PROBLEMATIC SUBSTANCE USE AMONG NURSES:
A KNOWLEDGE TRANSLATION CAMPAIGN

by
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A SCHOLARLY PRACTICE ADVANCEMENT RESEARCH (SPAR) PROJECT
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Abstract

**Purpose.** The focus of this Scholarly Practice Advancement Research Project was to examine the literature related to problematic substance use amongst nurses. Using the findings of the literature review a knowledge translation campaign was developed to educate both undergrad nurses and practicing nurses on problematic substance use.

**Background.** Problematic substance use amongst nurses has been known to exist in nursing for over a century. Throughout this time there have been many strategies employed to combat this complex devastating affliction. The rates of problematic substance use in nursing ranges from 8%-20%. Many nurses are unaware that problematic substance is a serious concern in the workplace, or of the signs and symptoms of this complex illness.

**Method.** The theories of complexity and sensemaking were used to direct the literature review. Through this process two themes were identified. 1) The need of early and ongoing education regarding problematic substance use and 2) the situational circumstances of the occupational environment for professional nurses in facilitating problematic substance use. Two knowledge translation campaigns were developed to create awareness and to decrease the stigma related to problematic substance use in nursing.

**Conclusion.** The cause of problematic substance use can range from personal to occupational triggers, making problematic substance use amongst nurses difficult to identify and treat. The knowledge translation campaigns will advance nursing by educating nurses about the signs and symptoms of problematic substance use allowing for recognition in the practice environment.

Key words: problematic substance use, knowledge translation campaign, sensemaking, complex theory, nursing
Acknowledgements

We, as nurses, give our minds and our bodies to care for those in need. We do it in environments that we have no control over. There are hazards. Many are deadly. We apply the nursing process and we face these situations together.

I would like to acknowledge those who made this SPAR possible.

Thank you to my SPAR supervisor, Bernie Garrett. I will be forever grateful to you for showing me the path so that I may show others.

Thank you to my committee member Johanna Ward for stepping up to support my success.

Thank you to Rhonda for being the most amazing addict I will ever know. You are a teacher and a trailblazer. Thank you for being my inspiration.

I would also like to send a special thank you to my brother Craig. Your constant willingness to proofread has been greatly treasured.

Thank you to my husband Curtis for raising our beautiful kids while I took on the challenge of graduate school. You have done an amazing job.

Lastly, I would like to acknowledge all of us who have been touched by problematic substance use. The stories that have left scars on us and our colleagues must be told and understood. With knowledge, change is possible.
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CHAPTER 1: INTRODUCTION TO PROBLEMATIC SUBSTANCE USE IN NURSING

Introduction

For as long as nurses have been practicing, there has been evidence of problematic substance use (PSU) in the workplace (Heise, 2003). PSU is defined as the use of substances by an individual that has affected various aspects of performance and behavior and has become problematic (ACCA, n.d.). The substances used in PSU can range from legal to illegal substances such as alcohol, opiates, and analgesics. The individual experiencing PSU can be using on a recreational or dependent basis (ACCA, n.d.). The cycle of PSU is described as the use of a substance to decrease anxiety and stress and increase feelings of power and control. Once the effects of the substance have subsided, the stress and anxiety return and the cycle begins again (ACCA, n.d.). PSU amongst nurses is described as a serious and complex issue which can impair practice and endanger the health and safety of the public (Nurses Association of New Brunswick, 2016). According to the Canadian Nurses Association, (2009) PSU amongst nurses is a “direct threat to the delivery of safe, competent, compassionate and ethical care insofar as it can impair the nurse’s cognitive and motor functions and interfere with judgment and decision-making.” PSU can also have a negative impact on other team members as well as the nurse practicing with PSU (Nurses Association of New Brunswick, 2016).

In the United States, PSU in the nursing practice environment is a criminal offence. In many cities there are units within police departments that focus primarily on PSU in healthcare. According to W5 (2018), the department responsible for PSU in healthcare in Cincinnati averages one nurse arrest per week. However, in Canada there are no specific federal policies in place to ensure PSU is reported to regulators or the police. In many situations, PSU is handled on
a case-by-case basis related to where the PSU is occurring and if nursing practice and patient safety has been impacted.

It is clear PSU hurts more than just the user: it can have a detrimental impact on the population for which the nurse is caring. For example, a patient could suffer from inadequate pain management due to the nurse misappropriating the drugs for personal use or the nurse could have impaired decision-making capabilities that put a patient at risk. Also, a patient could acquire an infection or disease from a contaminated needle. This is evident in a recent news story from Washington where a nurse was accused of knowingly infecting patients with hepatitis C while supporting her drug addiction (Schallhorn, 2018).

PSU and how it is perceived have evolved over the last 100 years. In the late nineteenth century, PSU was referred to as habituation. Nurses with PSU were referred to as nurse habitués (Heise, 2003). From there the terms drug diversion, drug addiction, chemical impairment, drug abuse and substance use disorder and now problematic substance use have been used to describe substance use amongst nurses. The term has evolved in parallel with the understanding of the illness as well as the perception of the illness. The importance of the evolving language used to describe PSU allows for meaningful engagement with the illness as its complexity is discovered, understood and treated.

The marginalization of nurses living with PSU has been present throughout the history of PSU, and stigma has hindered its understanding. One of the most common rationales for the lack of reporting of PSU in the nursing workforce is cited to be the fear of judgment, stigma from self or others (Nurses Association of New Brunswick, 2016 & CARNA, 2017). Stigma is defined as “a mark of disgrace associated with a particular circumstance, quality, or person” (Oxford University Press, 2018). Stigma is considered to be a negative stereotype that results in discrimination (Canadian Mental Health Association of Ontario, 2018). According to the
government of Canada, “stigma, or negative attitudes or beliefs, can have a major impact on the quality of life of people who use drugs, people in recovery and their families. It can prevent people from getting help. It can also reduce the quality of help people receive and make their condition worse.” (Government of Canada, 2018, para. 2).

All nurses are susceptible to PSU as it does not discriminate. The effects of PSU can be displayed differently depending on the individual and the severity of the PSU (CARNa, 2017). It is important for the prevention and recovery of PSU that the stigma related to PSU be dispelled allowing the nurse to feel supported to come forward and either report themselves or another colleague to their employer or union. When nurses feel empowered and safe, they are more likely to disclose information regarding PSU (CARNa, 2017). One of the most effective methods of decreasing stigma is through education. If nurses were to receive ongoing education on the causes of PSU and how to recognize PSU in themselves and their colleagues, it could lead to the reduction of stigma and in turn an increase in the health and wellness of the nursing population.

The image of nursing has historically been represented by the idealized figure of Florence Nightingale. PSU in nurses conflicts with this pure image suggesting PSU affects the “good moral character” of the nurse (Heise, 2003). The first documented case of PSU in nursing was in the early nineteenth century. Nurses with PSU were thought of as weak-willed and were deemed unworthy of being a nurse. Over the next few decades, PSU would be swept under the carpet by the health care community due to the hidden nature of the illness and the stigma associated with it. In the 1960s, Dr. Solomon Garb from Cornell University attempted to study PSU in nursing. His findings showed PSU to be immeasurable due to under reporting and called for better reporting systems that supported rehabilitation and not termination (Haise, 2003). In a 1978 newspaper article titled “The Alcoholic Nurse”, it was stated the alcoholic nurse was most likely
top of the class and both highly educated and respected for excellent work (Klemesrud, 1978 & Jefferson & Ensor, 1982). By the 1980s, many states in the US began to focus on the rehabilitation of nurses rather than their termination (Heise, 2003).

