Challenges and Opportunities of Rural Nursing Preceptorship: A Photovoice Perspective

by

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Abstract

In nursing education, preceptorship practica typically occur at the end of the undergraduate nursing program and are intended to consolidate learning as the student prepares to enter practice. Nursing students are evaluated throughout the preceptorship in part related to their ability to manage and evaluate their nursing care in terms of the entry to practice competencies. Preceptorship, being a high-stakes practice course is inherently challenging and stressful for nursing students. To date, there is a dearth of literature that has addressed the challenges and opportunities experienced by members of the preceptorship triad namely the nursing student, their faculty advisor and preceptor. The purpose of this study was to explore the challenges and opportunities associated with rural preceptorship by nursing students, their faculty advisors and preceptors. Gaps exist in the current literature concerning strategies to prepare nursing students for rural nursing preceptorship and practice.

Photovoice was used as a creative approach to participatory action research (PAR), which has been found to empower and engage community members as co-researchers, for the purpose of implementing change based on the priorities of the community, in this case, teaching and learning experiences of nursing students and their faculty advisors. The study sample comprised nine senior nursing students, assigned to rural communities in a western Canadian province for their final clinical preceptorship, and five faculty advisors who moved between communities. Participants were provided with digital cameras and instructed to photograph the challenges and opportunities of rural nursing practice. The participants then selected their own

photographs to present to the researcher, serving as an impetus for rich discussions during face-to-face, individual interviews.

The findings from this research project offer new insights into the rural preceptorship experience, from the perspective of the students and faculty advisors. This study yields data germane to the rural setting, and relates a story of rural nursing preceptorship based on imagery and interviews. As participants described their experiences throughout the preceptorship placement, four overarching thematic clusters emerged: (1) sense of rurality, (2) rural versus urban placements, (3) travel, and (4) making do with limited resources. The implications of this study are relevant to the role of the nurse educator in the preparation of students for both the opportunities and challenges of rural nursing preceptorships. If students successfully navigate a positive preceptorship experience, this too may influence their desire to seek employment in a rural setting (Crow, Conger, & Knoki-Wilson, 2011; Edwards et al., 2004; Hunsberger et al., 2009; Killam & Carter, 2010; Webster, Lopez, Allnut, Clague, Jones & Bennett, 2010). Adequate preparation of future nurses, competent to practice in rural settings, is critical. This growing knowledge base requires comparative studies concerning challenges and opportunities in rural settings, during supervised clinical courses which could be further extended through comparative research in non-rural settings.

Dedication

I dedicate this thesis to each of the research subjects who participated in the study. Without their willingness to engage in the research process, the study would not have been seen to fruition, to which I am forever in their debt.

I also dedicate this work to my family; my husband Rod and our four children, Brett, Eric, Scott and Olivia. Your patience, love and encouragement, inspired me and kept me moving forward.

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I again must thank the participants for their willingness to participate and contribute to the growing body of knowledge around rural nursing practice, in particular the student experience during rural preceptorship. Recognizing the high stakes nature of the preceptorship course, I am grateful to the nursing students for their willingness to participate and engage in the research process. Special thanks to the faculty advisors who were able to make space in their already busy schedules to contribute to this body

of educational scholarship. To the nursing managers and preceptors who participated with me by supporting the research process along with students and faculty advisors, I hope this knowledge will find its way back to you in meaningful and significant ways; having a positive influence on the rural practice experience for current and new nursing staff, patients, and community members.

Sincere gratitude and love to my family, Rod, Brett, Eric, Scott, and Olivia. The long hours away from home collecting data and during residency were difficult for all of us, but you smiled and pushed me on. I could not have done it without you, you are my reason.

Lastly, I acknowledge the profound influence my late parents and brother have had on my adult life. At a young age, my parents instilled in me, a passion for life-long learning and achievement, to which I attempt to exemplify, to honor their memory.

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Chapter One: Introduction

Quality health care delivery is a Canadian priority (Canadian Health Services Research Foundation [CHSRF], 2006; Kulig, Kilpatrick, Moffitt, & Zimmer, 2015; Kulig & Williams, 2012; LoBiondo-Wood, Haber, Cameron, Singh, 2012). However, rural Canadians experience shorter life expectancy, higher rates of chronic disease, mental health conditions, smoking, and substance abuse, and lower socioeconomic status (Bushy, 2002; DesMeules & Pong, 2006; Grol, Wensing, Eccles, & Davis, 2013; Health Canada, 2008; Kulig et al., 2015; Kulig & Williams, 2012; Macleod, Browne, & Leipert, 1998: Tambly, 2011; White 2013). Rural communities, home to more than 30% of the total Canadian population, face significant barriers to health care access, often relying on registered nurses as the only primary health care providers (Kulig & Williams, 2012; Macleod, Browne, & Leipert, 1998). It follows that educational initiatives for rural nursing practice are urgently required (Jackman, Myrick, & Yonge, 2012); however, the current literature is devoid of strategies to prepare nursing students for such practice. Likewise, very few studies address the challenges and opportunities inherent in rural preceptorship. Nurses working in rural settings are well positioned to inform and guide knowledge development in this area of nursing practice.

