designs (Anttila, Valimaki, Hatonen, Luukkaala, & Kaila, 2012; Hatonen et al., 2008). Geographical settings ranged from Finland, North America, China, and the United Kingdom, and five of the nine studies focused specifically on a sample of patients with a diagnosis of schizophrenia. Findings of the review were organized into health education needs of psychiatric inpatients, nurse-led education group interventions, and health education competencies of psychiatric RNs.

Health Education Needs of Psychiatric Patients

Patient education is an important component of treatment in any health setting, and because of the complex nature of mental illness, the associated symptoms, and its impact on daily life, health professionals caring for patients with psychiatric disorders should prioritize patient learning needs and education as a vital part of providing quality care (Chien et al., 2001; Burlingame et al., 2006; Kristiansen et al., 2018; Pollock et al., 2004). It is important to explore a range of view-points when determining the health education learning needs of psychiatric inpatients, including the perspectives of nurses and other health care providers (HCPs) that facilitate patient care. This allows for a more comprehensive picture of what learning needs exist (Pollock et al., 2004); however, patients are the most reliable source when it comes to their own learning, and focusing on their perspectives will contribute to less resistance and more successful education efforts (Burlingame et al., 2006; Kristiansen et al., 2018; Payson et al., 1998).

Five research studies focusing on the learning needs of psychiatric inpatients were found with a range of different designs and methods. This included two studies with quantitative designs (Burlingame et al., 2006; Chien et al., 2001) one with a qualitative

design (Pollock et al., 2004), and one that used mixed research methods (Hatonen et al., 2008). The fifth study was a systematic review exploring inpatients' experiences of education provided on psychiatric wards (Kristiansen et al., 2018). Themes of common learning needs for psychiatric inpatients that were identified from these studies included topics such as: (1) diagnosis and treatment, (2) medications, (3) overall mental wellness and coping, and (4) needs related to education methods and delivery. A critique of these research studies can be found in Appendix A-1.

Diagnosis and treatment. Psychiatric inpatients from five studies reported they wanted to be informed about their diagnosis, symptoms, and treatment so they could be active participants in making educated decisions for their recovery and care (Burlingame et al., 2006; Chien et al., 2001; Hatonen et al., 2008; Kristiansen et al., 2018; Pollock et al., 2004) There is a desire for a shift towards more "patient-centred medicine", where patients are better informed about their illness, prognosis, and treatment, thus allowing them to take responsibility and have an active role in their own recovery, which will hopefully also promote mental health and wellness (Burlingame et al., 2006; Kristiansen et al., 2018; Pollock et al., 2004).

With regards to understanding the diagnosis, patients ranked knowing about early warning signs of mental illness and relapse as the number one patient learning need (Chien et al. 2001). "Symptoms of illness" was also ranked in the top ten most important learning needs, however, findings from a similar study by Burlingame et al. (2006) did not report illness symptoms as one of the top ten patient priorities. Alternatively, patients from both studies did prioritize the same learning needs of improving communication and understanding medical treatment. Both studies utilized a survey design to determine

existing learning needs of patients with schizophrenia, but Burlingame administered questionnaires to both patients and nurses in the United States (US), and focused on an inpatient setting. The study had an overall rating of medium and had limitations such as poor statistical reporting and limited recruitment strategies (PHAC, 2014). Alternatively, Chien et al. included patient participants only from China and focused solely on the outpatient setting. This study had a rating of strong and had minimal limitations. The differences in the learning needs identified by patients in these studies could be partly attributed to the differing geographical locations of patients and contrasts in culture. These studies show that learning needs for psychiatric inpatients include understanding the early signs of mental illness and relapse including the symptoms of the diagnosis, how to improve communication skills, and understanding medical treatment.

Medications. One of the primary treatments for psychiatric illness is medication (Pollock et al., 2004). A number of different classes with various purposes and methods of action exist and are administered to psychiatric inpatients to treat a wide array of symptoms (National Institute of Mental Health (NIMH), 2016). Patients from three different studies identified information about medications as a significant learning need, with the study by Burlingame et al. (2006) identifying it as patients' number one learning need. Medication information can include harm; strength and dosage; interactions with other drugs; and consequences of not taking medication (Chien et al., 2001; Burlingame et al., 2006; Pollock et al., 2004). Not being adequately informed of these aspects related to prescribed medication can result in patients feeling helpless, uninformed, and left out of their own treatment, which can potentially lead to a lack of adherence with medications (Pollock et al., 2004).

Alternatively, Pollock et al. (2004) reported that although HCPs did identify medication education as an important patient learning need, they did not report this as substantial or pressing an issue as patients did. Instead, they identified maintaining patients' adherence with medication treatment as a significant priority for their roles as care providers, possibly more of a priority than provision of information about medications. HCPs also voiced concerns about providing patients with too much information about medications that might result in obsession over things like side effects. In general, provision of education and information to patients regarding medications and adherence to treatment were clear learning needs for this population.

Overall mental wellness and coping. Patients themselves have identified the need for health education to focus on health promotion, holistic mental wellness, and coping (Burlingame et al., 2006; Chien et al., 2001). With regards to coping, Burlingame et al. (2006) identified it as one of the most important patient learning needs, including coping with depression, anxiety, panic attacks and stigma. Alternatively, the study by Chien et al. (2001) reported coping with anxiety and depression as two of the ten least important patient learning needs, but found improving coping ability in general to be a significant priority. Patients also identified learning needs related to improving social relationships, including ways to deal with loneliness and improving communication skills, which were considered part of the top ten information areas seen as a priority by patients (Burlingame et al., 2006; Chien et al., 2001). Motivation and related concepts were also identified as a significant patient learning need (Chien et al., 2001). More specifically, many patients wanted to learn about how to get more enjoyment from life, as well as to improve independent living skills (Burlingame et al., 2006). Finally, patients

identified learning needs related to daily problem solving and dealing with life challenges and changes (Chien et al., 2001). These studies show that appropriate learning needs for this population include: health promotion; holistic mental wellness; coping with depression, anxiety, change, panic attacks, and stigma; improving social relationships; dealing with loneliness; and improving communication and independent living skills.

Educational Approaches and Delivery. Patients also identified learning needs with regards to the ways in which information and education are delivered. According to patients in a study by Hatonen et al. (2008), written information was an effective method of providing education. It can be utilized over time and is especially helpful when patients' are in severe stages of illness causing issues with concentration. Written information could be reviewed later when symptoms have begun to subside (Pollock et al., 2004). Hatonen et al. also reported that with regards to resources, 52% of patients preferred to receive information via leaflets, 36% preferred some form of literature, 32% preferred videos, and 22% wanted to receive information via the internet. All of these methods of providing patients with information were also supported by the systematic review by Kristiansen et al. (2018). However, written information was seen as insufficient on its own. Patients felt it necessary to speak face-to-face with HCPs so they could ask specific questions about their treatment and build openness, trust, and therapeutic relationships (Pollock et al., 2004). The study by Hatonen et al. found that 94% of patients wanted to receive information and teaching through open discussions with staff. Patients also felt they would benefit from staff being more engaged and open in asking whether they had any information concerns or questions, as they felt

uncomfortable asking at times in fear that they might be a burden or interruption for providers and their busy schedules (Hatonen et al., 2008; Pollock et al., 2004).

Overall, patients with acute psychiatric illnesses desire provision of information that educates them about their disease, treatments, and medication, (Kristiansen et al., 2018; Pollock et al., 2004), as well as information that helps promote positive health promoting behaviours like coping, motivation, building social relationships, and managing emotions (Burlingame et al., 2006; Chien et al., 2001). Generally, the process of psychiatric patients being adequately informed by health providers about concepts related to their health and wellness needs can be improved upon (Pollock et al., 2004). Also, despite the fact that including the perspectives of health providers creates a more diverse and comprehensive picture of education needs, there can sometimes be a gap between patients actual perceived learning needs and what HCPs see as a priority; therefore, the learning needs that patients express should be used as a primary guide for understanding this phenomenon and developing education strategies (Burlingame et al., 2006).

The preceding review of the literature shows that appropriate educational approaches and delivery for this population could include: leaflets, videos, literature, internet websites, face-to-face interventions, and open discussions.

Education Interventions for Psychiatric Inpatients

Only four studies that implemented some form of health promotion-focused, nurse-led education intervention for psychiatric inpatients were found. These studies fell into three different categories: (1) technology-based education, (2) conventional education, and (3) Recovery Education. Three studies were research-based, and were

included in literature tables located in Appendix A-1 (Anttila et al., 2012; Kuosamanen et al., 2009; Pitkanen et al., 2012), and one study outlined the development of a recovery-based education program (Knutson et al., 2013). Each of the three research studies were set in Finland and focused on technology-based education as at least one of the interventions being tested. Two had a randomized controlled trial (RCT) design (Kuosamanen et al., 2009; Pitkanen et al., 2012), and the other used a mixed-method design (Anttila et al., 2012). All three studies utilized the same sample of patients but collected and analysed different data. The target population of patients diagnosed with Schizophrenia was chosen as it is an acute mental illness with debilitating symptoms that can affect daily functioning and coping and has also been shown to respond to education therapy (Pitkanen et al., 2012).

Technology-based education. Advances in technology and the increased use of computers has resulted in advancements in technology-based education strategies implemented in nursing care (Pitkanen et al., 2012). Each of the research articles related to patient education interventions found for this review explored the use of technology-based methods of health education in acute care psychiatry. Studies by Kuosmanen et al. (2009) and Pitkanen et al. (2012) utilized the same sample of inpatients with schizophrenia from two acute psychiatric hospitals in Finland. Both utilized randomized controlled trial (RCT) designs examining the effects of an IT (information technology) intervention in comparison to conventional patient education methods and usual care. The IT intervention (i.e., Meili.Net) consisted of one-to-one nurse-led sessions with patients on five topics: (1) illness, (2) treatment, (3) well-being, (4) support, and (5) patients' rights. The program also included peer support through chat rooms, print-outs of relevant

information, and a counselling tool where patients could email questions that would be answered by nursing staff. The conventional education intervention consisted of nurse-led group sessions with oral and written learning material on the same five topics as the IT group, and the control group received usual patient care (Kuosmanen et al., 2009).