The purpose of this Scholarly Practice Advancement Research Project (SPAR) is to examine better the roles of the stakeholders impacted by PSU and to explore the impact of targeted knowledge translation PSU awareness campaigns in preventing PSU in nursing.

Significance and Problem Statement

PSU has touched us all as health professionals, patients, friends and family members. In 1915, it was documented that nurses might be tempted to use opioids due to the pressure of their job (Heise, 2003). More than 100 years later, PSU is still present in nursing and role strain is noted to be one of the largest contributors to PSU (National Council of State Boards of Nursing, 2011). PSU was not publicly addressed until the 1980s, and it is estimated that the rate of PSU in nursing is between 8-20% of the nursing population (Ramer, 2008 & Monroe and Kenaga, 2010). The large variance in this number is thought to be related to the under reporting and the variations in management of PSU. I can remember starting my nursing practice and hearing stories of a nurse who was misappropriating morphine from the unit and injecting it while working. One day she was found unresponsive in the staff washroom. She was resuscitated, removed from practice, and referred for treatment. She never returned to the bedside. It was not long after that I met another nurse who would later overdose and then another and another and another.

PSU is a subject matter that is very close to me on both a professional and personal level. The health care system has always played an outsize role in my life: I was raised by a physician and a nurse in a small town in Northern British Columbia. I can recall many stories of PSU in health care. I can remember going to a local physician’s house with my father, and I played with
his kids while he convinced the physician it was time for him to get help for his drug and alcohol problem. On another occasion there was a nurse who was a marathon runner. I would see her running for hours at a time. One day my father said she was sick. She had been using drugs she had taken from the hospital. She never returned to nursing. I have known from a young age the damage that PSU can cause. PSU in nursing is under-researched as well as under-reported (Monroe & Kenaga, 2011). This is thought to be due to the stigma and the risk of discipline or termination of employment. In an article by Monroe et al. (2011), it was stated “poor or ineffective policies that mandate punitive action may endanger the public by making it difficult for impaired nurses to ask for help” (pg. 1, para 1).

Currently, I work for the British Columbia College of Nursing Professionals (BCCNP), the provincial regulator for nurses in B.C., in the Early Intervention Program Health (EIPH). I see firsthand the need for a collaborative approach to combat this devastating affliction.

Many of the addicted nurses who are removed from practice never return to the bedside, which results in a loss of highly skilled personnel from the workforce. It is worthwhile to note that the nursing profession is regularly rated as the most trusted profession (Olshansky, 2011). When cases of PSU attract public attention, for instance via media stories, PSU by nurses challenges the public’s trust in the nursing profession and health care system (Canadian Nurses Association, 2009). However, there has been little research into PSU among nurses, or work to increase the awareness of PSU and explore ways in which to deal with it. “Many health care workers are unaware that PSU is a serious problem in the workplace,” (Berge, Dillon, Sikkink, Taylor, Lanier, 2012, p.5, para. 3). This lack of knowledge regarding PSU among nurses suggests action is needed in order to create an overall understanding of PSU.

There are many stakeholders in PSU cases: the regulator, the union, the employer, the Worker’s Compensation Board (WCB), the nurse, colleagues and the public. Further
investigation is needed to understand how stakeholders should work together to prevent the harmful effects of PSU and to protect the public. Due to the variability in how PSU cases are managed, there are also no clearly defined statistics available in Canada on the prevalence of PSU. When the lack of federal policy and knowledge regarding PSU are examined, it is not surprising that PSU is misunderstood. The discrete epidemic of PSU in the health care environment is anything but invisible. It is a devastatingly tragic situation for many nurses and one that needs to be addressed and discussed much more openly.

The intent of this SPAR is the following:

1. To examine the roles of different stakeholders in relation to PSU. This will be achieved by completing a comprehensive literature review analyzing the contextual and relational aspects that contribute to PSU.

2. To create a knowledge translation campaign to educate nurses about the risks of PSU. Knowledge translation campaigns aim to close the gap between research and practice. These campaigns are aimed at changing professional behavior in health care (Scott et al., 2012). This campaign will target the student nurse, the practicing nurse and health colleagues. This will be done in two parts:

   1) Developing a poster campaign in the workplace to create awareness of PSU. A bathroom-based poster campaign offers the presentation of information to a captive audience. It is similar to graffiti on the bathroom wall that is read by an audience in need of some form of diversion (Grogono, A. W., Jastremski, M., McCarthy, R., Ruggieri, P., & Nugent, W, 1980).

   2) Creating a professional tool/action plan that can be used by nurses to form a personal plan to address PSU in their practice and commit to self-regulation.
Approach

In this SPAR, the roles of the multiple stakeholders in PSU, and the value of a PSU education program for nurses will be explored through an action-research project. The project aims to find out whether a short PSU education program can help knowledge translation about PSU in the workplace. The project will be undertaken in two phases: an initial literature review and the development of a PSU education program, followed by plan for a knowledge translation campaign. The logic model framework (Figure 1) has been adopted to guide this process. A logic model is used to develop programs and describe the effectiveness of a program. “The model describes logical linkages among program resources, activities, outputs, audiences, and short-, intermediate-, and long-term outcomes” related to awareness of PSU.” (McCawley, 2002 p. 1, para 1).
PSU is a significant problem in contemporary nursing practice. In this chapter, the background and significance of PSU in the nursing population have been discussed. In the following chapter, the professional literature surrounding the nature of PSU will be explored. The theoretical concepts used to inform the knowledge translation campaign will be introduced and linked to the findings of the literature review.
CHAPTER 2: LITERATURE REVIEW

In this chapter the findings from a comprehensive literature review are summarized, and significant themes that have appeared throughout this review are identified. Additionally, theoretical concepts arising from the literature are examined. Two distinct theoretical concepts arising from the literature are presented, discussed and utilized to inform a proposed knowledge translation campaign for PSU amongst nurses.

Introduction

A literature review can be described as both a summary and an explanation of the current state of a topic (McLaughlin Library University of Guelph, n.d.). It provides an overview of the current research that is meaningful to the issue of PSU amongst nurses. The goal of the literature review is to identify works that will help inform this project. The literature review will include theoretical and empirical literature focusing on the primary data, observations in the field and related theory. This literature review will focus on PSU in health care, specifically within the context of nursing. It will also look to identify the roles of the stakeholders and possible gaps within these roles. For this literature review, the CINAHL and PubMed databases were used. My search terms included problematic substance use, drug diversion, and substance use disorder meshed with nursing and impairment. The following questions will be used to guide the literature review: What is problematic substance use in nursing, what are the contributing factors of PSU and what are the actions that are needed by the stakeholders to aid in the reduction of PSU in nursing? These questions were devised to streamline the literature search to allow access to the appropriate and relevant literature on the topic of PSU in nursing.