Background and Significance

Socioeconomic status and geographical location are linked to disparities in Canadian health outcomes, the poorest of which are to be found in rural and remote areas (Shields & Tremblay, 2002). While rural nursing research is growing, significant gaps persist (Greiner, Glick, Kulbok, McKim-Mitchell, 2008). Laurent (2002) explains that the recruitment and retention of rural health care providers has focused largely on

physicians; and that long hours and scant resources have influenced, negatively, the work-life balance and employment retention of rural health professionals. Specifically, education in rural jurisdictions for most health professionals is insufficient (Laurent, 2002). Numerous barriers may impede rural individuals' ability to obtain education, related to time, cost and access to basic and continuing education programs (Francis & Mills, 2011; Leipert & Anderson, 2012).

Preceptorship immerses nursing students in a particular setting over an extended period of time (Jackman et al., 2012); nonetheless, the contextual values and beliefs specific to rural communities are mostly absent from nursing curricula (Dowdle-Simmons, 2013). A sustainable, rural nursing workforce is dependent upon educational preparation specific to this environment (Hunsberger, Baumann, Blythe, Crea, 2009). Forbes and Edge (2009) point out that the challenges of rural nursing education and rural health care are exacerbated by the shortage of nurses and other health care team members. Such findings continue to be relevant in 2017, where a national nursing shortage, including specialty nursing, nursing faculty, and nursing leadership, exists in many settings, necessitating continuous exploration of strategies related to recruitment, and retention.

Edwards, Smith, Courtney, Finlayson and Chapman (2004) posit that the shortage of nurses in rural and remote areas is compounded by nursing students' lack of educational experience in these settings. Remarkably, no more than eight percent of nursing students are exposed to rural practice in undergraduate programs (Edwards et al., 2004). The failure to adequately prepare nurses for the complexity of rural environments has resulted in poor job satisfaction and poor staff retention (Sedgwick &

Yonge, 2008a). More research is need to understand factors that may contribute to retention challenges, such as lack of support for professional development as well as lack of resources for spouses and partners. Rural health is adversely affected by high levels of health care provider attrition, itself a measure of these professionals' lack of investment in the overall health service provision of the community. It is, therefore, important to identify effective strategies that prepare nursing students for the diversity, acuity, and complexity of rural nursing practice. Meyer Bratt, Baernholdt, and Pruszynski (2014) suggest that differences between urban and rural practice settings must be recognized and specifically addressed. To reduce new staff turnover, and preserve operational resources, it must be determined how rural-specific education influences patient- and organizational outcomes (Meyer Bratt et al., 2014).

Uncovering little research specifically addressing the challenges of rural, clinical placements for nursing students in a review of the literature, Killam and Carter (2010) explored current research into rural nursing placements, and preceptorship in general. Through rigorous inclusion criteria, the authors ultimately concluded that the most common challenges for nursing students can be placed into seven categories: political, environmental, community, nursing, organizational, relational, and personal. They emphasize that more purposeful research is needed to address the specific challenges of rural practice placements; stressing the importance of understanding their inherent elements, in order to positively influence long-term recruitment, create effective solutions around attrition, and retain the required numbers of rural nurses specified by health authorities.

This study contributes to the development of knowledge of rural nursing preceptorship through: 1) identifying the challenges and opportunities that nursing students and faculty advisors experience during preceptorships in rural communities; and 2) providing an opportunity for these stakeholders to participate in data collection and analysis, thereby capturing the complexity of learning in rural environments. It is hoped that the findings will contribute to securing high quality undergraduate, rural placements; thereby contributing to the development of solutions that address the shortage of rural nurses into the future (Edwards et al., 2004).

Research Problem

At present, little nursing research specifically addresses the challenges and opportunities of rural nursing practice. Furthermore, nursing students who undertake rural practice placements may face challenges unique to the rural setting. An increased understanding of the challenges and opportunities nursing students experience in rural, clinical placements can: a) foster the creation of strategies to address these challenges; and b) enhance student learning, as well as recruitment and retention of rural nurses. This understanding has the potential to encourage nursing students to choose rural placements, which may in turn result in their considering the benefits of rural employment (Edwards et al., 2004).

Study Purpose

The purpose of this study was to examine the challenges and opportunities experienced by nursing students, preceptors, and faculty advisors during final preceptorship practica in rural settings. Persons living and working in rural communities are best positioned to articulate the strengths and challenges of rural life. Nursing

preceptorships provide an extended placement in the rural setting that comprises not only day-to-day nursing practice, but the complexity of the work and the unique social environment. Nursing students who complete the final preceptorship course in rural settings have the opportunity not only to consolidate their undergraduate nursing education, but also to develop sophisticated knowledge and skills that are important to the successful navigation of the complex, rural practice environment.

The specific objectives of this study were:

1. to explore nursing students', preceptors' and faculty advisors' perceptions of the challenges and opportunities in a rural nursing preceptorship;
2. to investigate how these challenges and opportunities influence student learning;
3. to examine the influence of these challenges and opportunities on nursing students' interest and willingness to seek employment in the rural setting as graduates.

Research Question

The study was guided by the following, broad question: *What are the challenges and opportunities experienced by nursing students, preceptors, and faculty advisors during nursing preceptorship placements in rural communities*?

Additional questions asked included:

1. Did the specific challenges or opportunities encountered by students, preceptors and faculty advisors in rural preceptorships influence student learning, satisfaction, and student interest in rural employment?

2. How did students, preceptors, and faculty advisors address the challenges they encountered in the rural preceptorship, and what supports, if any, were utilized?
3. How did nursing students, preceptors and faculty advisors perceive their experiences of the rural practice context?
4. What are the connections between rural preceptorship and rural employment factors, particularly recruitment and retention of new nursing graduates in rural settings?