The two studies differed in their purpose and outcome measures. The study by Kuosmanen et al. (2009) looked at the effect of the education interventions on experiences with "deprivation of liberty" (DL), which included things like involuntary admission, antipsychotic medication, and physical restraint like seclusion. Deprivation of liberty was usually a result of aggressive behaviour during admission. DL scores were measured from 0 (no experience of DL) to 100 (severest possible DL). At discharge patients who participated in IT educational interventions reported less DL than the patients who participated in conventional educational interventions, but there was no significant difference in DL measures between groups. There were also no significant differences between groups with regards to length of stay, study drop-out, or patient satisfaction. Generally, Kuosmanen et al. found that IT education was not superior compared to other methods in specifically reducing DL, however, the education intervention had no negative effects on pts' DL, satisfaction, or length of stay.

Pitkanen et al. (2012) also found no significant evidence supporting IT education as a superior method for psychiatric inpatients. They explored the impact of computer-based patient education, to conventional patient education on patients' quality of life (QOL) and functional impairment. QOL scores improved significantly in both groups during follow-up. However, there was no significant difference in changes between groups over time. Scores representing level of functional impairment improved

significantly for both groups over the follow-up period (p=<0.001), but again, there were no significant differences between groups whether they received a specific intervention or not. The absence of statistically significant findings in these studies could possibly be attributed to some inpatients being in the most severe phase of their illness, making concentration difficult and especially impacting the computer-based education intervention which was mainly driven by patients expressing their own learning needs (Pitkanen et al., 2012).

Limitations for the studies by Kuosmanen et al. (2009) and Pitkanen et al. (2012) were similar due to their use of the same sample and should be considered when interpreting findings. Only 38% of patients approached agreed to participate in the study, possibly due to the lack of commitment toward treatment interventions in this patient population, and although participants were randomly assigned to groups, they were not randomly selected for the study resulting in possible selection bias. Question of generalizability of findings also existed since participants were only selected from two hospitals in Finland. Feasibility of implementing the computer-based intervention was not clear as not every inpatient psychiatry unit would have the technology and resources available to do so. Finally, because patients and nurses were not blinded to the study groups there is potential that contamination could have occurred between patients on the wards (Pitkanen et al., 2012). Both studies had a rating of medium quality (PHAC, 2014), and could be expanded upon by widening the sample population to include patients from multiple geographical locations, as well as implementing more education sessions over a longer period to increase effect size (Pitkanen et al., 2012).

Additionally, a third study by Anttila et al. (2012) also explored the general effect of the Meili.Net IT education intervention on the same sample of inpatients. However, the quality of this study was significantly poorer and had several limitations that should be considered when interpreting results. Researchers only discussed results in relation to the IT intervention group and provided little explanation of the conventional education group and whether or not a usual care group existed. Also, descriptions of study procedures, data collection and analysis, and randomization were extremely vague and confusing at times. Validity and reliability of the data collection instrument (i.e., "evaluation report") was not established, and the criteria surrounding the coding of qualitative data into quantitative data was also unclear. Qualitative data from IT education sessions were coded as either (1) "successful education session with no problems," which accounted for 74% of sessions, or (2) "less successful session with a variety of problems" which represented 26% of sessions. Despite the majority of education sessions being considered successful, the patients who were included in the "less successful session" category felt as though the information offered was not precise enough, that questions were not adequately answered, and that this different education style was disturbing. Also, frequent disturbances (3.7% of sessions) and interruptions requiring rescheduling (1.4% of sessions) that occurred during sessions could support the idea that structured education interventions may not always be appropriate for patients with acute psychiatric illnesses in more severe stages of their disease (Anttila et al., 2012). However, the study found IT-based education to be a generally promising method for patient education.

In general, these studies found that, although this type of technology-based education did not appear to be significantly superior to any other form of education intervention, there were also no negative effects for patients with regards to QOL, DL, functional disability, or length of hospital stay (Kuosamanen et al., 2009; Pitkanen et al., 2012). Computer-based education was found to have potential for providing patients with a more individualized learning experience as it is easier to tailor to their unique needs (Pitkanen et al., 2012), and could also be considered an innovative method that provides a different approach to learning than standard education which has been identified as a learning need by psychiatric inpatients (Hatonen et al., 2008). Therefore, this method of patient education is worthwhile for continued implementation into psychiatric nursing practice and further exploration into possible benefits via research (Kuosamanen et al., 2009; Pitkanen et al., 2012). However, it should also be noted that computer-based education should not be seen as a replacement for one-to-one patient education provided by nursing staff that is essential to learning and building therapeutic relationships (Anttila et al., 2012).

Conventional education. Of the three studies discussed that implemented IT education interventions, two of them also explored the use of more conventional forms of patient education. This included group sessions led by nurses where information on specific health topics contained in educational pamphlets were discussed and explained with patients, and an allowance for patients to raise any related questions or concerns throughout the learning process (Kuosamanen et al., 2009; Pitkanen et al., 2012). No significant differences were found in either study that supported conventional education methods as superior to either IT-based methods or education received in usual care.

However, in the study by Pitkanen et al. (2012) patients who received conventional education did experience significant increases in QOL scores (p=<0.001) at follow-up, as well as a decrease in scores related to functional disability (p=<0.001). Overall, only two studies exploring conventional forms of nurse-led group education with a focus on mental health and wellness promotion were found. Therefore, it has become clearly evident that more research is necessary in this area to determine the benefits and efficacy of this type of intervention for acute psychiatric inpatients.

Additionally, a systematic review by Kristiansen et al. (2018) that examined education interventions for psychiatric patients in general determined that patient education programs are useful and beneficial in psychiatric care, but that no single type of education intervention is more effective than another. Also, the importance of including patients in decisions regarding their treatment and education was stressed, with priority placed on education efforts being tailored to the diverse health and learning needs of specific patient groups (Chien et al., 2001; Burlingame et al., 2006; Kristiansen et al., 2018).

Recovery education. An article by Knutson et al. (2013) outlined the development of a patient education program and tool for administration by psychiatric nurses called "Recovery Education" in order to fill a gap that existed in education interventions for psychiatric inpatients that focused on health promotion, coping, and recovery. The education program was created based on the idea that recovery from mental illness is possible through positive thinking and reclaiming control over one's life, and that patients require knowledge and coping skills in order to achieve this and reduce stress. Elements of Cognitive Behavioural Therapy (CBT) were also woven through the

program. Authors created their own recovery model to base the program on as they could not find one in the literature that accurately addressed their needs. It included seven different elements: (1) hope, (2) security, (3) support and managing symptoms, (4) empowerment, (5) relationships, (6) coping, and (7) finding meaning. Group sessions with psychiatric inpatients were conducted by nursing staff on a variety of topics that addressed these elements, and also included methods such as use of handouts, music, short videos, and "mindfulness breaks". The overall goal of the education program was to enhance patients' coping skills, teach them to utilize supports and hopefully prevent relapse after discharge.

Evaluation of the Recovery Education program was conducted after each lesson where patients would rate the lesson as poor, fair, good, very good, or excellent, and also provided written statements reporting what they found "helpful" and "not helpful" about the session (Knutson et al., 2013, p. 878). Of 92 evaluations completed from January 2009 through 2010, 1% of patients rated the lessons "poor", 6% rated "fair", 21% rated "good", 37% rated "very good", and 35% rated "excellent". Many patients also expressed positive opinions of the education groups, stating they experienced feeling supported, less alone, and connected with others, and that they learned new information and skills that contributed to personal growth. Patients' suicidal thoughts also decreased after receiving the education (mean score of 7.8 on admission vs. 1.0 on discharge), however, this data was not taken from a random sample.

The study by Knutson et al., (2013) was the only article from this review that outlined an education intervention with a specific focus on overall mental wellness, health promotion, and coping, rather than symptoms and treatments of mental illness.

More research supporting this innovative program and exploring its effect on patient outcomes would be beneficial in understanding its potential impact for implementation into psychiatric inpatient care and maintaining recovery in mental illness.

Each of the education interventions outlined in these articles have characteristics and topics that address many of the established learning needs previously identified by patients in the literature. For example, the education topics of illness, treatment, well-being, and support (Anttila et al., 2012; Kuosmanen et al., 2009; Pitkanen et al., 2011) address patient-identified learning needs of mental illness, symptoms, treatment with medication, coping, improved life functioning, and improved social relationships (Burlingame et al., 2006; Chien et al., 2001; Kristiansen et al., 2018). Maintaining focus in this way on tailoring education efforts to patients' perceived learning needs is extremely important, as it insures that education interventions will be as relevant and beneficial as possible in meeting patients educational needs (Burlingame et al., 2006; Chien et al., 2001; Pollock et al., 2004).

Competencies of Psychiatric Registered Nurses

Psychiatric RNs are extensively trained and have a wide range of skills, knowledge, and expertise in providing competent, safe, and ethical care to psychiatric patients; part of this care is ensuring patients are well educated and informed about concepts related to their health (Canadian Federation of Mental Health Nurses (CFMHN), 2014; Knutson et al., 2013; Koivunen, Huhtasalo, Makkonen, Valimaki, & Hatonen, 2012). This specific discipline of nursing has its own unique set of standards for practice, outlined in a document by the CFMHN (2014). In this document, there is a section of competences specifically related to teaching and education which outlines the abilities

and skill-set of psychiatric RNs. These competencies support the fact that psychiatric RNs are completely qualified to identify the learning needs of psychiatric inpatients and appropriately implement health education interventions with this population. Some of the competencies of psychiatric RNs with regards to patient education include: collaboration with patients to determine learning needs; promoting recovery from illness through education; providing health promotion education in the context of a patient's individual needs, culture, and situation; helping patients to make informed health decisions; providing guidance, support, and relevant information; and engaging in patient education interventions and adapting to meet changing learning needs (CFMHN, 2014). Each of these competencies provides psychiatric RNs with the ability to safely and competently provide quality patient education in the psychiatric inpatient setting.

Summary and Conclusions

Upon completion of this review of the research literature, it has become clear that more research is necessary with regards to psychiatric inpatient education and learning needs. Little is currently known about structured, nurse-led patient education interventions in psychiatric inpatient settings, and more research is needed to confirm the most valuable perceived information needs of different psychiatric patients at different stages of illness recovery in order to ensure that education interventions are meeting those needs (Kristiansen et al., 2018). The fact that only three appropriate studies implementing patient education interventions in this setting could be found for this review was an important finding in itself, pointing to the need for more research on varying types of education programs being implemented in the acute care psychiatric setting. The need for innovation in approaches to patient education was also identified (Hatonen et al., 2008),

so more research exploring the implementation and efficacy of technology-based interventions could be beneficial (Pitkanen et al., 2011). Although, several studies found that no single type of education intervention is more effective than another (Pitkanen et al., 2011; Kristiansen et al., 2018; Kuosmanen et al., 2009).