The inclusion criteria represent the broad conditions of what must be present in the article for it to be included in the review, whilst exclusion criteria define the specific additional features
of included articles that would led to their exclusion from the review. The inclusion and the exclusion criteria for this literature review can be found in Table 1.

Table 1: *Inclusion and Exclusion Criteria*

<table>
<thead>
<tr>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
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<tbody>
<tr>
<td>• Literature available in English</td>
<td>• Literature not focused on nurse addiction</td>
</tr>
<tr>
<td>• Literature available through bibliographic databases (PubMed &amp; CINAHL) with abstracts available</td>
<td>• Literature focused on diversion of prescriptions</td>
</tr>
<tr>
<td>• All professional literature types – published</td>
<td>• Literature focused on the discipline of nurses</td>
</tr>
<tr>
<td>• Professional academic literature focused on the act of addiction in in the profession of nursing</td>
<td>• Terms related to nursing as breastfeeding</td>
</tr>
<tr>
<td></td>
<td>• Novels/fictional accounts</td>
</tr>
<tr>
<td></td>
<td>• Literature older than ten years</td>
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</tbody>
</table>

The rationale for these criteria was to produce the most pertinent articles that reflected PSU and the nursing population within the province of British Columbia, Canada. Also, these criteria allowed for the exclusion of any articles that did not focus on PSU.

**Analytical Framework**

It is vital to use theory to inform the literature review. Theory can help to expand the understanding of the knowledge gaps related to PSU. Theory also helps to guide the development of possible solutions to PSU. The theories of complexity and sensemaking will be utilized as the analytical framework to direct the literature review and in turn inform the knowledge translation campaign. The rationale for the theories of complexity and sensemaking is their focus on relationships within organizations. These theories allow communication and education to be imperative with in the process of change by increasing the quantity and quality of the conversations (Jordan, Lanham, Crabtree, Nutting, Miller, Stange, McDaniel & Reuben, 2009).
Complexity Theory

Complexity Theory provides a framework for understanding complex organizations. Complexity theory is based in complexity science, which focuses on enabling the learning, creativity and adaptive capacity within complex adaptive systems (CAS) (Uhl-Bien, Marion, McKelvey, 2007). A CAS can be defined as a “system of individual agents, who have freedom to act in ways that are not always predictable, and whose actions are interconnected such that one agent’s actions change the context for other agents” (Grobman, 2005, p. 360). Complexity theory hypothesizes that healthcare organizations are complex adaptive systems whose agents are dynamically interrelated and cooperatively bonded by common purpose or outlook (Uhl-Bien et al., 2007). This is “a theory that is based on relationships, emergence, patterns and iterations” (Roussel, 2013, p.404, para 2). Behaviors of individuals within a CAS will be dependent on the individual’s perception of the environment (Grobman, 2005). As systems adapt and change throughout time, individuals enter and leave the system and there are changes in the behavior of the agents. Within complexity theory there is a state just before the point in which the system would collapse. This state is referred to as “the edge of chaos.” It is thought when a complex system is at the “edge of chaos”, creativity, growth and useful self-organization are at the most ideal level (Burnes, 2005). In this state, the complex system must transform to ensure survival, which often results in innovation and adaptation.

Complexity theorists advocate for watchfulness regarding the unintended consequences of small change, which is due to the belief that small changes can have massive unanticipated effects. This phenomenon is known as the butterfly effect (Burnes, 2005). The butterfly effect can have both negative and positive impacts as evidenced by a gentle nod of approval, which can boost healthy morale and when repeated often can increase retention (Varhese, 2010). Complexity theory can help us to better understand the many influences the health care
environment has on PSU by nurses, and how these nurses have interacted with the health care system throughout history. By understanding this relationship, opportunity is created to challenge the system causing it to recalibrate in creative new ways (Porter-O’Grady, 2015). Elements related to Complexity Theory that will be examined in the literature review will include the complex working environment of the nurse, the complexity of the population the nurse is caring for and the role interdisciplinary relationships on PSU.

Sensemaking

Sensemaking is defined by Manojlovich (2013) as a process that arises from the communication of two or more individuals who have different perspectives. It can be used to bridge the communication gaps between disciplines and stakeholders because it encourages the sharing of different viewpoints when working together for a common goal. Sensemaking is a process of inquiry that supports asking questions, such as “What is happening here?” “What should we do about it?” and “How does this relate to what we have seen before?” (Baran et al., 2010 & Manojlovich, 2013). When communication between colleagues, employers, regulators and unions is guided by sensemaking, a shared understanding of what is needed to facilitate the prevention of PSU within a complex system is developed. The relationship between sensemaking and stakeholder communication can result in creative problem solving and collaborative knowledge sharing. By using the theory of sensemaking, we can create awareness around the idea of “the cause and effect.” So much of the efforts to prevent PSU in the working environment are concerned with the safeguarding of the controlled substances (CS) that can be used to contribute to PSU. These efforts include Omicells or Pyxis machines and “witnessed wasting” of the CS. This is the focus on the “cause.” As many addicts will attest, the safeguards are no match for their addiction. So, what about the “effects”? When there is awareness and education about the signs, symptoms and consequences of PSU, research shows this would have an effect on a
nurse’s risk of developing PSU. Education and awareness would build champions in the workforce to teach others how to identify PSU and intervene to prevent unsafe practices. According to Berge et al. (2012), the entire workforce should have knowledge of PSU and its threats to patient safety. It is important to discourage PSU by equipping employees with the available resources and supports to report PSU. Sensemaking in the form of education should include: the environmental risk of PSU, the signs and symptoms of PSU and the process to acquire help for a nurse suffering from PSU.

Sensemaking is closely related to complexity theory. Both sensemaking and complexity theory examine the relationships between different groups and facilitate role clarity, creative problem solving and synergy between groups (Porter-O’Grady, 2015). Both sensemaking and complexity theory are needed in order to encourage all stakeholders to work together to increase awareness of PSU. With the complexity of healthcare continuing, the importance for a collaborative approach for PSU is becoming more evident. All partners in patient care as well as the patient would like the workplace to be free of nurses with PSU.

Nurses who suffer from PSU may work in a complex health care environment with many different stakeholders. As the literature review will show, the health of the nurse can be directly correlated to the health of the occupational environment. Sensemaking and complex theory could help identify how to better support nurses and their colleagues to confront PSU and ultimately remove nurses with PSU from the practice environment.