Definitions of Terms

For the purpose of this study, the following terms are defined to clarify the context of the questions:

Nursing preceptorship. Nursing preceptorship in Alberta is a ten-week, consolidated nursing practicum (NEPAB, 2013) of approximately 350 hours, which occurs upon the successful completion of all prior theoretical and clinical courses in the collaborative undergraduate nursing program. Students are assigned one-to-one with a Registered Nurse (RN) and a faculty advisor from the educational institution. The preceptorship is typically employed full-time. Nursing students are often permitted to select their own preceptorship placement settings, based on availability and other considerations.

Rural. The author recognizes the absence of a universally accepted definition of what constitutes rural (Pitblado, 2005; Pong, 2002). For the purpose of this study, rural is defined as any community with a population of less than 50,000 residents, and a distance of at least 20 km from the nearest urban community (Kulig et al., 2008).

Rurality. Rurality is a sense of place and way of life, associated with living in a rural community (Balfour, Mitchell, & Molestane, 2008).

Preceptor. The preceptor is an RN, employed in an acute inpatient or community nursing role, in a rural community. The preceptor is assigned one-to-one with the undergraduate nursing student, supervising and evaluating the student's performance throughout the preceptorship placement.

Faculty advisor. The faculty advisor is a faculty member who liaises with the nursing student and the preceptor. Typically, the faculty advisor is assigned multiple students at multiple health care sites. The faculty advisor travels to the communities to meet with the student and preceptor at the beginning, middle, and end of the practicum (or more frequently as required). The focus of these interactions includes role responsibilities, expectations, student evaluation, and process of communication. Interactions take place either face-to-face, or remotely via telephone, Skype or other mobile technology.

Assumptions

The following assumptions underlie the study:

1. Rural communities are entrenched in an historical and traditional context that influences their overall social climate and culture.
2. Enhanced understanding of the challenges and opportunities inherent in rural practice will enable nursing students to build competence and learn skills required to meet the unique health needs of rural residents.
3. The experiences of students, preceptors, and faculty advisors during undergraduate rural nursing preceptorships will provide insights essential to

the recruitment and retention of recent graduates, whom may be committed to long-term employment and social investment in the community.

Summary

Rural practice placements have the potential to enrich undergraduate nursing education and to introduce the role of the rural nurse to undergraduate nursing students. This role is unique in that it affords meaningful connections with the rural community at large, through identifying and responding to specific community needs. Successful rural nursing preceptorships introduce future nurses to the challenges and opportunities of rural practice and may encourage recent graduates to seek out permanent employment in rural settings.

Chapter Two: Literature Review

Rural Nursing Preceptorship

In a rapidly changing health care environment, coupled with the ever-increasing complexity of knowledge, preparation of nursing students is an ongoing challenge for nursing educators (Yonge, 2009). Individuals and families residing in rural areas require health care professionals who are responsive to their unique circumstances. The needs of rural communities, as well as the ability of health care service providers to address local health care priorities, are influenced by limited resources and geographical distance from primary health care centers. Health care professionals must be cognizant of the strengths and limitations of rural communities to effectively address their needs and promote their overall health.

The study involves two rural areas, each approximately 150 kilometers square, in southwestern and central Alberta. These areas are culturally diverse, comprised of ethnic and religious minorities such as Aboriginal, Dutch, Mexican, Kanadier Mennonite, Latter Day Saint, Roman Catholic and Muslim. Agriculture is the primary industry, including cattle, grain, beets and potatoes. Many seasonal and long-term, unskilled, agricultural laborers reside in these areas.

The final preceptorship typically occurs in the final year of a baccalaureate nursing program, enabling nursing students to consolidate what they have learned throughout their undergraduate studies. This practicum, undertaken prior to the student's entry into professional practice, entails full-time immersion as a member of the health care team in a specific area of nursing, under the supervision of an experienced, registered nurse. Preceptorships may take place in acute, inpatient, or community

settings—often selected by the students themselves—thereby providing contextually specific nursing practice experiences.

The purpose of this literature review was to determine the state of knowledge regarding rural nursing preceptorship, which resulted in a thematic synthesis of 19 peer reviewed research articles. The SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research Type) tool (Table 1) for research evidence synthesis was employed to identify the following key elements in each study; the sample description, phenomenon of interest, research design elements, what was evaluated, and the research approach used (Cooke, Smith, & Booth, 2012).

Table 1

Spider Tool

S (Sample)	Nursing students in the final practicum (preceptorship) course of a four-year baccalaureate program
PI (Phenomenon of Interest)	Rural undergraduate nursing preceptorship
D (Design)	Interview, focus group, ethnography, phenomenology, thematic analysis, grounded theory
E (Evaluation)	Student, preceptor and faculty advisor experiences related to the challenges or opportunities experienced during the course of rural preceptorship placements
R (Research Type)	Qualitative, quantitative and mixed methods studies

This literature review consisted primarily of automated searches of electronic databases: Academic Search Premier (1995-2015); CINAHL (1995-2015); ERIC (1995-2015); Cochrane Database (2005-2015); Ovid MEDLINE In-Process (1995-present); Journals@Ovid Full Text (July, 2015); Your Journals@Ovid; Health and Psychosocial Instruments (1985-2015); and OVID Healthstar (1999-2015).