Psychiatric patients were found to have a wide variety of learning needs, including information specific to their individual diagnoses and treatment (Hatonen et al., 2008; Kristiansen et al., 2018; Pollock et al., 2004;), as well as more health promotion focused learning that could optimize coping and wellness (Burlingame et al., 2006; Chien et al., 2001; Knutson et al., 2013). The importance of including patients in decisions regarding their treatment and education was also stressed, with priority placed on education efforts being tailored to the diverse health and learning needs of specific patient groups, rather than on HCPs perceptions (Chien et al., 2001; Burlingame et al., 2006; Kristiansen et al., 2018). More patient-centered education interventions in inpatient psychiatry would be beneficial for improving this area of patient care and research (Hatonen et al., 2008; Pitkanen et al., 2011).

References

Anttila, M., Valimaki, H., Hatonen, H., Luukkaala, T., & Kaila, M. (2012). Use of web-based patient education sessions on psychiatric wards. *International Journal of Medical Informatics, 81*(6), 424-433. doi:10.1016/j.ijmedinf.2012.02.004

Burlingame, G., Ridge, N., Matsuno, J., Hwang, A., & Earnshaw, D. (2006). Educational needs of inpatients with severe & persistent mental illnesses: A partial replication. *Journal Of Psychosocial Nursing And Mental Health Services, 44*(5), 38-43. Retrieved from https://search-proquest-com.qe2a-proxy.mun.ca/docview/225540201?rfr_id=info%3Axri%2Fsid%3Aprimo

Canadian Federation of Mental Health Nurses. (2014, March). *Canadian standards for psychiatric-mental health nursing: Standards of practice (4th ed.)*. [PDF file]. Toronto, ON: Author. Retrieved from http://cfmhn.ca/professionalPractices?f=7458545122100118.pdf&n=212922-CFMHN-standards-rv-3a.pdf&inline=yes

Chien, W. T., Kam, C. W., & Lee, I. F. K. (2001). An assessment of the patients' needs in mental health education. *Journal of Advanced Nursing, 34*(3), 304-311. doi:10.1046/j.1365-2648.2001.01759.x

Fernandez, R., Evans, V., Griffiths, R., & Mostacchi, M. (2006). Educational interventions for mental health consumers receiving psychotropic medication: A review of the evidence. *International Journal of Mental Health Nursing, 15*(1), 70-80. doi:10.1111/j.1447-0349.2006.00405.x

Hatonen, H., Kuosmanen, L., Malkavaara, H., & Valimaki, M. (2008). Mental health: Patients' experiences of patient education during inpatient care. *Journal of Clinical Nursing, 17*(6), 752-762. doi:10.1111/j.1365-2702.2007.02049.x

Knutson, M., Newberry, S., & Schaper, A. (2013). Recovery Education: A tool for psychiatric nurses. *Journal of Psychiatric and Mental Health Nursing, 20*(10), 874-881. doi:10.1111/jpm.12043

Koivunen, M., Huhtasalo, J., Makkonen, P., Valimaki, M., & Hatonen, H. (2012). Nurses' roles in systematic patient education sessions in psychiatric nursing. *Journal of Psychiatric and Mental Health Nursing, 19*(6), 546-554. doi:10.1111/j.1365-2850.2011.01833.x

Kristiansen, S.T., Videbech, P., Kragh, M., Thisted, C. N., & Bjerrum, M. B. (2018). Patients' experiences of patient education on psychiatric inpatient wards; A systematic review. *Patient Education and Counseling., 101*(3), 389-398. doi:10.1016/j.pec.2017.09.005

Kuosmanen, L., Valimaki, M., Joffe, G., Pitkanen, A., Hatonen, H., Patel, A., & Knapp, M. (2009). The effectiveness of technology-based patient education on self-reported deprivation of liberty among people with severe mental illness: A randomized controlled trial. *Nordic Journal of Psychiatry, 63*, 383-389. doi:10.1080/08039480902825241

National Alliance on Mental Illness. (2018). *Types of mental illness.* Retrieved from https://namica.org/resources/mental-illness/types-mental-illness/

National Institution of Mental Health. (2016, October). *Mental health medications.* Retrieved from https://www.nimh.nih.gov/health/topics/mental-health-medications/index.shtml

Payson, A., Wheeler, K., & Wellington, T. (1998). Health teaching needs of clients with serious and persistent mental illness: Client and provider perspectives. *Journal of Psychosocial Nursing & Mental Health Services, 36*(2), 32-35. Retrieved from https://search-proquest-com.qe2a-proxy.mun.ca/docview/764029570?rfr_id=info%3Axri%2Fsid%3Aprimo

Pitkanen, A., Valimaki, M., Kuosmanen, L., Katajisto, J., Koivunen, M., Hatonen, H., . . . Knapp, M. (2012). Patient education methods to support quality of life and functional ability among patients with schizophrenia: A randomised clinical trial. *Quality of Life Research, 21*(2), 247-256. doi:10.1007/s11136-011-9944-1

Pollock, K., Grime, J., Baker, E., & Mantala, K. (2004). Meeting the information needs of psychiatric inpatients: Staff and patient perspectives. *Journal of Mental Health, 13*(4), 389-401. doi:10.1080/09638230410001729834

Public Health Agency of Canada. (2014, July). *Infection and prevention and control guidelines critical appraisal toolkit.* Retrieved from http://publications.gc.ca/collections/collection_2014/aspc-phac/HP40-119-2014-eng.pdf

Zhao, S., Sampson, S., Xia, J., & Jayaram, M. (2015). Psychoeducation (brief) for people with serious mental illness. *Cochrane Database of Systematic Reviews, 4*(4). doi:10.1002/14651858.CD010823.pub2

Appendix A-1. Literature Tables

Author/Year; Purpose; Study Design	Setting & Sample	Methods & Outcome Measures	Results	Limitations, Conclusion, & Ratings
Author: - Anttila et al., (2012) **Design:** -Mixed method (focus on quantitative data) **Purpose:** -"To evaluate use of web-based patient education (PE) in clinical practice." **Questions:** 1. How are PE sessions used? 2. How do nurses report use of PE sessions? 3. How are length and # of PE sessions associated with pts' background characteristics and use of sessions.	**Setting:** -Finland. 9 psych acute care wards in 2 psych hospitals. **Sample:** -Inpatients with schizophrenia spectrum psychosis. 829 eligible, 518 refused leaving n=311 study participants. 149 nurses working on inpatient wards. -Intervention group: 100 pts (7 lost to follow-up/opt-out) – n=93 pts received web-based intervention. 76 nurses randomly assigned to provide web-based education (plus 7 other nurses not planned to do so) – total = 83 nurses. -Control: 211 pts received conventional education. 73 nurses randomly assigned to provide it.	**Intervention:** -Web-based pt education intervention ("Mieli.Net"). 6 sessions over period 1-70 days, 10-360 min per pt (first session for testing pts IT skills). 5 topics: (1) mental illness, (2) tx, (3) well-being, (4) patients' rights, (5)daily life. 20-60 min sessions daily/every other day - included e-support tool for counselling/ support from peers and nurses (Q&A column) & chatroom. **Outcome Measures:** -"Evaluation Report"- collected data on pt session length, # of sessions per pt, & any interruptions. -Written evaluation by nurses - examined for themes. -Oral feedback from pts. *Sessions coded as "successful" or "less successful".	-Qualitative data from sessions were coded as \(1) "successful education session with no problems" (74% of sessions) or (2) "less successful session with a variety of problems" (26% of sessions). -Many disturbances (3.7% of sessions) & interruptions (1.4% of sessions & required rescheduling) – causes (e.g., pts lacked understanding, disruptive psych symptoms)	**Overall Study Rating:** Low **Limitations:** -Inconsistencies and vague in description of procedures/how pts & nurses were assigned to groups/randomized. No explanation of how randomization was done. No explanation of conventional education. -Lack of validity and reliability with data collection instrument ("evaluation report"). -Process of "transforming qualitative data into quantitative data" slightly unclear with criteria for what categorized a session as either "successful" or "less successful". **Conclusions:** Majority of education sessions were categorized as "successful" where pts felt their learning needs were met. IT education is a promising option for pt learning.

Author/Year; Purpose; Study Design	Setting & Sample	Methods & Outcome Measures	Results	Limitations, Conclusions, & Rating
Author: - Kuosmanen et al. (2009) **Design:** -RCT **Purpose:** -To determine effectiveness of needs-based IT education program on pts experience of deprivation of liberty (DL) in hospital (being restrained, medicated, etc. re: aggressive behaviour). **Hypotheses:** (1)Pts in IT group more likely to experience less DL. (2)Pts in IT group more likely to have shorter LOS and less study drop-outs.	**Setting:** -2 psych hospitals in Finland, 9 acute psych wards. **Sample:** -n=311 Inpatients with schizophrenia spectrum psychosis. 829 eligible pts, 518 refused (62%). 217 completed endpoint data collection (30% lost to follow-up). -Randomized (done centrally & manually) into 3 groups: 1. IT education – n=97 (intervention group) 2.Conventional Education n=102 (comparison) 3. Usual Care - n=101 (control) - Unit nurses also in 2 groups: (1) giving IT edu. & (2) giving conventional (all nurses provided usual care).	**Intervention:** -IT based pt education program (internet-based portNet") - Nurses lead 5 1-1 sessions lasting ~30min over 1 month. 5 topics: (1)well-being, (2)daily activities, (3)mental health problem, (4)tx, (5)pt rights. -Conventional education - content & # of sessions same as IT, oral and written info provided by nurses*Data collection at baseline & discharge. **Outcome Measures:** -*Pt self-reported DL* - measured with visual analogue scale (VAS) made for this study (0mm = no experience of DL to 100mm = severest experience of DL). -*Length of stay (LOS)* -*Study drop-out* -*Pt Satisfaction Scale (PSS)* – only measured at discharge	-At discharge IT pts reported less DL than comparison & control (mean 28.2mm vs. 32.3mm vs. 29.7mm), but not sig. difference. -No statistically sig. difference in LOS between groups. -No sig. difference in study drop-outs between groups. -No sig. difference in satisfaction scores between groups, but all generally satisfied with care.	**Overall Study Rating:** Medium **Limitations:** -Only 38% of pts approached agreed to participate in study & although participants were randomly assigned to groups, they were not randomly selected for study, resulting in possible selection bias. -Question of generalizability of findings since participants only selected from two hospitals in Finland. -Question of how feasible the IT intervention is for every inpatient psych unit. Might not have computers/resources readily available. **Conclusions:** -IT education was not superior compared to other methods in specifically reducing DL, however, the education intervention had no negative effects on pts' DL, satisfaction, or LOS.