**Literature Review Findings**

The results of the literature review produced 22 articles from PubMed database and 15 articles from CINAHL database, and are summarized in Table 2. These articles were reviewed for relevancy. This literature search resulted in nine articles being chosen for final review, and these final articles are presented in Table 3. The excluded articles contained content that did not
meet the previously defined inclusion criteria. These included articles contained content relating to nurses caring for patients with PSU (rather than nurses practicing while suffering from PSU). In the reviewed literature, the current and recommended approaches to prevention of PSU within nursing focused upon both support and the consequences for the nurse with PSU. These current approaches to dealing with PSU in the workplace found in the literature helped identify the gaps in the prevention of PSU in nursing. By identifying these knowledge gaps, a more effective plan to address PSU in nurses can be developed, resulting in enhanced capabilities to protect patients and our nurses from the destructive effects of PSU.
Table 2: Search Terms

<table>
<thead>
<tr>
<th>CINAHL</th>
<th>Date Range</th>
<th># Articles</th>
<th>Duplicates</th>
<th># Potentially Relevant</th>
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<tbody>
<tr>
<td>Drug Diversion AND Nursing</td>
<td>1993 – 2018</td>
<td>31</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Drug Diversion AND Nursing AND Impairment</td>
<td>1995 - 2018</td>
<td>9</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Drug Addiction AND nursing NOT drug diversion</td>
<td>2017-2017</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Substance use disorder AND nursing AND impairment</td>
<td>2016 - 2018</td>
<td>26</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Problematic Substance Use AND Nursing</td>
<td>1998 - 2018</td>
<td>6</td>
<td>0</td>
<td>1</td>
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</table>

<table>
<thead>
<tr>
<th>PubMed</th>
<th>Date Range</th>
<th># Articles</th>
<th>Duplicates</th>
<th># Potentially Relevant</th>
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<tr>
<td>Drug Diversion AND Nursing</td>
<td>1993-2018</td>
<td>56</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Drug Diversion AND Nursing AND Impairment</td>
<td>1994 - 2018</td>
<td>7</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Drug Addiction AND nursing NOT drug diversion (MeSH terms removed anything related to breast feeding)</td>
<td>2017-2018</td>
<td>409</td>
<td>10</td>
<td>6</td>
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<tr>
<td>Substance use disorder AND nursing AND impairment</td>
<td>2013 - 2018</td>
<td>37</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>
### Table 3: Article Summary

<table>
<thead>
<tr>
<th>Article #</th>
<th>Study Title</th>
<th>Authors/Year</th>
<th>Study Design</th>
<th>Country</th>
<th>Common Themes</th>
</tr>
</thead>
</table>
| 1         | Don't ask don't tell: substance abuse and addiction among nurses             | (Monroe & Kenaga, 2011)    | Discussion/syntheses of the results of three other papers | United States | Addiction rate in nurses as high as 20%  
Addiction in nursing recognized over 100 years ago  
Fear of punishment and discipline to keep them from asking for help  
Conclusions:  
• Poor and ineffective policies endanger the public  
• Early intervention is needed; non-punitive  
• Recognition of a colleague’s need for treatment is the first step in rehabilitation  
Recommendations:  
• Promoting education in work and school  
• Encouraging an atmosphere amenable for reporting  
• Providing information on the signs and symptoms  
• Conducting ‘mock’ interventions |
| 2         | Diversion of Drugs within Health Care Facilities, a Multiple-Victim Crime: Patterns of Diversion, Scope, Consequences, Detection and | (Berge, Dillon, Sikkink, Taylor, & Lanier, 2012) | Discussion article                           | United States | • Mayo Clinic’s effort to prevent drug diversion  
• Drug Diversion must be rapidly identified and responded to  
• Clear policies and procedures are needed  
• Teams have been created to investigate diversion  
• Drug diversion causes risks to patients, co-workers and employers  
• There is no data to define the extent of |
<table>
<thead>
<tr>
<th>Prevention</th>
<th>How do Nursing Students perceive Substance Abusing Nurses</th>
<th>Quasi-experimental study, two-group pre-test – post-test, n=79</th>
<th>United States</th>
<th>diversion</th>
</tr>
</thead>
</table>
| 3          | (Boulton & Nosek, 2014)                                  |                                                         |               | • Perceptions of nursing impairment Inventory (PNII) given to 2 groups.  
• One group received education (one full semester) on substance abuse education  
• Posttest given  
Findings:  
• Educated students considered chemical abuse treatable  
The nurse’s supervisor is responsible for supporting the impaired nurse to access professional care |
| 4          | Substance Use and Mental Illness Among Nurses: Workplace Warning Signs and Barriers to Seeking Assistance | Quantitative Study, n=302 | United States | • Surveys sent to recent participants of a peer health assistance program  
• Nearly half reported they had used drugs or alcohol at work  
• 48% felt this affected performance  
• 27% acknowledged they put patients at risk  
• 76% thought they themselves should have recognized their problems  
• Barriers to self-report: too scared, too embarrassed, loss of license  
• Listed strategies to prevent: changes in legislation to protect nurses, nurses sharing stories, increase awareness for nursing students |
| 5          | Substance Abuse and the law: A Case Study | Discussion Paper | United States | RN as well as an attorney reviewed a case of drug diversion  
Anywhere from 8-20% of nurses are addicted  
Nurses take care of others and not themselves  
Complaints filed against a nurses license is public |
| 6 | Occupational Environment and psychoactive substance consumption among nurses | (Scholze, Martins, Galdino & Ribeiro, 2017) | cross-sectional descriptive study n=221 | Brazil | 3 aspects to data collection Social demographic & occupational characteristics Nurse work index - Revised Alcohol, Smoking and Substance involvement screening test (ASSIST) Conclusions: the more negative the nurse’s work environment, relationships with Doctors, organizational support and autonomy the greater the consumption |
| 7 | Nurses with Substance Use Disorders | (Worley, 2017) | Discussion | United States | Management of nurses with SUD moving from disciplinary to ATD programs Barriers: Lack of education regarding risk of SUD Barriers to reporting can result in not identifying SUD until there is an on the job problem Needs: to make ATD programs more uniform, appropriate funding and allowing nurses to seek care without having to disclose directly to the nursing boards |
| 8 | Substance Use Disorder Among Nurses: A Curriculum Improvement Initiative | (Stewart & Mueller, 2017) | pretest- posttest BSN n=180 MSN n=89 | United States | SUD is inadequately addressed in nursing education Comprehensive education strategy was implemented Evaluation using the PNII Significant improvement in knowledge and |
| 9 | A Critical review of knowledge on nurses with problematic substance use: The need to move from individual blame to awareness of structural factors (Ross, Berry, Smye, & Goldner, 2018) | Literature review | Canada | The influence of structural factors on PSU
5 themes
Access
Stress
Attitudes as contributory factors
Treatment policies
Culture of nursing
Recommendations education
To empower nurses to improve their work environment
education to strengthen peer support
engaging of policy makers, employers and professional bodies |
All of the articles reviewed explored the adverse effects of PSU on both patients and the nurse involved, as well as the impact on supporting staff. Cares, Pacem, Denious and Crane (2015) state “Substance use among nurses is a matter of public safety, putting nurses and their patients at risk.” As we know, nurses have a high level of responsibility when caring for others. When the effects of PSU alter health outcomes or impair a nurse’s work, it is problematic, according to the Canadian Nurses Association (Ross, Berry, Smye, Goldner, 2017). Yet Worley (2017), suggests PSU is often not identified until there is a specific problem identified at the employment site and after the nurse's practice has been negatively affected. This often results in patients having not received appropriate pain management because the patient is unknowingly sharing their narcotics with the nurse who is replacing syringes of narcotics with saline or falsifying the medication administration records of the patients (W5, 2018).