Inclusion and exclusion criteria were determined based on “relevance and acceptability” for the purpose of the literature review (Meline, 2006, p. 22). Inclusion criteria for the search included undergraduate nursing students who complete the preceptorship in rural communities. Literature and research published in the past ten years was obtained, but the search was extended back to 1995 in order to capture seminal publications. Recognizing that rural preceptorship is an emerging area of research, international research, unpublished dissertations and conference presentation abstracts were included to avoid overlooking relevant work-in progress and unpublished research. All methodological designs were included in the search of the existing research. Exclusion criteria limited the literature search to undergraduate nursing preceptorship and did not include allied health professionals or teacher-education placements due to the contextual uniqueness of nursing practice experience.

Search terms applied were: *nursing education, preceptorship, nursing preceptorship, rural preceptorship, rurality, preceptorship challenges,* and *preceptorship opportunities*. Truncation and search syntax were applied, as applicable, to encompass variations in spelling and word usage. Following electronic searching, selected references were manually checked, and citations searched. All references were imported and stored using the Endnote reference manager.

Limited scholarly activity in the form of peer reviewed publications indicates that rural preceptorship is an emerging area of research. Forty-one abstracts pertaining to rural nursing preceptorship were reviewed. Eligibility was assessed using pen and paper and the Reporting Assessment Checklist (RAC) (Carroll, Booth & Lloyd-Jones, 2014) by reading the abstract, perusing the article and assessing the following criteria;

presence of a research question, description of the study design, description of sampling strategy and techniques, and *methods of data collection and data analysis*. The references were synthesized (Appendix A) to ensure clear, consistent and accurate data extraction was achieved. From this process, 19 research articles were selected for applicability and review. As a result, four main themes emerged from the review of the research evidence synthesis: the nature of the *rural experience*, the importance of *interprofessional collaboration*, *recruitment and retention* of nurses to rural communities, and student performance *evaluation and feedback*.

The rural experience*.* Most rural preceptorship studies are focused on operationalization of the experience. The findings pertain to student, faculty and nurse preceptor perspectives on this experience, benefits related to interprofessional collaboration, recruitment and retention, and issues related to evaluation. There is no evidence of research focusing specifically on the challenges experienced by the members of the rural preceptorship triad (student, preceptor and faculty advisor). In a photovoice (Wang & Burris, 1997) study conducted by Yonge, Myrick, Ferguson, and Grundy (2013a), undergraduate students and their preceptor participants collected photographic images as a medium to represent their experiences. Thematic clusters emerging from the data included coping with challenges, the influence of the community on care, and the nature of teaching and learning. Three major themes comprised the latter: confidence, conscientiousness and growing together. This study corroborates previous findings regarding the need for more rural practice opportunities for nursing students, increased curricular emphasis on rural health; and context-specific preparation related to content and skills. The authors recommend the development of

rural mentorship programs for new nursing graduates, observing that staff, preceptors and students all take part in fostering rural experiences and relationships. They found photovoice to be an innovative method enabling participants to capture their experiences, while providing an impetus for description and discussion.

Yonge et al., (2013b) explored the significance of the landscape photographs as representations of the rural community, finding that rural identity informs student and preceptor perceptions of the rural setting. They found that the rural landscape both influences and reflects the determinants of health, such as time, space, physical and environmental resources. Space and distance were key among these, influencing the time required for rural residents and health care providers to travel to access local services such as schools and health services. The photographic research data revealed factors that influenced access to services, such as seasonal weather patterns, local infrastructure, and safety concerns related to poor road conditions and repair. Also apparent was the juxtaposition of traditional and modern influences in rural communities; historical sites and buildings, alongside modern facilities, represented how rural communities advance while maintaining their connection to the past. These images may signify community members' conflicting feelings of loss and gain as their past is replaced by new, modern, and ostensibly superior facilities.

In a grounded theory study, Yonge, Ferguson, and Myrick (2006) also examined how students and preceptors engaged in rural preceptorship, relying on interviews, field notes and course documents as sources of data. Their research corroborated many previous findings pertaining to rural preceptorships. Most of the students involved requested rural placements; those who did not nonetheless reported positive

experiences, thereby disproving many preconceived ideas about rural nursing (Yonge et al., 2006). While this study focused on teaching and learning, some of the student participants described challenges such as limited technology, a sense of isolation, and the unpredictability of patient census. The complexity of rural patient care, characterized by preceptors as a benefit, pleasantly surprised the students. The students' interest in rural preceptorship was motivated by their desire to carry on working and living in rural communities (often the same settings where they were studying) following graduation. These findings highlighted the importance of developing a sustainable, rural preceptorship experience as a recruitment and retention strategy.

In a study by Pront, Kelton, Munt, and Hutton (2013) found that rural experiences provided many of the same learning opportunities as urban ones. The student participants were surprised by the level of complexity in rural nursing, to the extent that it became at times "chaotic and overwhelming" (Pront et al., 2013, p. 284), having a potentially negative impact on learning. Professional relationships and boundary issues were also reported by students who lived and worked in the same community, adding to the complexity of the preceptorship (Pront et al., 2013; Yonge, 2009).