Author/Year; Purpose; Study Design	Setting & Sample	Methods & Outcome Measures	Results	Limitations, Conclusions & Rating
Author: - Pitkanen et al. (2012) **Design:** -RCT **Purpose:** -To estimate effectiveness of pt education methods on QOL & functional impairment in pts with schizophrenia. **Hypotheses:** (1)Systematically planned education methods are more effective than usual tx with respect to QOL and functional disability. (2)Computer-based education more likely to enhance pts' QOL & decrease functional disability than traditional education.	**Setting:** -2 psych hospitals in Finland, 9 acute wards. **Sample:** -n=311 Inpatients with schizophrenia spectrum psychosis. 829 eligible pts, 518 refused (62%). -86 pts dropped out in 12mo span (27.7%), 25 in IT, 33 in conventional, & 28 in control. -Randomized (using distance randomization) into 3 groups: 1. IT education – n=100 (intervention group) 2.Conventional Education n=106 (comparison) 3. Usual Care - n=105 (control) - Unit nurses also in 2 groups: (1) giving IT edu. (n=76) & (2) giving conventional edu. (n=73) (all nurses provided usual care).	**Intervention:** -IT based pt education program (internet-based portal "Mieli.Net") – Nurses lead 5 1-1 sessions per pt lasting ~30min over about 1 month. 5 topics: (1)well-being, (2)daily activities, (3)mental health problem, (4)tx, (5)pt rights. -Conventional education – content, length, & # of sessions same as IT group. Oral and written info provided to pts by nurses. *Data collection at baseline, then at 1, 3, 6, & 12 months later. **Outcome Measures:** -*Quality of life Enjoyment & Satisfaction Questionnaire (Q-LES-Q-SF)* - measures QOL (primary outcome). -*Sheehan Disability Scale (SDS)*- measures impairment in functioning (secondary outcome) - lower score = decreased disability. *Data collection instruments reliable & valid	-Mean global Q-LES-Q-SF index improved significantly in all groups during follow-up (p=<0.001), however, no sig. difference in changes between groups over time (p=0.503). -Scores for all items on SDS scale (work/studies, social life, & family/life responsibilities) decreased sig. over follow-up period (p=<0.001 for all 3), but no sig. difference between groups in changes over time (work/studies p=.134, social life p=.075, family/home p=.082).	**Overall Study Rating:** Medium **Limitations:** -Question of generalizability of findings since participants only selected from two hospitals in Finland. -Although participants were randomly assigned to groups, they were not randomly selected for study, resulting in possible selection bias. -Question of how feasible the IT intervention is for every inpatient psych unit. Might not have computers/ resources readily available. **Conclusions:** No advantages to systematic education methods over usual care & no advantage to IT vs. traditional. However, no negative impact either.

Author/Year; Purpose; Study Design	Setting & Sample	Methods & Outcome Measures	Results	Strengths & Limitations; Conclusion & Ratings
Author: - Burlingame et al. (2006) **Design:** -Partial replication - Survey **Purpose:** -To partially replicate a previous study with a psychiatric inpt population to determine their health education needs. **Objectives:** (1)To attempt to generalize findings by Payson et al. (1998) to an inpt population. (2)Assess health education needs of psychiatric inpts. (3)Compare inpts actual education needs to nurses' perceptions of those needs.	**Setting:** -Utah, USA. 4 adult units in a psychiatric inpt facility. **Sample:** -Replicating previous study of outpts with sample of inpts. -48 inpts and 12 nurses volunteered to participate. -Questionnaire administered to both inpts and nurses.	**Methods:** -63-item modified (so appropriate for inpts) needs questionnaire using 5-point Likert scale ("no interest" to "very much interest") to measure pts interest in learning more about each item/topic (e.g., coping with symptoms, controlling anger, etc.). **Outcome Measures:** -*Modified Needs Assessment Questionnaire (NAQ).*	-Both similarities and differences in perceptions of pts vs. nurses re: needs. -The top 10 needs of pts were: (1)Psych meds & side effects, (2)How to get enjoyment from life, (3)Coping with depression, (4)Ways to deal with loneliness, (5)How to control anxiety & panic, (6)How to feel good about self, (7)Coping with stigma of mental illness, (8)Nutrition, health, & aging, (9)Improving communication, & (10) Causes of mental illness. -Needs identified by nurses that were sig. dif. from pts: -Living with mental illness, how mental illness affects life, symptoms of specific illnesses, & dealing with voices.	**Overall Study Rating:** Medium **Limitations:** -Poor reporting of data analysis and statistical findings. -Limited in recruitment methods/sampling. **Identified Learning Needs:** -Medications -Dx & Tx -Coping & Emotions -General wellness in health and life. -Social relationships

Author/Year; Purpose; Study Design	Setting & Sample	Methods & Outcome Measures	Results	Strengths & Limitations; Conclusion & Ratings
Author: - Chien et al. (2001) **Design:** -Cross-Sectional Survey **Purpose:** -To assess the learning needs of pts with schizophrenia discharged from inpt care with follow-up tx in an outpt clinic, and whether or not these needs are being met.	**Setting:** -Hong Kong, China. 2 major outpt clinics. **Sample:** -220 psychiatric outpts, randomly selected from patient lists using computer-generated table of random numbers. -Final sample of 192 pts (response rate of 87.3%), with 12 refusing to participate and 16 who failed to complete questionnaire.	**Methods:** -Data collected over 6mon. period. Pts given self-reporting questionnaire and returned to clinic in sealed envelope. **Outcome Measures:** -*Chinese version of educational needs questionnaire (ENQ)* – pts rate importance of learning topics on 5-point Likert scale (1=not important to 5=very important). Also rated how much need was being met on 4-point Likert scale (1=not met to 4=always met).	-Top 10 most important pt needs: (1)Early warning signs of illness and relapse, (2) strategies solving problems, (3)improving social relationships, (4)side-effects of medications, (5)Symptoms of illness, (6)getting needs met from mental health system, (7)persistent hallucinations (8)Improving communication, (9)Improve independent living skills, (10)Self-help organizations. -Top 5 least important needs: (1)Sleeping problems, (2)Research on mental illness, (3)setting limits on pt behaviour, (4)involuntary admission to hospital, (5)anger, violence, and assaulting behaviour.	**Overall Study Rating:** Strong **Limitations:** -Authors identified some of responses might be specific to characteristics of patients in Chinese culture. -Also identified the need for refinement of language translation on a few survey items to improve validity and reliability. **Identified Learning Needs:** -Medications -Dx & Tx -Coping & Emotions. -Social Relationships. -General wellness in health and life.

Author/Year; Purpose; Study Design	Setting & Sample	Methods & Outcome Measures	Results	Strengths & Limitations; Conclusion & Ratings
Author: - Hatonen et al. (2004) **Design:** -Mixed Method **Purpose:** -To explore psychiatric pts' experiences of pt education on inpt wards. **Questions:** -Which information areas are important in education for pts. -What are pts' suggestions for improvement of pt education?	**Setting:** -Finland, 9 different inpatient wards in 2 psychiatric hospitals. **Sample:** -114 pts during discharge process, diagnosis of schizophrenia, schizotypal or delusional disorders – 54 participants consented to study (response rate of 45%).	**Methods:** -Mixed methods of qualitative interviews to determine pt suggestions for improvement of pt education, and quantitative approach of "structured questions" to determine importance of informational areas. -Structure and semi-structured (open-ended) questions used in pt interviews to explore pts experience or receiving education. *Structured questions: -20 questions on importance of information topics (asked if topic was important to them – response: 1=yes & 2=no). -20 questions asking whether pr had received info about specific topic (1=yes, 2=no, 3=not relevant). *Open-ended questions: -Asking about how education could be improved (answers manually recorded & inductive content analysis used. *Total interview length 20-90 mins	-Pts most important information areas were "treatment procedures" (98%) & "treatment alternatives" (98%). -Suggestions for improvement for education included more open communication from staff & nurses tailoring information and care to pts' specific needs and views.	**Overall Study Rating:** Medium **Limitations:** -Random sampling not used. -Question of generalizability of findings with sample from only 2 hospitals. **Identified Learning Needs:** -Tx -Alternatives to med tx (i.e. counselling).

Author/Year; Purpose; Study Design	Setting, Sample, & Methods	Data Analysis & Results	Limitations & Learning Needs Identified
Author: - Pollock et al. (2004) **Design:** -Focus groups **Purpose:** -To investigate pt concerns re: provision of medication information on acute care psych wards & to formulate ways of improving quality & & accessibility of pt information materials.	**Setting:** -West Midlands, UK **Sample:** -90 participants (pts, relatives, psychiatrists, nurses, OT, psychologists, & managers), 88 took part in groups (14 total), 2 couldn't attend and provided oral and written accounts of experiences. -Pts recruited from user consultancy network, psychologists, & by nurses from acute care units. **Focus Groups:** -Pts - 5 groups (2 were of former pts) -Relatives – 1 group -Psychiatrists – 2 groups -Nurses – 3 groups -OT – 1 group -Psychologists – 1 group -Managers – 1 group *60-90 min groups with 4-10 members each. Each group asked about current provision of medicine information, perceived shortcomings and impact this has on pt care, tx outcomes, and relationships. Also asked for recommended improvements.	**Data Analysis:** -Sessions taped and then transcribed. Thematic identification & content analysis used. **Results:** -Pts and relatives had number of similar concerns about meds & information, including wanting to know more about dx, illness outcomes, tx, and alternatives to medication as tx (i.e. counselling). -Pts felt the need for both written information and verbal communication with providers. Also valued open communication and being asked by providers what learning needs were as they were nervous to be a burden or interrupt. -Considerably less consensus on learning needs between groups of different providers. See medication information as a priority, but not to the degree that patients do. Possibly prioritize patient adherence to medication treatment over providing them with information.	**Limitations:** -Composition of focus groups and opinions might not be representative of target population. -Potential idealization of experience accounts because of group setting. -No clear exclusion criteria. **Identified Learning Needs:** -Medications -Dx & Tx -Alternatives to med tx (i.e. counselling).