Contrary to the expectations for a health care profession, three of the articles reviewed noted the prevalence of PSU among nurses is similar to that of the general population (Cares et al., 2015, Stewart & Muller, 2018 & Worley, 2017). Although the nursing population is a large group, it is interesting that these numbers would mirror the general public. Unlike the general population, the nursing population is made up of employed, well-educated individuals who are mostly female. This may speak to the nature of PSU in that it does not discriminate; everyone is at risk of developing PSU. The rates of addiction in the field of nursing have been suggested to range from 6% to 20% of nurses. This number is based on hypothesized information derived from comparable populations such as the general population or anesthetists (Bell, McDonough, Ellison & Fitzhugh, 1999) The literature suggests a rather large discrepancy in the rates depending on the compared population. In interviewing Rhonda Jolly from BCCNP, who specializes in PSU in nursing, stated that she believed the numbers could be much higher than 20%. It was reported that the actual rates are unknown and there is not available data that is able
to precisely define the extent of the PSU in the workplace (Berge, Dilion, Sikkink, Taylor and Lanier, 2012). The research suggests this may be related to the stakeholder’s reluctance to legitimate that substance dependency and PSU is a problem within nursing (Boulton and Nosek, 2014). As well as the nurse’s fear of professional discipline, the stigma of moral failure associated with PSU can prevent nurses with PSU from seeking treatment (National Council of State Boards of Nursing, 2011). In an article by Cares et al. (2015), almost half of the surveyed nurses reported using drugs or alcohol while working. However, this study surveyed a limited population of nurses who were recovering nurses with PSU, so does not likely generalize to the wider population of professional nurses. The majority of the surveyed nurses reported they should have been able to recognize by themselves that they were developing PSU (Cares et al., 2014). However, they did not, and possibly the concept of “nurse heals thyself” is entrenched deep within the beliefs of nurses, and nurses tend to care for everyone else in place of caring for themselves (Brown, 2016).

Supporting nurses and their colleagues to receive the education needed to identify problematic behaviour and promote self-care and self-regulation is essential. Over two-thirds of the nurses living with PSU surveyed in another quantitative study by Cares et al. (2017) stated they felt their PSU could have been recognized earlier. These nurses cited that the employer and the nurse’s colleagues could have done more to help by recognizing PSU earlier, reporting problematic behavior to nurse leadership and avoiding poor narcotic handling practices. The study revealed that 43% of the nurses felt this would have had a positive change in the progression of PSU. Monroe & Kenga (2011) stated that poor and ineffective policies, punitive early intervention and lack of education related to the signs and symptoms contributed to the underreporting of PSU. The policies and procedures need to be clear, and PSU needs to be rapidly identified. The education within the school of nursing and the working environment
needs to be present and effective on issues related to PSU (Berge et al., 2012 & Monroe et al., 2011). The lack of education within the school of nursing may increase the risk of a nurse developing PSU by being unaware. This lack of education could also potentially contribute to a lack of recognition of PSU by other nurses in the practice setting (Stewart et al., 2018).

Therefore, PSU education early in pre-registration nursing education could help to promote awareness, prevention and decrease stigma (Stewart et al., 2018). Education can shift one's attitude from moralistic to compassionate and caring. According to Boulton and Nosek (2014), previous research has shown that the content of education about PSU “was broadly lacking in nurses’ educational programs” (pg. 1). The aim of one quasi-experimental study by Boulton et al. in 2014 was to expose nursing students to education regarding PSU to see if it altered their attitudes. This study found the educated student nurses showed more compassion towards nurses with PSU than the students who did not receive the PSU education. Another finding of this study was that the nurses educated on PSU believed that it was the responsibility of the nurse leader to support and guide the affected nurse to access care and support (Boulton et al., 2014). This study also noted that other health disciplines such as pharmacy had an entire course on PSU (Boulton et al., 2014).

Another factor evident from the literature is that the occupational environment of nursing may put the nurse at additional risk for PSU and therefore contribute to the estimated high rates of PSU. In the article by Scholze, Martins, Galdino, & Ribeiro (2017) it was found that the more negative the nurses’ work environment, the greater the risk for PSU. This theme is reflected throughout the literature. The work of the nurse can include daily exposure to death, pain, trauma, lack of resources, intradisciplinary conflicts and workplace violence (Scholze et al., 2014 & Ross et al., 2017). This continuous exposure can lead to burnout, caregiver fatigue, post-traumatic stress syndrome, anxiety and suicidal ideation (Scholze et al., 2014 & Ross et al.,
2017). Unlike the majority of high stress working environments such as firefighting or policing, the nursing work environment includes access to pharmaceuticals. When the occupational environment of nursing is combined with the high degree of nursing knowledge related to pharmaceuticals, nurses with PSU may justify the theft and use of drugs to cope with the occupational stressors (Ross et al., 2017). There is strong evidence in the literature that correlates access to increased rates of PSU. According to Addiction Center (2018) what sets nurses apart from other professional is their accessibility to highly sought-after drugs — because it’s easier for them to get the drugs, it’s easier to create or feed an addiction.” (para 4). There are many strategies in place to prevent nurses from accessing the medications to support PSU. These strategies include narcotic handling policies, pharmaceutical dispensing machines and nurse witnessed narcotic wastage. Pharmaceuticals taken from the occupational environment of the nurse are most commonly taken for personal use and not for financial gain (Berge, 2012).

From this literature review, two major issues in PSU policy and practice in professional nursing appear to emerge. These are:

1. The need of early and ongoing education regarding PSU for professional nurses
2. Consideration of the situational circumstances of the occupational environment for professional nurses in facilitating PSU.

Summary

The literature review has shown the estimated prevalence of PSU in the workplace, the rationale for PSU in nursing and strategies to combat PSU. In the following chapter, the methodology for a knowledge translation campaign to address PSU incorporating the issues highlighted will be discussed.
CHAPTER 3: KNOWLEDGE TRANSLATION THROUGH ACTION RESEARCH

An action research project is proposed to support knowledge translation (KT) using two separate campaigns. These campaigns will be informed by the knowledge derived from the literature review. Each campaign is designed to target currently practicing nurses as well as undergraduate nursing students. Each of these campaigns shares the common goals of creating awareness, prevention, knowledge and decreasing stigma related to PSU. The rationale for two campaigns is to reach nurses at the beginning of their practice and within their practice years. Each campaign is intended to create understanding of the signs, symptoms and risk factors of PSU. It is believed this poster campaign will provide the necessary foundation to generate confidence in reporting as well as the action of reporting the nurse with PSU.

Knowledge Translation

Polit and Beck (2017) suggest KT is “the exchange, synthesis, and application of knowledge by relevant stakeholders with complex systems to accelerate the beneficial effects of research aimed at improving healthcare” (p. 733). KT is used to bridge the gap between research and practice (Polit et al., 2017). Knowledge that is obtained through research is brought into the practice setting, where the knowledge can be further transferred and evaluated. The act of moving research into practice creates the opportunity to measure the effect of interventions as they are conveyed to the population, allowing goals to be adapted to promote sustainability of evidence-based practice. KT can also contribute in helping guide future nursing care decisions (Titler, 2004). KT is critical for the implementation of research to affect health, policy development, programs and practice (CIHR, 2018). Improved health outcomes, strengthened healthcare systems and more effective healthcare delivery have all been identified as outcomes resulting from effective KT (Scott, Albrecht, O'Leary, Ball, Hartling, Hofmeyer, Jones, Klassen, Burns, Newton, Thompson, Dryden, 2012). Finally, creating a lasting impact on the targeted
population is a key component of KT. Keeping the information simple, easy to remember, creditable and unexpected or racy will aid in the success of the KT campaign (Parachute, n.d.).