Interprofessional collaboration*.* Effective health care service delivery depends on the ability of health care providers to interact and collaborate with other team members in planning, provision and evaluation. While undergraduate clinical education focuses on the individual acquisition of knowledge, and skills relevant to scope of practice, nurses and other health care professionals must work together to plan, implement and evaluate care. Typically, nursing students are introduced to the concept of interprofessionalism during their undergraduate education, but opportunities for

interprofessional practice remain limited (MacDowell, Glasser, Weidenbacher-Hoper, & Peters, 2015). The final preceptorship is the time when nursing students most often engage with other members of the health care team. Evaluating the impact of an interprofessional rural preceptorship experience, MacDowell et al., (2015) suggested dysfunctional teamwork is one of the leading causes of health care errors (MacDowell et al., 2015). Learning about the roles of other health care professionals produced a change in attitude toward interprofessional teamwork. This study was limited by its relatively small sample (N=52) but it evinces the importance of interprofessional education in health care. This finding is corroborated by several other studies pertaining to interprofessional education for nursing students, in particular during preceptorship (Sedgwick, 2011; Sedgwick & Rougeau, 2010; Sedgwick & Yonge, 2008a; Sedgwick, Yonge, & Myrick, 2009; Yonge et al., 2013a).

While some students undertake final preceptorships in their home communities, they may find themselves inadequately prepared nonetheless, especially in rural settings (Sedgwick & Yonge, 2008a). The authors found that a sense of belonging significantly influences the preceptorship experience, for both students and preceptors, insofar as students feel supported in their learning, and safe enough to ask questions and make errors (Sedgwick & Yonge, 2008b).

Sedgwick and Rougeau (2010) noted that students must navigate the close-knit, work culture of the rural community, describing this experience as a point of tension that may inhibit a student's ability to learn; such tension tends to diminish once the student achieves a sense of belonging. Insofar as community spirit is a central element of rural life, successful teamwork is the key to successful rural preceptorship (Sedgwick &

Rougeau, 2010). Meyer Bratt et al., (2014) further affirmed the connection of belonging to the community with job satisfaction and the intention to seek employment upon completion of the nursing placement. These findings link successful rural placements with nursing recruitment.

In an ethnographic study, Sedgwick, Yonge, and Myrick (2009) examined students' perceptions of learning in a rural-based hospital. Overwhelmingly, the students reported feeling as though they belonged to the team, in contrast to their previous, urban clinical experiences. Rural preceptorships engage all members of the health care team in supporting student learning. This approach differs from urban settings, wherein the registered nurse is primarily responsible for support and supervision of the student (Sedgwick et al., 2009). Elsewhere, Sedgwick (2011) found student integration into the interprofessional team required deliberate planning by the preceptor and faculty advisor, to ensure the student was allocated time with different team members. Furthermore, the student and members of the healthcare team all required information regarding each other's roles and responsibilities (Sedgwick, 2011). Improved communication among interdisciplinary team members has the potential to enhance students' learning and interest in rural employment.

Recruitment and retention. The influence of rural preceptorship on future employment has yet to be fully understood. On average, 12-50% increased interest has been noted following rural clinical experiences, although this finding encompasses supervised clinical placements and non-nursing, allied health student placements (Courtney, Edwards, Smith & Finlayson, 2002; Schoo, McNamara, Stagnitti, 2008). While these placements are recognized as a recruitment strategy for nursing units in

rural and urban centers, post-preceptorship employment data remains inconclusive (Schoo et al., 2008).

Jackman (2011) explored the relational process of teaching and learning during rural preceptorships, from the perspectives of the student, preceptor and faculty advisor. She found that other health care staff and community members adopted supportive roles, similar to those of the preceptor and faculty advisor. Students who received authentic rural experiences were more likely to remain and practice in the rural setting following the preceptorship. These findings suggest that other members of the interprofessional health care team should take part in a comprehensive preceptorship orientation, and the author offers insights regarding recruitment strategies for new graduates (Jackman, 2011).

In Australia, retention of rural nurses—especially in specialty areas such as psychiatry—is an ongoing challenge (Charleston & Goodwin, 2004). Preceptorship in rural and specialty practice areas may be effective as a recruitment and retention strategy. Rural course delivery poses logistical challenges such as evaluation and feedback, while student support is a key indicator of success. Charleston and Goodwin (2004) implemented a preceptor-training module focusing on the knowledge and skills required to support and supervise students during preceptorship. Staff indicated this training improved their knowledge and attitudes toward the teaching and supervision of students, although the extent of the improvement was unclear, as was the degree to which students sought employment at the rural site (Charleston & Goodwin, 2004). Other researchers have found that students who report positive rural preceptorship experiences are inclined to stay and work in rural settings (Crow, Conger, & Knoki-

Wilson, 2011; Edwards et al., 2004; Hunsberger et al., 2009; Killam & Carter, 2010; Webster, Lopez, Allnut, Clague, Jones & Bennett, 2010).

Evaluation and feedback. Evaluation is a common issue in the current body of research on rural preceptorship. While students may be required to complete some type of self-evaluation during preceptorship, this process typically requires the combined efforts of the preceptorship triad—student, preceptor and faculty advisor. The determination of the final grade is usually the sole responsibility of the faculty advisor. While the role of the faculty advisor is critical to student success, students often perceive the faculty role as peripheral to the actual preceptorship (Sedgwick & Yonge, 2009). This arrangement is unlike the students' prior clinical practice experiences, wherein faculty advisors provide supervision and instruction to students, directly. It is nonetheless imperative that students and preceptors feel supported by faculty advisors, despite their lack of physical presence. Faculty advisors also require support, mentorship and orientation in their roles and responsibilities (Sedgwick & Yonge, 2009). Pre-planned, summative evaluation meetings with the student and preceptor are important to the success of the preceptorship triad. Where physical distance prevents meeting in person, the triad can make use of resources such as texting, telephone, Skype, teleconference or videoconference. As Sedgwick and Yonge's (2009) study was limited to student perceptions of faculty involvement during preceptorship, more research is needed to understand faculty perspectives.