References

Anttila, M., Valimaki, H., Hatonen, H., Luukkaala, T., & Kaila, M. (2012). Use of web-based patient education sessions on psychiatric wards. *International Journal of Medical Informatics, 81*(6), 424-433. doi:10.1016/j.ijmedinf.2012.02.004

Chien, W. T., Kam, C. W., & Lee, I. F. K. (2001). An assessment of the patients' needs in mental health education. *Journal of Advanced Nursing, 34*(3), 304-311. doi:10.1046/j.1365-2648.2001.01759.x

Crosby, R. & Noar, S. M. (2011). What is a planning model? An introduction to PRECEDE-PROCEED. *Journal of Public Health Dentistry, 71* (1), S7-S15. doi:10.1111/j.1752-7325.2011.00235.x

Hatonen, H., Kuosmanen, L., Malkavaara, H., & Valimaki, M. (2008). Mental health: Patients' experiences of patient education during inpatient care. *Journal of Clinical Nursing, 17*(6), 752-762. doi:10.1111/j.1365-2702.2007.02049.x

Kristiansen, S.T., Videbech, P., Kragh, M., Thisted, C. N., & Bjerrum, M. B. (2018). Patients' experiences of patient education on psychiatric inpatient wards; A systematic review. *Patient Education and Counseling., 101*(3), 389-398. doi:10.1016/j.pec.2017.09.005

Kuosmanen, L., Valimaki, M., Joffe, G., Pitkanen, A., Hatonen, H., Patel, A., & Knapp, M. (2009). The effectiveness of technology-based patient education on self-reported deprivation of liberty among people with severe mental illness: A randomized controlled trial. *Nordic Journal of Psychiatry, 63*, 383-389. doi:10.1080/08039480902825241

Appendix B

Environmental Scan Report

As a part of a process evaluation of a *RN-Led Patient Education Group Program* for adult patients in acute care psychiatry, an environmental scan was conducted with the purpose of determining whether any other RN-led patient education groups for this population existed within the provinces of Newfoundland and Labrador (NL), Ontario, and British Colombia. Any programs found throughout the scan were to be analyzed to determine similarities or differences that might exist when compared to the current program. This information will be used to help inform the process evaluation that will occur later in this practicum project. The environmental scan began with a comprehensive assessment of the *RN-led Patient Education Group Program* as it currently exists and an in-depth description of its contents. This was followed by a thorough assessment of any RN-led patient education group programs existing in the rest of NL, as well as in the provinces of Ontario (ON) and British Columbia (BC).

Sources of Information and Data Collection

The environmental scan was conducted through collection of data from various different sources. First, the contents of the *RN-Led Patient Education Group Program* being evaluated was carefully examined and described. The scan then expanded to search for any similar programs in other psychiatric care facilities in NL, as well as ON and BC. For the facilities in NL, this was accomplished through data collection on the acute care units located in the only psychiatric hospital in the province, as well as through examination of the website of the health authority in which this facility exists. Appropriate websites for the provinces outside of NL, included a leading teaching and research psychiatric hospital in ON and an inpatient psychiatric facility in BC. These

were explored for any evidence of existing *RN-Led Patient Education Group Programs* currently being implemented by RNs in the adult inpatient setting. Finally, for further confirmation, a clinical nurse educator for the NL facility and a Registered Nurse (RN) working in the BC facility were contacted and asked whether they knew of any *RN-Led Patient Education Group Programs* that were currently being implemented within their hospitals.

Description of Program Being Evaluated

This environmental scan began with a comprehensive assessment and description of the education program being evaluated. This *RN-Led Patient Education Group Program* currently exists on the inpatient psychiatry unit at the main tertiary care institution in a large urban center in the province of NL. The patients admitted to this unit are adults aged eighteen and above and can be characterized as having acute psychiatric diagnoses, including various types of mood disorders, schizophrenia, any adult patients requiring inpatient treatment for eating disorders within the province, and much more. The program includes a set of eight folders, each with a different education topic related to psychiatric wellness and promotion of mental health. These topics include the following: (1) conflict resolution, (2) emotions, (3) medication adherence, (4) assertiveness, (5) making changes, (6) sleep, (7) self-esteem, and (8) motivation. Each folder contains two separate sets of forms including forms for the nurse leading the program and handouts for the patients receiving the program. The forms for the nurse include a "facilitator outline" with a script that can be followed to guide the session, including prompts for when to give certain handouts or to ask the group thought

provoking questions about the session material. Each of these outlines also begins with a brief description of acceptable and expected behaviours to be read to the participating patients before each group, as well as objectives for the session. The sets of patient handouts are also included in the folders, with various forms of activity and fact sheets related to the learning topic.

With regards to the program overall, there is no formal documentation or a separate folder describing the program, its objectives, or even providing a formal name for the program. No references supporting the evidence, information, or handouts used to create the program were included. Over time, the facilitation of these education groups became a RN-led intervention and responsibility to be shared among unit RNs once per week. Unfortunately, there is no written explanation of how the education groups should be implemented (i.e., location of teaching, suggested environment, number of participants, etc.). Overall, this *RN-Led Patient Education Group Program* has a focus on enabling patients to optimize mental health and wellness.

Scan of Newfoundland and Labrador

A scan of NL was completed in order to determine whether any other *RN-Led Patient Education Group Programs* existed in the psychiatric adult inpatient setting throughout the province. This was accomplished by scanning for any mental health and wellness patient education materials on seven acute care inpatient units of one adult, psychiatric hospital in NL. That facility has inpatient units for patients admitted for acute, residential, geriatric, rehabilitative, and forensic psychiatric care. It also has a psychiatric emergency/assessment unit, as well as several different outpatient services. The hospital

serves the entire population of NL, which was approximately 500,000 in 2016 (Statistics Canada, 2018).

All seven acute care, inpatient units were scanned in person for any form of documented *RN-Led Patient Education Group Program*s, followed by a scan of the corresponding health authority website. From this scan, and also from the writer's experience of providing nursing care on all of these units from 2015-2017, it was clear that there were no formal RN-led patient health education group programs being implemented in these units. In addition to these efforts, the clinical nurse educator for this hospital was contacted and asked whether she had knowledge of any formal, documented *RN-Led Patient Education Group Program*s being implemented within the organization in the acute care setting, to which she replied that nothing fitting that exact criteria exists to her knowledge. The findings of this scan lead to the assumption that there are no structured *RN-Led Patient Education Group Program*s existing within this area of NL apart from the program being evaluated in this practicum project.

Scan of Area in Ontario

To explore if *RN-Led Patient Education Group Program*s exist in other parts of Canada, the environmental scan was then extended to the province of ON. A large psychiatric hospital in an urban centre of ON was chosen for assessment. The organization provides care to 34,000 patients each year with 530 inpatient beds and services ranging from counselling to treatment of acute mental illness (Centre for Addiction and Mental Health (CAMH), 2018). The hospital website was explored to determine if any concrete evidence of *RN-Led Patient Education Group Program*s

existed and were being implemented on acute care inpatient units. After examining the website and the description of services provided, no definitive evidence of any *RN-Led Patient Education Group Program*s for adult psychiatric inpatients could be found.

Scan of Area in British Columbia

Finally, a hospital in BC was chosen to represent psychiatric healthcare in western Canada and complete the environmental scan of *RN-Led Patient Education Group Program*s for adult patients in acute care psychiatric settings. The hospital chosen is located in the Lower Mainland region of BC and has two psychiatric inpatient units with sixteen beds each. Very little information about this hospital's specific psychiatric inpatient services could be found on the website of the corresponding health authority (Fraser Health Authority, 2018a). Upon scanning this website for any evidence of *RN-Led Patient Education Group Program*s in this setting, it was determined that no definitive evidence exists of any formal programs of this nature that are being presently implemented within this facility and this patient population. Additionally, a RN working on the inpatient acute care psychiatric units at this hospital was contacted to further confirm these results. She explained that no education group programs led by RNs existed within her facility to her knowledge.

Data Analysis

No concrete evidence of any *RN-Led Patient Education Group Programs* could be found for any of the locations scanned. This in itself is an important finding and further confirms the need to conduct a process evaluation of the existing program to

ensure it is being implemented as planned and assist with future implementation of that program.

Conclusions

Upon completing the environmental scan, it has become apparent from the information available that no definitive evidence of any *RN-led patient education group programs* exists apart from the program evaluated in this practicum project. It is also interesting to note that, although no evidence of any other programs were found in any of these organizations, each organization had information displayed on their websites stating in some way that health promotion and education was a priority for their organization and the services they provide (CAMH, 2018; Eastern Health, 2017; Fraser Health Authority, 2018b); therefore, this type of program would be in line with the values and goals of these different organizations. Unfortunately, because no other *RN-led patient education group programs* were uncovered through this environmental scan, the process evaluation had to rely more heavily on the research literature to determine what other kinds of programs like this were being implemented in psychiatric inpatient care.

References

Centre for Addiction and Mental Health. (2018). *About CAMH.* Retrieved from http://www.camh.ca/en/driving-change/about-camh

Eastern Health. (2017, July 5). *Population health.* Retrieved from http://www.easternhealth.ca/WebInWeb.aspx?d=2&id=2380&p=2377

Fraser Health Authority. (2018a). *Psychiatry unit- Royal Columbian Hospital.* Retrieved from https://www.fraserhealth.ca/Service-Directory/Service-At-Location/D/A/psychiatry-unit---royal-columbian-hospital#.WI95y_MxsM

Fraser Health Authority. (2018b). *Mental wellness.* Retrieved from https://www.fraserhealth.ca/health-topics-a-to-z/mental-health-and-substance-use/mental-wellness#.W_JFKC_MxsM

Statistics Canada (2018, April 24). *Census profile, 2016 census.* Retrieved from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/Page.cfm?Lang=E&Geo1=PR&Code1=10&Geo2=&Code2=&Data=Count&SearchText=Newfoundland%20and%20Labrador&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=10

Appendix C

Consultation Report

In order to complete the process evaluation of a *RN-Led Patient Education Group Program,* key stakeholders who were familiar with the program were consulted to help answer the question "Are we implementing the program as planned?" Information was gathered from key informants on how the program has been implemented, any issues that exist, and ways in which the program could be improved. The data gathered from the consultations were utilized in conjunction with results from a comprehensive review of the research literature; an environmental scan focusing on existing education programs in this setting, and the learning needs of this patient population. Objectives for the consultations included: (1) conduct semi-structured interviews with key stakeholders to determine their impression of the *RN-Led Patient Education Group Program* and its quality as it currently exists, and (2) organize and analyze the data collected from the consultations to help inform a process evaluation of the *RN-Led Patient Education Group Program*.