**Action Research**

Action research is an approach commonly used to create behavioural changes and changes in practice environments. There are four main principles that have been identified in action research. The first principle is participation and collaboration (Cordeiro & Soares, 2018). Action research requires participation from the population that the research is planning to affect and bring about change to. This type of research is often carried out by collaborative teams with common goals (Koshy, Koshy, & Waterman, 2011). The second principle in action research is a constant cycle consisting of planning, action, observation and evaluation (Cordeiro et al., 2018 & Koshy et al., 2011). The need to amend the research plan is based on ongoing evaluation and observations. The third principle is “knowledge building that considers participants’ realities” (Cordeiro et al., 2018, p.1). It is important in this method that the participants are involved in the research process. Engaging the studied population in the process promotes their empowerment to change and improves their environment through adapting a new behaviour or reality. The final principle in action research is creating social change and improved problem solving. This is achieved through the research process itself. Creating awareness, understanding, knowledge and desire give the participant the tools needed to sustain the change and inform future research (CIHR, 2018).

There are many well-known, high profile campaigns that have used both knowledge translation and action research successfully to create social change. For example, in British Columbia, Canada, smoking cessation campaigns such as quitnow.ca have helped make cigarette smoking socially unacceptable and unwelcome in public areas. Another well-known campaign based on action research is the preventable.ca movement. Preventable.ca aims to create
behaviour change through knowledge and self-awareness of risk-taking behaviour to prevent common, everyday accidents. Both of these campaigns have likely saved lives, changed present and future decision making. They have also created opportunities for further gaps in the research to be identified and new research to take place.

**Study design**

**Poster**

The first approach for a knowledge translation activity is to create a poster campaign and reach out to staff in the locations where PSU is commonly thought to occur in the workplace: staff washrooms located within the hospital environment. This location was identified from the literature as a common place for drug use as well as through my personal knowledge from working with the Early Intervention Program at BCCNP (Bebinger, 2017 & Addition Center, 2018). Posters will be designed, created and informed by the findings of the literature review. They will be strategically placed so that they are most likely to be seen. These posters will contain images related to PSU as well as important facts of the signs and symptoms of PSU (Appendix A and B) with the goal to help nurses identify the symptoms in the workplace and seek help for themselves or to report a colleague whose practice is thought to be impaired by PSU.

The poster campaign targets nurses working with PSU as well as other stakeholders in PSU. These stakeholders include colleagues, employers, regulators and unions. The poster targets these stakeholders by the location and content of the posters. When these stakeholders in PSU encounter the posters, awareness and knowledge will be gained. Over time, it is anticipated that this acquired knowledge will increase the ability of the stakeholder to identify and report PSU in the workplace. The increased knowledge capacity of the stakeholders will provide a safer practice environment for staff and the public. This anticipated outcome of the poster campaign
will increase the professional responsibility of the stakeholders and help to bridge the gap between PSU, legislation and practice.

**A PSU Professional Tool**

The literature review identified a gap in the education regarding PSU in both nursing schools and in the practice environment. The literature review also revealed that nurses felt they should be able to self-identify and self-recognize PSU. This second campaign is the development and introduction of a professional plan to systematically address PSU (Appendix C). This is a tool that has been adapted from Substance Use Best Practice Tool Guide (Department of Mental Health and Substance Abuse Services, 2016). This tool is designed for nurses to use to assess their own PSU risk. This self-administered tool will allow nurses to create a preventive action plan to help them self-identify, track changes reacted to personal PSU and ultimately avoid PSU in their nursing practice. It is recommended that the nurse review this plan annually. The registrant could be reminded by the regulating college at the time of renewal to complete the professional tool. The completion of this tool will help provide insight into whether or not they are engaging in PSU as well as update their personal action plan as their career progresses. It could form part of their annual professional development cycle. This self-administered professional tool incorporates both complexity theory and sensemaking. The small change of annual self-review of substance use practices by nurses would create the butterfly effect of PSU awareness in the complex practice environment. This tool can create further awareness of the nurses’ ability to recognize PSU in themselves and their colleagues thus creating a shared understanding of what is needed to prevent PSU in the practice environment.

The development of a Professional Plan for nurses to annually address PSU in their practice targets nurses in all stages of their nursing career. This professional plan provides the opportunity for education on PSU to begin in nursing school and extend for the duration of the
nurse’s practice. As previously mentioned, a gap between education and PSU was identified in the literature. This campaign addresses this gap and provides further opportunities to continue the education process related to PSU.

The standard of Professional Responsibility and Accountability must be present in practice by the registrant in order to maintain practicing status. This standard states that the nurse “is accountable and takes responsibility for his/her own nursing action and professional conduct” (BCCNP, 2018). An anticipated outcome of this campaign is the self-reflection of the nurse in regards to the professional standards outline by the nurses regulating body. The PSU professional tool guides the nurse to reflect on the potential effects of PSU in practice, such as unsafe practice and protecting their clients from the risk of infection by a contaminated needle used for PSU. This ongoing self-reflection is anticipated to increase the self-recognition of PSU and in turn the nurse removing themselves from practice and self-reporting PSU to the employer, union and the regulator. This will increase the protection of the public and the recovery of the nurse affected by PSU.

**Potential Outcomes on the KT Campaigns**

Although there are differences between the two KT campaigns, there are anticipated outcomes that are shared by both. In evaluating these campaigns, it is important to explore the possible intended consequences and the possible unintended consequences of both.

The intended consequence of these two campaigns is to ultimately create a practice environment free from PSU. In the logic model in Chapter 1, the project outcomes were identified for two groups. The first group was the nurses and the second group was the stakeholders, (including the public and other health professionals). Both of these groups share in an anticipated long-term outcome of increased understanding of PSU and decreased stigma.
associated with PSU. With the addition of knowledge, awareness and understanding, the cases of nurses suffering from PSU are anticipated to decline.

There may be unintended consequences that could possibly be an outcome of the two campaigns. The first possible unintended outcome could be an increase in stigma related to PSU. It is not unreasonable to think that if individuals had been unaware that PSU exists in nursing, they could develop a social stigma towards a nurse with PSU. Social stigma is described as the negative regard towards people who possess a particular characteristic (Herek, 2009). This social stigma could further develop in generalization regarding nurses and PSU, possibly leading to stereotypes (Frost, 2011). This negative association between nurses and PSU could result in stigma-related stress. In an article by Frost (2011), one of the consequences of stigma related stress is the increase in risk behaviors. These behaviors include the nurses shielding themselves from the stigma by further hiding their PSU and not reaching out for help. The second possible consequence of these two campaigns could be increased strain on the resources available to the nurse with PSU due to an increase in reported cases of PSU. The employer, union and regulator may need to increase supports available in order to manage the caseload and to effectively support the nurse in their rehabilitation. The last possible consequence of these campaigns could be related to the need for development of an education curriculum for nursing schools. Nursing schools would have to allot resources to this development and the delivery of this curriculum for PSU. This could add strain to the already maximized nursing curriculum. Overall, these two campaigns would have an effect on PSU in the practice setting. These effects have the potential to be both positive and negative.