Rural, clinical placements are increasingly recognized as rich opportunities for nursing and allied health students. Yonge et al., (2011a; 2011b; 2011c) examined both student and faculty perceptions of the evaluation process during rural preceptorship,

employing a grounded theory approach. For the students, formative evaluation was the most frequent and effective form of preceptor feedback. The students most valued privacy, frequency, and regularity in evaluative conversations with their preceptors. The students were less clear about their role in the evaluation process, but identified receptivity to feedback as their responsibility. For their part, preceptors struggled to evaluate students, stating they often felt ill-equipped to conduct and document student evaluations. These preceptors often sought out assistance from the students themselves in using the evaluation tool, lacking context-specific orientation in the student evaluation process (Yonge et al., 2011a).

In the second phase of the same study, Yonge et al., (2011b) investigated the most effective evaluation tools and models for rural preceptors. They found rural preceptors require more support than their urban counterparts. Physical distance makes it difficult for faculty members and preceptors to meet frequently in person, meaning rural preceptors may receive less faculty support than urban ones. Grounded theory; comparative analysis of the data; current literature; and preceptor feedback all served to identify evaluation priorities, and to create a framework to guide the evaluation process. Prior to commencement of the rural preceptorship, the roles and expectations of each member of the triad must be explicit. The researchers also provided criteria regarding what is evaluated, by whom, when, where, why and how, along with distinct strategies for preceptors to address each of the components (Yonge et al., 2011b). While this framework was designed to address evaluation issues relevant to the rural preceptorship experience, the factors addressed therein are general and broad enough that it could plausibly be applied to a variety of practice settings.

Summary of Literature Reviewed

The state of knowledge around rural nursing preceptorship is emerging, albeit with existing gaps. Researchers have reported on the unique qualities of rural work and life, and how some of the uniquely rural factors influence the student experience and overall student learning. For example, some researchers have found that interprofessional practice is enhanced in smaller, more close-knit rural practice sites. It remains unclear, however, the extent to which the undergraduate nursing education, of which is primarily urban focused, prepares nursing students for practice in rural settings. Nor is it clear whether students who complete successful preceptorship in rural communities, remain in the community to work and live. Less is known about the long-term retention of newly graduated nurses who commence employment post-graduation in rural communities. Lastly, challenges associated with rural preceptorship have been identified by previous researchers. Issues related to student evaluation processes, travel and physical or social isolation have been explored, but strategies to address the aforementioned strategies have not been specifically examined and require further research.

Chapter Three: Method and Design

Nursing inquiry has been described as a political activity requiring moral engagement of the researcher with participants (Meleis, 1987). Given that medical and nursing research throughout history has been strongly influenced by positivism, nursing researchers must be cognizant of the complex relationships existing among gender, race, culture, power and sociopolitical factors (Anderson et al., 2003; Holmes, Bernard, & Perron, 2008; McGibbon et al., 2013). The feminist perspective is congenial to postcolonial scholarship, which in turn acknowledges past and current effects of colonization and recognizes prior knowledge as a product of cultural essentialism, constructed through an historical context that shapes every day experiences (Anderson et al., 2003). Feminist theory emphasizes epistemological issues related to validity; legitimization of relational, contextual, and subjective sources of data; and participants as experts. Feminism has contributed not only to the development of knowledge, but to the ways in which knowledge is created. Research couched in a postcolonial, feminist perspective must treat all persons equally, regardless of these defining factors. The postcolonial, feminist lens through which to understand the world may lead to being responsive to social imbalances experienced by individuals, groups and communities. Such a lens ensures the priorities of the individual or community remain at the forefront of research, thereby developing knowledge that represents the unique needs of the individuals and groups studied. This approach counters persistent, essentialist views of culture (Harrowing, Mill, Spiers, Kulig, & Kipp, 2010; Vandenberg & Grant-Kalischuk, 2014) and responds to the sociopolitical, economic and historical context of communities and the individuals residing therein. Postcolonial, feminist scholars

emphasize the need for multiple perspectives and interpersonal connections in the co-creation of knowledge, confronting the intersection of class-, race-, and gender-based oppression (Gubrium & Harper, 2013). Participatory action research (PAR) emerged from research activities carried out by postcolonial and feminist scholars who rejected traditional methods of knowledge development and inquiry (Gubrium & Harper, 2013). PAR methodologies were developed to address barriers, power inequality and oppression in the researcher-participant relationship.

Participatory Action Research and Photovoice

The purpose of this study was to generate an understanding of the challenges and opportunities of rural preceptorship, as experienced by nursing students, preceptors and faculty advisors. In previous studies, discovering challenges has been ancillary to the primary research purpose (Yonge et al., 2006); namely, focusing on the teaching and learning process in rural settings. The current study was designed to further explore the theme, derived from other studies, of challenges and opportunities in rural preceptorship. Using photovoice, participants provided a photographic representation of the challenges and opportunities they experienced during the rural preceptorship. The study revealed the ways in which participants addressed the challenges and built on the opportunities of rural practice.