Setting, Sample, and Procedures

Three consultations were conducted with the following key stakeholders: one experienced staff RN working in an acute care, adult psychiatry setting who was familiar with the *RN-Led Patient Education Group Program* (Participant X); a clinical nurse leader familiar with the program (Participant Y); and a staff member with some involvement in creation of the original program (Participant Z). Participant X was included because of her experience implementing the program and ability to speak to the implementation phase, which is the focus of a process evaluation. Participant Y was consulted because of her expertise and understanding of the setting and patient

population, and her experience facilitating implementation of the program. Participant Z was consulted because of her input into the creation of the *RN-Led Patient Education Group Program* and knowledge of the program's origin and preliminary implementation. All stakeholders being consulted were approached in person or via email and asked if they would like to participate in the interview. A face to face meeting with Participant Y was arranged to take place in a private area on the unit at a time that was convenient for her. The interview with Participant X occurred over the phone and the interview with Participant Z via email as these were the most convenient options for both participants.

Data Collection

Data was collected via semi-structured interviews in person, over the phone, or via email with each key stakeholder. Open-ended interview questions were developed to guide the consultations (Appendix C-1), with a longer list of more specific questions for Participant X who had implemented the program in the somewhat recent past. Once the participants agreed to be interviewed, a copy of the interview questions were provided to them prior to the interview. In first interacting with each participant for their interview, I started by introducing myself, followed by providing an explanation of the practicum project, the objectives of the consultations, and how the data collected would be analyzed and used in the project. Prior to beginning the interviews, I also obtained permission from the participants to take notes throughout the interview and informed them that their identities would remain anonymous. For the participant being interviewed via email, all of this information was provided in an email message along with the interview questions

and encouragement to write back or call if there were any questions. Any and all identifying information has been removed from this report.

Results

Interview with Participant X. The first interview was conducted with Participant X, an experienced staff RN working on the acute care psychiatry unit. Her interview was completed over the phone as this was the most convenient option for her. She was asked a list of open-ended questions found in Appendix C-1 and her responses are as follows.

1. Has the program been implemented in your area? If so by whom? When?

Participant X stated that she had witnessed the program being successfully implemented on her unit by RNs, but that this has been done sporadically. She reported there was a variation in the time between implementations and there was no schedule of when the program was implemented.

2. What is your overall impression of the program?

Participant X reported that overall the program could be considered "limited in scope," because topics were "too broad" and not specific enough to meet the mental health and wellness education needs of psychiatric inpatients with acute mental illness. She also stated that the program was not inclusive to all psychiatric inpatients and gave the example of those patients in the acute stages of mania or advanced dementia that could not participate in groups. Participant X pointed out the fact that none of the information utilized in the program was cited as being from any specific source, making it unable to be determined where the information came from or whether it was current

and reliable. Finally, she explained that little to no training had been provided on how to implement the program in the time that she had been working on the unit.

3. Have the program activities been implemented as intended?

Participant X stated that program activities have not been implemented as intended because most often the program is not being implemented on a consistent basis. Participant X also stated that there is a lack of consistency in who is implementing the program and when it is implemented. She identified the fact that no formal guidelines for implementation of the program exist in writing, and that this should change because it leaves nursing staff unsure of what they are supposed to be doing. She gave an example of including a guideline that outlines what types of patients/level of illness acuity should be considered appropriate or not for attending mental health education groups. Participant X stated that, "patient education is important, and it feels like this is being done very haphazardly."

4. Would you add or delete any topics?

Participant X did not identify any current topics that should be removed, but did suggest several new topics, including: diagnosis and symptoms of disease; electroconvulsive therapy; the Recovery Model/strengths-based education; diet and exercise; mindfulness and relaxation techniques; and topics related to patients with acute mental illness requiring hospitalization such as transitioning back home into the community. She also stated that she thought education sessions for patients' family members would be beneficial, as well as education sessions with more of a cognitive behavioural therapy (CBT) focus.

5. Did you utilize the accompanying teaching materials e.g. work-sheets or activities?

Participant X confirmed that she did utilize the accompanying teaching materials when implementing the program and they were beneficial to learning.

6. Do you think the program benefitted patients' health and well-being?

Participant X stated that she thought the program did benefit patients' well-being. She explained that a positive aspect of the program being implemented was that it gave patients the opportunity to talk about any issues they were having and somewhat acted as a form of group therapy at times.

7. Are the program materials easy to understand?

Participant X stated that program materials were relatively easy to follow, but that information and handouts could be difficult to comprehend for patients in acute stages of illness like depression where focus is limited, and for patients with lower IQs and developmental delays.

8. Were there any issues with the space or environment available?

Participant X stated that at the time she was implementing the program there were no issues with accessing a room on the unit to implement the program, but she reported there was a concern that the current room may not be available in the future and there may be no space for providing group education sessions.

9. What do you think could be done to improve the program?

Participant X had a wide array of suggestions for how the program could be improved. She stated that she believed implementation of the program should be interdisciplinary instead of solely the responsibility of the RN staff, as high workload and low staffing levels can have a huge impact on whether the program is being implemented consistently and effectively. She also thought that the most reasonable and effective option would be for a staff member to be hired for the specific purpose of implementing the program, as it could also be beneficial for patients on the many other acute care units within the mental health program. Participant X stated that the education topics should be more specifically focused to psychiatric inpatients, and that the program should be made to be more inclusive to patients with varying levels of illness acuity. She argued that more education and training for staff on how to facilitate the program should be provided, and that this should be ongoing in order to accommodate new staff coming to the unit. Participant X also suggested that the best time to implement the program might be during evenings and weekends, as nurses tend to have more time and there is less going on throughout the unit. Finally, Participant X suggested that education topics and materials should evolve over time as patients do, rather than remaining constantly unchanged.

Interview with Participant Y. The second interview was with Participant Y, a clinical nurse leader on the unit, which occurred face-to-face in a private space. She was asked the open-ended questions found in the interview guide and her responses are summarized as follows:

1. Has the program been implemented in your area? If so by whom? When?

Participant Y stated that the program has been implemented before but that it is not being done now and has not been done consistently. When it was being implemented, she stated that RNs would be assigned to facilitate the group one day per week.

2. What is your overall impression of the program?

Participant Y's overall impression of the program was that there are many existing flaws and issues that are preventing it from being implemented successfully. She identified the biggest issue as a lack of human resources. She explained that the current workload demands of RNs on the unit the makes it incredibly difficult to implement this education program consistently. With regards to the program itself, she referenced the fact that none of the information included has been referenced to any type of source, so no one knows where the information came from or whether it's appropriate. Also, very few updates to the content of the program have been made over the years, contributing to the likelihood that the content is dated. Additionally, she explained that in the past, RNs have been expected to implement the program, but to her knowledge many of them have not been trained in how to do so, stating, "staff don't want to do it. They don't feel familiar or comfortable with it." She explained that she believes that patient education is a worthwhile and beneficial intervention and that it is within the nurses' scope to implement it, but because of all of these issues this program has not been implemented consistently.

3. What do you think could be done to improve the program? What's working, what isn't?

Participant Y stated that the program could first be improved by increasing allocated human resources on the unit, increasing feasibility and the likelihood that staff will have the opportunity to implement it. Additionally, she argued that nursing staff need to receive in-service education on how to implement the program so that they feel familiar and confident with the contents, and that they should also be allowed to select the topics to teach that they feel most comfortable with, as this will make them more likely to agree to participate. She stated that she believed that taking an interdisciplinary approach to the program would also be beneficial and more feasible, with other unit healthcare workers contributing to facilitation of education groups instead of it solely being the responsibility of RNs. She also stated it would be beneficial to have a separate staff member hired specifically to facilitate this type of program.

Interview with Participant Z. The final interview was with Participant Z who was familiar with the development of the program. This interview occurred via email as this was most convenient for the participant. Open ended questions located in the appendix were provided via email and Participant Z's responses were as follows:

1. What is your overall impression of the program?

Participant Z stated that she believes the program could be extremely effective and beneficial "if it is delivered in the right format." She explained how she thinks that the education groups are currently too long with too much information packed into one

session. She stated that, because of the nature and severity of the illnesses of many of the patients, they might not have the attention span to sit through a full hour of presenting information or the ability to retain the majority of what was just said to them. She said that she thought that some of the education topics were beneficial, explaining that education on things like conflict resolution and assertiveness could help patients better deal with difficult situations with family, in the work place, and with people in general. However, she felt that the contents of the education groups were "too wordy" and needed to be "lightened up a bit" to help patients better understand the material being presented. In general, she stated that she believed the groups could have a significant positive impact if they were scheduled and implemented regularly.

2. What do you think could be done to improve the program? What's working, what isn't?

Participant Z stated that one important factor in improving the program would be to shorten the time for the education groups and simplify the material for patients; this could include providing more handouts with easy to understand bullet points that outline the material covered and are simple to read and comprehend. With regards to implementation of the program, Participant Z discussed the importance of having staff invested and comfortable with teaching the specific topic they are presenting. In relation to the program content and topics, participant Z suggested the addition of new topics related to stress and coping, exploring things like every day stressors, situations that cause stress, and positive ways to cope with it. With regards to who should be implementing the program, Participant Z stated that other staff members besides RNs

could be prepared to facilitate the groups, because when RNs workloads become unmanageable they might not have the time to implement the groups, causing them to be cancelled and for patients to miss out on the opportunity to participate. She suggested including other staff members, and even recruiting the help of pharmacy and nursing students when they are doing rotations on the unit. Overall, Participant Z stated that she believed that the program could be beneficial for patient wellness and that it should be implemented if possible on the unit.

Data Analysis

All of the data collected from the consultation interviews was analyzed for similarities, differences, and common themes in order to provide an overall picture of stakeholders' opinion of the program, and thus help to inform the process evaluation of the program. The following themes are discussed: (1) content and rigor of the program, (2) resources for implementation, (2) in-service education and (3) administrative.