**Evaluation**

To evaluate and measure the proposed KT campaigns, two study designs are proposed. The evaluation of the KT poster is a quantitative design intended to evaluate the impact of the
PSU AMONG NURSES

Poster campaign. The evaluation of the PSU professional tool is a qualitative study design to understand the lived experiences of nurses using the PSU Professional tool.

**Poster Campaign Evaluation**

For this action research to be evaluated, a quantitative study and a quasi-experimental longitudinal pretest-posttest time series design will be used. This quantitative study will not include a control group. The feasibility of using a control group would be difficult because preventing a control group from possibly having unintentional exposure to the media poster campaign could not be guaranteed. To be able to evaluate the nursing population’s knowledge of PSU prior to the poster campaign using a pretest posttest design will be used. This will provide baseline data (Randolph & Viswanath, 2004). This study will not involve any blinding of researchers or the participants due to the collection of the data being unaffected by people’s awareness (Polit et al., 2017). The pretest and the posttest data will be gathered through the use of web-based surveys allowing a broad audience to be surveyed. The pretest data will be gathered prior to the media poster campaign and posttest data will be collected after the campaign has been active for 6 months. The instrument used for measuring the outcome variables was located through the Health and Psychosocial Interments database (HaPI). This verified evaluation tool was obtained from an evaluation of an AIDS awareness project (McGill and Joseph, 1996). This evaluation tool will be incorporated into the surveys. The goals of the evaluation tool are to assess the knowledge before and after intervention and to understand general attitudes and perceptions regarding the high risk behaviour. The evaluation tool will also attempt to explore the impact of the posters by having questions that address the effectiveness and frequency of observation of the poster by staff members. An accurate sample size was determined by using the Cohen table for sample size determination (Polit et al., 2017). A small
effect size would require a sample size of 393. To account for 20% attrition in the study, the sample size would need to be 472.

For this study, convenience sampling will be used. Nurses within the selected metropolitan hospital will be asked to participate in the pretest and posttest survey via email and intranet. Prior to the survey, informed consent will be obtained (Thomas, Sorenson, Joshi, 2016). Participants will have the opportunity to be entered into a draw for a cash prize upon completing the survey. Ethics approval from the metropolitan hospital ethics board and the University of British Columbia will be secured prior to the initiation of this quantitative study. The risk/benefit assessment of this study suggests there is minimal risk to the participants in this study. Should it be found that during this quantitative study there is increased risk, the study will be stopped and re-evaluated.

Prior to the media poster implementation, the pretest web-based surveys will be completed and this will allow baseline data to be gathered. To maximize effect size, the posttest evaluation will be competed as close as possible to the conclusion of the media poster campaign (Snyder, Hamilton and Huedo-Medina, 2009). The pretest survey data will be compared to the posttest data. Statistical software will be used to analyze this data, to calculate the difference between the pretest posttest data and then determine the statistical significance of the intervention. The outcome of the poster will help to guide future awareness campaigns regarding PSU in nursing.

If the evaluation of this campaign in measured to have a positive impact, the campaign can be expanded to include computer network screensavers and intranet information circulars. This will allow the campaign to be more rigorously evaluated due to the inclusion of additional data such as hits on resource websites.
PSU Professional Tool Evaluation

An action research protocol will be developed to understand and evaluate if completing a professional plan related to PSU has an impact on nurses’ ability to identify PSU in themselves and their colleagues. The aim of this study is to understand the lived experiences and perceptions of practicing with or with others experiencing PSU. This study will be based in phenomenology. Phenomenology is “concerned with lived experiences of humans” (Polit et al., 2017, p.54). By raising mindfulness through self-evaluation and awareness, an opportunity to produce a shift in understanding of PSU in the practice environment is created. The design of this study will use community-based interviews. These interviews will take place in individual settings, and the interview design will use grand tour questions. This unstructured approach will begin by asking broad questions to gain an overview which can ten lead to more focused questions is needed (Polit et al., 2017).

For this study, convenience snowball sampling will be used. This type of sampling will allow a trusting relationship between participants and researchers to easily be established, decrease recruitment efforts by researchers and enable researchers to specify characteristics of the participants (Polit et al., 2017). For this study, a total of 10 participants will be required (Polit et al, 2017). The inclusion criteria are that the participant must be currently be completing a pre-registration nursing program or be a registered nurse working in practice. Participants will be excluded if they are currently undertaking treatment for PSU, attending a recovery center, non-practicing or having restrictions on their license. The rationale for these criteria is to protect the nurse from possible legal ramifications related to patient safety and to support the successful recovery of the addicted nurse. Due to the ethical nature of this study, there is a concern that the participants may withhold experiences based on the perceived possibility of persecution. In anticipation of this limitation, inclusion /exclusion criteria and the availability of legal counsel
for the participants have been outlined to maximize the trust of the research team by the participants. This will also maximize the opportunity for the gathered information to lead to further prevention and research related to PSU.

Ethics board approval will be obtained from the University of British Columbia. The participants will be given the study details and be invited to participate. Informed consent will be obtained from the participants. From there, the participants will complete individual interviews approximately 30-45 minutes in duration. The interviews will provide an opportunity for participants to have freedom in their explanations as well as researchers to obtain the information required for data analysis (Polit et al., 2017). Interview questions will be 1) “Can you explain what PSU in nursing means to you?” 2) “Did you complete the PSU professional plan?” and 3) “How will you prevent yourself and others from the risk of PSU?” The interviews will be recorded and transcribed by the research assistant and reviewed by the primary investigator for accuracy verification. The data will be analyzed by the development of a coding scheme involving data organization and identification of themes in the data (Polit et al, 2017).

The evaluation of the PSU Professional tool will provide the data required to validate the use of the PSU professional tool in prevention of PSU in practice. It will also validate the need for self-reflection and self-regulation within the nurse’s practice. The table below lays out the timeline.

Table 4: *Timeline for KT Campaigns*

<table>
<thead>
<tr>
<th>Poster Campaign</th>
<th>PSU Professional Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>• This quantitative study will take place over an 18-month period.</td>
<td>• This timeline for this qualitative study will be 12 months.</td>
</tr>
<tr>
<td>• The ethics approval, poster and survey design, and pretest data will take</td>
<td>• Allowing two months for ethic approval</td>
</tr>
<tr>
<td>approximately six months.</td>
<td>• Four months for interviews and data collection.</td>
</tr>
<tr>
<td>• The media poster campaign will run for six months prior to the post test</td>
<td>• Six months for data analysis and publication preparation.</td>
</tr>
<tr>
<td>survey.</td>
<td></td>
</tr>
<tr>
<td>• Data analysis and publication of study findings are estimated to take six</td>
<td></td>
</tr>
<tr>
<td>months.</td>
<td></td>
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</tbody>
</table>
Summary
Action research often includes both qualitative and quantitative data within its data gathering. In this method, research findings will develop as the action takes place creating new forms of understanding (Koshy et al., 2011). In this chapter, an action research approach for two KT campaigns was described as well as the initial evaluation of the proposed KT campaigns. In the following chapter, the contribution and applicability these campaigns will have on the advancement of nursing practice will be discussed.
CHAPTER 4: DISCUSSION

This chapter will discuss the how the information gained from these KT campaigns will inform and advance nursing practice. This discussion will review the possible outcomes as it relates to impact, culture, policy development and future research.