Qualitative inquiry accommodates subjective, flexible approaches to exploring and understanding of phenomena related to social or human conditions (Creswell, 1998). Action research (AR), as described by Lewin (1946, 1952), who coined this term, is a systematic, cyclical movement through the steps of planning, acting, observing and evaluating of the results of the action (Khanlou & Peter, 2005; McTaggart, 1991). This

research process is congruent with nursing practice, in that the latter is historically informed by the steps of the nursing process—the same steps as described by Lewin, albeit in a different context. AR is a group activity aimed at consensus and social change, intended for improvement (Lewin, 1946). PAR emerged from AR in the 1970s (Khanlou & Peter). While many of the principles of AR are shared with PAR, Hall (1984) states that PAR extends the purpose of AR by concentrating on empowerment of oppressed groups, or in this case, empowering nursing students to inform the current literature on rural nursing preceptorship while supporting and advocating for rural community members who it has been established, are largely underserved.

PAR is both a philosophy and an approach to qualitative research (Bargal, 2008; Cornwall & Jewkes, 1995), emerging from the discipline of adult education (Khanlou & Peter, 2005; White, Suchowierska, & Campbell, 2004). As a methodology, PAR prescribes strategies for data collection and analysis, while seeking to improve the human condition through social change (Bargal). PAR centers on the collaborative determination of goals: what is important, and what requires improvement or change, from the perspective of participants. PAR continues to evolve, but a number of principles are prominent in the current literature:

1. Sustained, ongoing, active engagement of participants throughout and during each step of the research process.
2. A reasonable expectation that the research will result in some direct and positive benefits for the participants.
3. A cyclical process of steps aimed at co-creation of knowledge between researchers and participants.

4. Relevance and applicability of knowledge, determined collectively with participants.
5. Methods and strategies for data collection that facilitate participant engagement in the co-creation of knowledge (McTaggart, 1991; Hall, 1984).

By actively involving participants in all stages of the research project, PAR engages participants as primary stakeholders, invested in research outcomes that serve to improve their personal situations and those of others. This focus on action entails research that is carried out *by*, rather than *on*, research subjects (Cornwall & Jewkes, 1995; McTaggart, 1991), based on the assumption that research is more useful when conducted by the people it is meant to benefit, from their perspective (McTaggart, 1991). PAR generates knowledge products for action, as opposed to conventional research methodologies that generate knowledge for understanding (Cornwall & Jewkes, 1995).

PAR is a collaborative process, contingent on authentic participation by the researcher and participants throughout each step of the process (McTaggart, 1991). Cornwall and Jewkes (1995) describe the research relationship between the researcher and participants as deep, authentic engagement as opposed to shallow or narrow association. This is accomplished through adherence to *contractual, consultative, collaborative*, and *collegiat*e principles of participation (Cornwall & Jewkes, 1995). These principles codify the ways in which the researcher interacts with the participants throughout the research process. Recruitment of participants involves explanation of their specific roles throughout the research and their *contractual* agreement to participate. Participants are *consulted* throughout the research project; changes or

adjustments of the research process are implemented only after *collaborative* agreement on priorities, the relevance of data and, a need for change. Lastly, the researcher works *with* participants, demonstrating *collegial* respect for their knowledge and the control they have over the research process. As a research methodology, PAR is relevant and applicable to this project inasmuch as it requires collaboration with community members in the co-construction of knowledge, for the purpose of improvement and social change (Etowa, Thomas Bernard, Oyinsan, & Clow, 2007; Khanlou & Peter, 2005; Loiselle & Profetto-McGrath, 2011; McTaggart, 1991).

Photovoice is an innovative PAR method in which participants engage actively in research, which aims to represent their experiences through their own eyes, for the purpose of effecting positive social change (Catalani & Minkler, 2010; Lal, Jarus, & Suto, 2012; Martin, Garcia, & Leipert, 2010; Robinson-Keilig, Hamill, Gwin-Vinsant, & Dashner, 2014; Suffla, Seedat, & Bawa, 2015; Wang & Burris, 1997; Wang, Yi, Tao, & Carovano, 1998). Photovoice is congruent with the foundations of PAR and postcolonial feminism, in that it directly engages participants in the co-creation of knowledge pertaining to community priorities (Racine & Petrucka, 2011; Robinson-Keilig et al., 2014). Participants' photographs are analyzed in conjunction with their interview data, (Harrison, 2002), thereby adding rich, deep context: why the images were taken, what they mean to their authors, and how they form part of a story. As with all forms of PAR, photovoice emphasizes authentic collaboration between the researcher and participants, transferring power over the research process to the latter, who determine what is meaningful (Teti, Murray, Johnson, & Binson, 2012).

The photovoice method was first employed with village women in rural China, on the assumption that these participants were the experts in the issues related to their lived reality (Wang, 1999; Wang, Morrel-Samuels, Hutchison, Bell, & Pestronk, 2004; Wang & Redwood-Jones, 2001). This method has since proven effective with nursing students in rural settings, fostering their interest and understanding of the unique qualities of rural settings (Leipert & Anderson, 2012). Meaning is articulated and attached to images by the participant. The researcher collaborates with the participants as co-researcher and co-producer of knowledge. The images reify and validate participants' individual experiences from their own perspectives, rather than those of the researchers, as data collectors.