Results and Discussion

The consultations with key stakeholders showed that despite the demonstrated need for this program, it is not being implemented consistently as planned. According to these key informants, implementation of the program has been affected by the perception of the content, rigor of the program, and the availability of human resources to implement the program. Overall, key stakeholders identified a need for the program and for administrative support for the implementation of the program, but they also had recommendations revisions to the content of the program, which has implications for future implementation and evaluation of the program. Following is a list of the key

recommendations suggested in the consultations.

Content and Rigor of Program

Examine the content of the program.

Identify resources used for content.

Examine patient materials for readability.

Resources for Implementation

Identify target audience.

Identify dedicated space and program schedule.

Identify interdisciplinary program educators.

Consider specific staff member hired for implementation.

Administrative Support

Develop an orientation to the program.

Consider reduced workload for RNs when teaching the program.

Summary

Psychiatric RNs are completely qualified to identify the mental health and wellness learning needs of psychiatric inpatients and appropriately implement mental health education interventions with this population. Some of the competencies of psychiatric RNs with regards to patient education include: collaborate with patients to determine learning needs; promote recovery from illness through education; provide health promotion education in the context of a patient's individual needs, culture, and situation; help patients to make informed health decisions; provide guidance, support, and relevant information; and engage in patient education interventions and adapting to meet

changing learning needs (CFMHN, 2014). Each of these competencies provides psychiatric RNs with the ability to safely and competently provide quality patient education in the psychiatric inpatient setting. Therefore, Psychiatric RNs are the logical choice to design, implement, and evaluate mental health education programs for psychiatric inpatients. In light of this important health educator role for the Psychiatric RN, it is clear that these key informants would support identifying a Lead RN to revise the program and prepare an implementation and evaluation plan for a future process evaluation.

Appendix C-1

Patient Group Education Program
Interview Guide

Questions for Participant X

1. Has the program been implemented in your area? If so by whom? When?

2. What is your overall impression of the program?

3. Have the program activities been implemented as intended?

4. Would you add or delete any topics?

5. Did you utilize the accompanying teaching materials e.g. work-sheets or activities?

6. Do you think the program benefitted patients' health and well-being?

7. Are the program materials easy to understand?

8. Were there any issues with the space or environment available?

9. What do you think could be done to improve the program? What's working, what isn't?

Questions for Participant Y

1. Has the program been implemented in your area? If so by whom? When?

2. What is your overall impression of the program?

3. What do you think could be done to improve the program? What's working, what isn't?

Questions for Participant Z

1. What is your overall impression of the program?

2. What do you think could be done to improve the program? What's working, what isn't?

Appendix D

A SUMMARY REPORT ON THE PROCESS EVALUATION OF A REGISTERED NURSE-LED PATIENT EDUCATION GROUP PROGRAM FOR ADULT PSYCHIATRIC INPATIENTS

Introduction

This report provides a summary of the findings from the process evaluation of the *Registered Nurse (RN)-Led Patient Education Group Program* for psychiatric inpatients conducted as partial fulfillment of the Master of Nursing program at Memorial. The *RN-Led Patient Education Group Program* is a mental health and wellness education program currently being implemented at an inpatient psychiatry unit in a main tertiary care institution in a large urban center in the province of Newfoundland and Labrador (NL). The *RN-Led Patient Education Group Program* is an innovative approach to promoting mental health and wellness in this population because it focuses more on health promotion and wellness education, rather than on the traditional approach of psychoeducation. The program is in keeping with the elements of the recovery model for mental health, which includes hope, security, support and management of symptoms, empowerment, relationships, coping, and finding meaning (Knutson et al., 2013). It was designed to be implemented by RNs caring for adult psychiatric inpatients aged eighteen and above who are experiencing acute psychiatric illnesses, including diagnoses such as mood disorders, schizophrenia, and eating disorders. The program is designed to address mental health and wellness promotion with this population and includes the topics of conflict resolution, managing emotions, medication adherence, assertiveness, making changes, sleep, self-esteem, and motivation. For purpose of this practicum, mental health and wellness education programs will be defined as programs that provide psychiatric inpatients with relevant health information to promote an understanding of illness,

treatment, and health promotion strategies in order to encourage behaviour that maximizes mental health and overall wellness (Chien, Kam, & Lee, 2001).

The PRECEDE-PROCEED (PPM) model, a widely known and useful health education planning model that provides a step-by-step guide for building and evaluating health promotion programs, guided this process evaluation (Appendix D-1). PRECEDE stands for "predisposing, reinforcing, and enabling constructs in educational/environmental diagnosis and evaluation", and PROCEED stands for "policy, regulatory, and organizational constructs in educational and environmental development" (Crosby & Noar, 2011, p. S8). Overall, the model involves an ecological approach to health promotion strategies as it considers all of the many components of a specific population's environment, cognition, skills, and behaviour, and views these as potential intervention targets (Crosby & Noar, 2011). This model has been applied to this practicum project, focusing on Phase 6: Process Evaluation.

Defining Process Evaluation

Conducting a process evaluation is a key step in program evaluation that occurs during the implementation phase of the program to determine how well it is working, detect any problems with implementation, and make sure the program is being carried out as was originally intended when it was designed (Center for Disease Control (CDC), 2014). When conducting this type of evaluation, interest is placed on all program inputs (i.e., policy or theoretical basis for the program, quality of goals and objectives, and resources available such as staff, space, and funding); implementation activities (i.e., staff

performance, data collection, organizational activity); and stakeholder reactions, (Green & Kreuter, 1991). A process evaluation includes determining whether the program has followed the implementation guidelines and procedures developed during the planning stages, while providing corrective feedback for future implementation and evaluation (CDC, 2014; Green & Kreuter, 1991).

Description of Program

The *RN-Led Patient Education Group Program* focuses on mental health and wellness promotion education and strategies to help patients optimize their mental health and wellness and coping abilities. It is implemented in a small group setting with sessions led by RNs on an inpatient psychiatric unit. The program includes a set of eight folders, each with a different topic related to psychiatric wellness and promotion of mental health. The topics include the following: (1) conflict resolution, (2) emotions, (3) medication adherence, (4) assertiveness, (5) making changes, (6) sleep, (7) self-esteem, and (8) motivation. Each folder contains two types of information: a facilitator outline for the RN leading the program and information handouts for the patients attending the program. The facilitator outline includes a script that can be followed to guide the group session, including prompts for distributing handouts or asking the group thought provoking questions about the session material to promote discussion. The facilitator outline begins with a brief description of acceptable and expected group behaviours to be read to the participating patients before each session, as well as brief objectives for the session. Information for patients includes sets of handouts with various forms of educational

activities and fact sheets related to the learning topic. However, not all handouts or facilitator outlines contain an explicitly stated purpose or objectives, or clear directions on how use the handout and implement the activities.

With regards to the overall goal of the program, there is no formal documentation or a separate folder describing the program, its goals and objectives, or even providing a formal title for the program. There are no references cited to support the evidence, information, or handouts used to create the program. RNs are responsible for the implementation of the program and that responsibility is assigned once per week; however, the dates and the time for the implementation of the program are not scheduled on a regular basis. The program was not designed to collect data for evaluation, so although there was some record of attendance and when the program was implemented from recent time, this was not consistent or comprehensive from the time which the program started being implemented. There was also no written explanation of how to plan for the implementation of the program (i.e., appropriate space, where to photocopy handouts, number of participants). These limitations made the process evaluation challenging because the data needed to conduct the evaluation was not readily available.

Analysis of Content of the Program

In an effort to analyze the content of the program, a comprehensive review of the research literature was conducted to gain a clear understanding of the learning needs of psychiatric inpatients in relation to RN led education group programs that currently exist for this population. For the purposes of this literature review, patient health education

interventions were defined as structured, RN-led education interventions or programs that provide psychiatric inpatients with relevant health information and promote an understanding of illness, treatment, and health promotion strategies in order to encourage behaviour that maximizes mental health and overall wellness (Chien, Kam, & Lee, 2001). Patient learning needs were defined as patients' unique perspectives on the specific areas of health information that they feel are a priority and where understanding would potentially contribute to achieving wellness and recovery (Burlingame et al., 2006). Additionally, health professionals' perspectives on patients' learning needs were explored in an effort to explore a more holistic and informative perspective on the learning needs of this population (Pollock, Grime, Baker, & Mantala, 2004). A comparison of the content identified in the literature and the RN-led program are presented in Table 1.

The topic of motivation was found in both the literature and in the content of the program. "Motivation" is the name and sole focus of one of the group topics included in the program. Alternatively, coping with mental health stigma was identified as a learning need in the literature but stigma is only mentioned briefly in the content of one of the group topics of the program. It would be worthwhile to explore the concept of coping with stigma further to determine whether it should be more extensively represented in the education content of the program. Additionally, "conflict resolution" was a topic from the program that was not directly represented in the literature as a patient learning need. However, the concepts of problem solving, social relationships and communication skills were, and could potentially be viewed as related to this topic.

Table 1.
Content Analysis for RN Led Mental Health Education Program

Literature Review	Content of RN Led Program	Recommendations
Early Signs of Illness & Relapse	None	Expand topic of coping with mental health stigma Include more strategies and increase content for coping with emotions, illness, and life changes/challenges, and more focus on coping in general Examine program topics of assertiveness, sleep hygiene, and self-esteem, and consider addition of concepts like early signs of relapse, loneliness, and independent living
Understanding Medical Treatment	Medication Adherence	
Medications	Medication Adherence	
Improving Communication Skills	Conflict Resolution	
Coping with Depression	Emotions	
Coping with Anxiety	Emotions	
Coping with Panic Attacks	Emotions	
Coping with Stigma	Briefly mentioned	
Coping with Change	None	
Improving Social Relationships	Conflict Resolution	
Dealing with Loneliness	None	
Motivation	Motivation	
Independent Living Skills	None	
Daily Problem Solving	Conflict Resolution	
Dealing with Life Challenges	None	

Another patient learning need identified in the literature was how to cope with diagnoses of anxiety and depression and the difficult, persistent emotions that accompany them (Burlingame, Ridge, Matsuno, Hwang, & Earnshaw, 2006; Chien et al., 2001). The program has one group topic called “Emotions” and it addresses the different emotions that we can feel, however, it does not address strategies for coping with persistent difficult emotions, or ways to be more accepting of changing emotions in general. The idea of coping and learning to cope with persistent difficult emotions as a learning need was also supported by the consultations with key stakeholders.