Impact

PSU in nursing is complex a multifactorial illness. Its cause can range from personal triggers to occupational triggers, making PSU difficult to identify and treat. PSU can be linked to a genetic susceptibility or social circumstance (ACCA, n.d). This can make PSU difficult to identify and diagnose. The KT translation campaigns will advance nursing practice by initiating conversations about the links of role strain, lateral violence and work demands and how they contribute to PSU (National Council of State Boards of Nursing, 2011). The KT campaigns will also help to educate nurses about the signs and symptoms of PSU allowing for PSU to be recognized in the practice environment. It is important to mention that PSU in nursing can also have a secondary impact on nursing even if the nurse is not actively using in the practice environment. The nurse’s practice could be negatively affected by the nurse being hung-over or experiencing withdrawal symptoms in the practice environment. This secondary impairment could lead to poor decision making and inability to provide safe patient care. Some examples include increased sick time, making errors in judgment or incorrect charting (CANA, 2017). Regardless of whether or not the nurse is suffering from PSU in the workplace or if the PSU is mild to severe, there is potential for the nurse to be unfit for practice.

Research shows the importance of early intervention and how it can increase the possibility of recovery, decrease relapse and prevent PSU from becoming more severe (Abuse, 2016 & CANA, 2017). This KT translation campaign will help create an environment where
the nurse will have the awareness to seek early intervention for PSU, colleagues will have the knowledge to identify PSU and the knowledge of how to report PSU in the practice environment.

**Culture**

The lack of education about PSU is a serious risk factor for nurses (National Council of State Boards of Nursing, 2011). This lack of education is compounded in many practice environments by managers on nursing units who do not have a background in nursing. Many managers in hospital settings come from a range of backgrounds. These backgrounds include physiotherapy, occupational therapy and medical technology. As pharmacology and disease processes are not an aspect of these managerial backgrounds, there is a lack of knowledge related to PSU. In the absence of a PSU knowledge base in leadership, PSU education is sorely needed.

In addition to the lack of knowledge of PSU, there is a need for a just culture environment. A just culture environment in nursing “seeks to create an environment that encourages individuals to report mistakes so that the precursors to errors can be better understood” (American Nurses Association, 2010). This shift from blame to gain can be the shift needed for a nurse to take responsibility for PSU, seek help and protect patient safety. This KT campaign pushes to remove the sigma that has been present in PSU for the last hundred years. There is a known problem in the practice environment that everybody knows is there and nobody wants to address the issue (ACCA, n.d). It is this stigma that is holding back the understanding and the treatment for nurses living with PSU.

**Policy**

As discussed in chapter 1, there are no specific federal policies to address PSU in nursing in Canada. As nursing is a safety sensitive occupation where addictive substances are available, there is a clear need for these policies. Policies are needed to provide the framework for a safe, organized, positive, empowering and nondiscriminatory practice setting (National Council of
State Boards of Nursing, 2011). If policies are not in place, there is a possibility that a nurse could be terminated in one workplace due to PSU and then rehired in another workplace without receiving treatment for PSU. This could result in the advancement of the PSU, an increased risk to the patient and a possible danger to the public.

These KT campaigns will provide the research needed to create a platform for the development of clear procedures for nurses on how to get help for PSU. It will empower all staff to identify and understand their legal responsibilities regarding reporting PSU. PSU policy can provide the nurse and leadership clear direction on the steps to managing PSU in the practice environment.

**Future research**

Currently there is an absence of literature addressing PSU as an occupational hazard for nurses (National Council of State Boards of Nursing, 2011). There is a need for both qualitative and quantitative studies to measure PSU in nursing. As stated earlier, there is no concrete data on the prevalence of PSU in nursing. This needs to be better studied so that further interventions can be developed and implemented. Also, there is a need for better understanding of the roles of burnout, caregiver fatigue and post-traumatic stress in contributing to PSU. Further research is also needed in understanding what the cost to the employer is when a nurse requires treatment for PSU. This research could include the cost of sick time, rehabilitation, ongoing medical monitoring, gradual return to work and retention.

**Conclusions**

PSU in nursing exists in an occupational environment that is known to be a complex system. The complex system of healthcare is made up of many different professionals and stakeholders in PSU who all share the same goal of safe patient care. Education and awareness are needed to decrease the stigma and increase reporting of PSU in the practice environment. In
my personal nursing practice and graduate education, every nurse I have known has practiced with a nurse who suffered with PSU. PSU is present in nursing practice.

In this paper, a comprehensive literature review was completed to help inform two knowledge translation campaigns aimed at bridging the gap between research and practice. An Evaluation for theses KT was proposed and the implication for advancing nursing practice was discussed. To conclude, it is an absolute necessity to get people talking about PSU and to keep this conversation going. These campaigns take important steps in getting stakeholders informed about PSU and its effects on the workplace. It will undoubtedly serve as a reminder that the work of a nurse has risks that can be unforeseen. One of these risks is something that can create multiple victims and it is the devastating affliction of PSU.
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https://doi.org/10.1111/nin.12215


https://doi.org/10.1097/NNE.0000000000000466


Toilet Stall
Drug Use is NOT Normal

Need Help?
Contact BCNU
or Workplace Health
Appendix B

Right Medication
Right Client
Right Dose
Right Time
Right Route
Right Reason
Right Documentation

PSU AMONG NURSES

PS.U.
Problematic Substance Use
Need Help?
Contact BCNU
or
Workplace Health
### Appendix C

Problematic Substance Use Professional Plan for Nurses Annual Review

**Year:**

<table>
<thead>
<tr>
<th>Alcohol/ Drugs</th>
<th>Past 30 days</th>
<th>Life Time (Years)</th>
<th>Route of Administration (IV/PO/inhaled/transdermal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol (any use at all)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol (to intoxication)</td>
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<td></td>
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<tr>
<td>Opiates/Analgesics</td>
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<td></td>
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<tr>
<td>Cocaine</td>
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<tr>
<td>Amphetamines</td>
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</tr>
<tr>
<td>Cannabis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hallucinogens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than one substance a day (including alcohol)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How much money would you say you have spent during the past 30 days on

<table>
<thead>
<tr>
<th>Alcohol:</th>
<th>Drugs:</th>
</tr>
</thead>
</table>

Has the amount of Drugs/Alcohol increased since last annual review of PSU professional Plan?

<table>
<thead>
<tr>
<th>(Circle one)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Who do you identify as the individuals you would turn to assist in gaining treatment for PSU?

| 1) | 2) |

Adapted from: Department of Mental Health & Substance Abuse Services, 2016