Coping with change, as well as with coping with life's challenges, was also identified as a significant learning need for this population. The program topic of "Making Changes", focused primarily on changing personal health habits and behaviours to promote overall health and wellness and not on "coping" with change. Although support for changing overall health behaviors was not identified as a learning need for this population in the literature review, it would be beneficial to explore this topic further to determine if it is a valid learning need that should continue to be included in the program in the future. Additionally, there were concepts identified in the literature as important learning needs for this patient population that were not clearly represented in the content of the current program, including: early signs of relapse, loneliness, and independent living. It would be beneficial to further examine these topics going forward to determine whether they might be beneficial to be added the program.

Key Informant Consultations

As mentioned previously, an ideal process evaluation focuses on a program that is actively being implemented in order to determine if this is being done effectively, as intended, and without any glaring issues. It also helps answer questions that "allow you to track program information related to who, what, when, and where questions, such as: to whom did you direct program efforts; what has your program done; when did your program activities take place; where did your program activities take place; what are the barriers/facilitators to implementation of program activities" (CDC, 2014, p.1).

One of the primary information sources for this process evaluation was consultation with key informants who were able to provide insight into the process of program implementation and issues that may exist with implementation. However, many of the questions that would typically be asked in a process evaluation could not be addressed by key informants because no implementation plan for the program existed in writing and thus, it did not include guidelines for collection of evaluation data. Additionally, the question of whether or not the program was being implemented as was intended when it was created could not be adequately addressed because there was no information on the policy or theoretical basis for the program, quality of goals and objectives, or resources needed such as staff, space, and funding or implementation activities. In light of these limitations, the following is a discussion of the program inputs, implementation activities, and stakeholder reactions to the implementation of the program.

Program Inputs

A process evaluation looks at several program inputs in the process of analyzing its quality and effectiveness, including policies, program goals and objectives, and physical and human resources (Green & Kreuter, 1991). Program inputs include the theoretical basis and evidence for the program. Unfortunately, there is no mention anywhere in the program as it currently exists of any theoretical basis for its creation, or any information detailing the evidence used to create the contents of the program (e.g., reference list). Another problem with the program inputs is the lack of explicit program

goals and objectives. The quality of these elements could not be assessed because no statement containing the overall purpose, goals, or objectives for the program could be found in any documents related to the program. There are objectives for individual education group sessions, but those objectives are limited in number and quality. A final program input that should be assessed is the presence and adequacy of the resources available for implementing the program.

According to key informant consultations, it is a challenge to find adequate human resources to implement this program, primarily due to RNs work demands restricting time for implementing the groups on the unit. Key informants identified this heavy workload as the most significant barrier to the success of program implementation. Informants also reported that to their knowledge, there is no formal orientation for RNs to the program contents or teaching strategies. Key informants also reported that although there was adequate physical space on the unit to implement the program, but it may be be difficult going forward as the space that was previously used may not be available in the future.

Implementation Activities

Implementation activities are another area of assessment in completing a process evaluation (Green & Kreuter, 1991). One such activity is staff performance in implementing the program, but since the program has not been consistently implemented and little data has been collected, this area could not be assessed. With regards to activities surrounding program implementation in general and whether implementation

has been carried out as intended overall, no guidelines could be found that outlined how the program was intended be carried out, how staff were intended to perform, what data was intended to be collected for later review, or any other instructions related to facilitation of the program (e.g., inclusion criteria for patients, maximum number of participants per group, ideal environment for sessions, frequency of implementation, etc.). Appropriate data to collect to assist with a process evaluation could include a schedule of staff facilitators and room bookings, patient attendance records, and patient and staff satisfaction surveys.

Stakeholder Reactions

Aside from the information already discussed, the key stakeholders consulted had insights into the program and the factors affecting implementation. One of the questions outlined in a process evaluation examines what barriers and facilitators exist affecting implementation of the program (CDC, 2014). One of the barriers outlined by stakeholders was that no sources of evidence for any of the program content were cited, leaving staff to wonder where the information came from and whether or not it was reliable, current, or appropriate for this population. Key stakeholders viewed the program as positive, important, and as having potential to produce benefits for patient wellbeing if it were to be implemented appropriately. The key stakeholders also recommended that the content be analyzed and revised in accordance with what is considered best practice for education of this patient population. This would help ensure that the information being delivered to patients is valid and appropriate.

Summary

This process evaluation recognized the need for the *RN-Led Patient Education Group Program* and identified key areas for improvement, including revising and updating program content and creating an implementation and evaluation plan for the future. It is important going forward that the content of the program be critically and comprehensively reviewed in accordance with the research literature, and then revised and updated based on that analysis to ensure that the program is based on the most current, reliable, and appropriate evidence of learning needs for this population. It is also important to put in place missing measures and structures such as program goals, learning outcome measures, and guidelines for implementation so that the program can be effectively evaluated in the future, as per the guidelines for a process evaluation (Green & Kreuter, 1991; CDC, 2014).

The overall findings from this process evaluation were that, although the content of the program is similar to other programs in the literature, there is a need to expand and update the content of the program to reflect current evidence for practice. The *RN-Led Patient Education Group Program* is an innovative approach to promoting mental health and wellness in this population because it focuses more on mental health promotion and is in keeping with the elements of the recovery model for mental health (Knutson et al., 2013). The program was designed to promote the well-being of psychiatric inpatients and recognizes the importance of mental health and wellness education. Despite challenges to implementation, the program has been implemented numerous times over the years and those efforts by staff and administration have not gone unnoticed.

However, it is clear there is a need for a plan for the future implementation and evaluation of this innovative program for psychiatric inpatients. That plan should involve updating and revising the program to include program goals, outcome measures, and guidelines for implementation so that the program can be effectively implemented and evaluated in the future. The plan should also clearly outline the data that will be collected to determine how well the program is working (e.g., patient and staff satisfaction surveys, attendance records), and identify any problems during implementation (e.g., lack of space or human resources). This data can then be used in future process evaluations in an attempt to improve the program. The *RN-Led Patient Education Group Program* has immense value and potential for the promotion of mental health and wellness for patients experiencing psychiatric disorders in acute care, inpatient settings, but there is a need to develop a plan to assist with the successful implementation and evaluation of the program in the future.

Recommendations for Future Implementation and Evaluation

1. Assign a senior RN to develop an implementation and evaluation plan for the program and monitor the collection of data for future evaluations.
2. Create a name for the program in consultation with key stakeholders.
3. Develop an overall program purpose, goals, and learning objectives.
4. Revise patient handouts and facilitator outlines to include the purpose, learning objectives and directions on how to implement teaching and learning activities.
5. Establish a plan for the implementation of the program including

    a. Identify a dedicated space e.g. schedule room bookings
    b. Schedule dates and the time for the implementation of the program
    c. Identify assigned RN and workload
    d. Develop guidelines for maximum group size
    e. Identify inclusion criteria for patients
6. Establish an evaluation plan for the program including the development of data collection instruments:
    a. Attendance records
    b. RN assignment sheet
    c. Staff and patient surveys
7. Assess, update, and revise program topics in accordance with current and reliable research literature and provide a reference list for each topic.
8. Explore expanding the content of the program to include the following:
    a. Early signs of relapse
    b. Coping with mental health stigma, depression, and anxiety.
    c. Persistent negative emotions
    d. Life changes and challenges
    e. Loneliness
    f. Enhancing independent living skills
9. Design and implement an orientation program for RNs assigned to teach the program.

References

Anttila, M., Valimaki, H., Hatonen, H., Luukkaala, T., & Kaila, M. (2012). Use of web-based patient education sessions on psychiatric wards. *International Journal of Medical Informatics, 81*(6), 424-433. doi:10.1016/j.ijmedinf.2012.02.004

Burlingame, G., Ridge, N., Matsuno, J., Hwang, A., & Earnshaw, D. (2006). Educational needs of inpatients with severe & persistent mental illnesses: A partial replication. *Journal Of Psychosocial Nursing And Mental Health Services, 44*(5), 38-43. Retrieved from https://search-proquest-com.qe2a-proxy.mun.ca/docview/225540201?rfr_id=info%3Axri%2Fsid%3Aprimo

Center for Disease Control. (2014, August 8). *Types of evaluation.* Retrieved from https://www.cdc.gov/std/program/pupestd/types%20of%20evaluation.pdf

Chien, W. T., Kam, C. W., & Lee, I. F. K. (2001). An assessment of the patients' needs in mental health education. *Journal of Advanced Nursing, 34*(3), 304-311. doi:10.1046/j.1365-2648.2001.01759.x

Crosby, R. & Noar, S. M. (2011). What is a planning model? An introduction to PRECEDE-PROCEED. *Journal of Public Health Dentistry, 71,* S7-S15. doi:10.1111/j.1752-7325.2011.00235.x

Green, L. W. & Kreuter, M. W. (1991). *Health promotion planning: An educational and environmental approach* (2nd ed.). Mountain View, CA: Mayfield Publishing Company.

Knutson, M., Newberry, S., & Schaper, A. (2013). Recovery Education: A tool for psychiatric nurses. *Journal of Psychiatric and Mental Health Nursing, 20*(10), 874-881. doi:10.1111/jpm.12043

Kuosmanen, L., Valimaki, M., Joffe, G., Pitkanen, A., Hatonen, H., Patel, A., & Knapp, M. (2009). The effectiveness of technology-based patient education on self-reported deprivation of liberty among people with severe mental illness: A randomized controlled trial. *Nordic Journal of Psychiatry, 63*, 383-389. doi:10.1080/08039480902825241

Pitkanen, A., Valimaki, M., Kuosmanen, L., Katajisto, J., Koivunen, M., Hatonen, H., . . . Knapp, M. (2012). Patient education methods to support quality of life and functional ability among patients with schizophrenia: A randomised clinical trial. *Quality of Life Research, 21*(2), 247-256. doi:10.1007/s11136-011-9944-1

Pollock, K., Grime, J., Baker, E., & Mantala, K. (2004). Meeting the information needs of psychiatric inpatients: Staff and patient perspectives. *Journal of Mental Health, 13*(4), 389-401. doi:10.1080/09638230410001729834

Zhao, S., Sampson, S., Xia, J., & Jayaram, M. (2015). Psychoeducation (brief) for people with serious mental illness. *Cochrane Database of Systematic Reviews, 4*(4). doi:10.1002/14651858.CD010823.pub2

Appendix D-1. PRECEDE-PROCEED Model for Mental Health Education