An academic search of health and social science research from 2013-2015 yielded over 100 research articles in which photovoice is cited as the primary research method. Photovoice has been utilized by researchers from numerous disciplines—Nursing, Public Health, Medicine, Occupational Health, Women and Children's Health, as well as that of indigenous and marginalized populations—in a variety of urban and rural settings. As a contemporary health and social science method, photovoice has acquired tremendous applicability and relevance.

Photovoice employs photographic imagery to illustrate the meanings of experiences or events (Wang & Burris, 1997; Wang, Yi, Tao, Carovano, 1998). According to Wang and Burris (1997), the main goals of photovoice are: 1) to empower community members in recording evidence of community concerns, through their own eyes; 2) to use photos as an impetus for verbal exchange and descriptive communication; and 3) to effect change at the policy level. The benefits of photovoice

include its flexibility and applicability to a variety of settings, pertinent to community and public health concerns (Wang & Burris, 1997).

Photovoice is a creative approach to PAR that empowers and engages community members as active researchers, for the purpose of elucidating the need for change based on the priorities of the community (Brake, Schleien, Miller, & Walton, 2012; Wang et al., 2004; Wang & Redwood-Jones, 2001). Photovoice was appropriate for the current study, to the extent that those involved in rural preceptorship are best positioned to define the challenges and opportunities therein (Lal, Jarus, & Suto, 2012; Suffla, Seedat, & Bawa, 2015; Wang, 1999). Research participants who live or work in the rural community are best positioned to identify factors giving rise to the challenges, as well as strategies to mitigate and cope with these challenges. Photovoice enabled participants to create a visual representation of their reality, empowering them to advocate for change in their community (Hergenrather, Rhodes, Cowan, Bardhoshi, & Paul, 2009). In summary, photovoice upholds the ontological and epistemological tenets of PAR and postcolonial feminism; it is an ideal method for engaging members of rural communities in visual representations of their stories (Racine & Petrucka, 2011).

Setting

This study was carried out in rural, southwestern and central regions of a western Canadian province, in communities with no more than 50,000 residents, at least 20 km distant from the nearest urban center. Seven rural communities comprised the setting. Each community offered diverse services, including small health centers providing various levels of care, and a variety of inpatient and community health services. Each community represented diverse cultural, religious and ethnic groups. Students were not

able to select the particular rural community they were placed. Rather students were randomly assigned to rural communities based on preceptorship capacity. Student participants were placed in inpatient or community health settings for their final preceptorships. Inpatient services ranged from acute care to long term and continuing care. Some acute care settings comprised maternal/child, labor and delivery, operating room, intensive care, pediatric, day treatment, and diagnostic imagining services. A variety of disciplines were represented in these settings, including Nursing, Medical, Physiotherapy, Occupational Therapy, and Respiratory Therapy. Community health placements included both public health and home care settings.

Sample

The non-probable, purposive sample was comprised of all fourth-year nursing students and their faculty advisors, from two, separate baccalaureate nursing programs, assigned to rural communities for their preceptorship placements. Initially, the sample also included RN preceptors assigned to work with these students throughout the preceptorship.

Students. The student sample included senior nursing students, from two separate undergraduate nursing programs, who had indicated their preference for a rural preceptorship placement. All nursing students assigned to rural settings were invited to participate, regardless of age, gender, or placement type. Students were required to consent to participate in the study, and to release their data for dissemination of the research findings (Leipert & Anderson, 2012).

Preceptorship is a final, compulsory course that provides a consolidated learning experience in a specific setting, assigned one-to-one with an experienced, registered

nurse. Each student was assigned a preceptor at the rural practice site, and a faculty advisor from the educational institution. The total sample consisted of nine (n=9) nursing students.

Preceptors. The preceptor sample comprised all RNs employed in the rural settings and assigned to students as preceptors. It is unknown whether preceptors received additional training or preparation prior to accepting a student for preceptorship, nor is it known where the preceptors were originally educated. It is not unusual for a student to be assigned more than one preceptor over the course of a preceptorship. In such cases, each of the preceptors was invited to participate. In the event that other RNs supervised the student during the preceptorship, only one RN was primarily responsible for the student's overall supervision and evaluation. It was this RN who was invited to participate.

Three preceptors at one practice site agreed to participate in the study, with the support of their manager. The researcher personally oriented these three preceptors, and supplied them with cameras. Thereafter, these preceptors did not respond to numerous requests by the researcher to meet to discuss their images. The researcher also contacted the nursing manager at the site to discuss this issue, but no response was received. Therefore, these participants were withdrawn.

Faculty advisors. Each student was assigned a faculty member, who acted as advisor and liaison to the student and preceptor(s) for the duration of the preceptorship course. The faculty advisor typically met in person with the student and preceptor three times during the preceptorship, to conduct initial orientation activities, midterm evaluation, and final evaluation of student progress. Additionally, ad hoc meetings took

place as requested by the student, preceptor or faculty advisor. The total sample of faculty advisors was five (n=5), representing both nursing programs involved in the study.

Recruitment

The researcher consulted placement offices in each of the two nursing programs for names of the students placed in rural settings, as well as preceptor names and contact information. The latter were provided using HSPnet, a practice education management system used across Canada to organize and track student placements.

The researcher provided the names of the eligible students, faculty advisors and preceptors to a program instructor not involved in teaching or supervising during the preceptorship course. This instructor then met with potential student participants during their orientation of the preceptorship at the beginning of the term (May 2016) to provide: 1) an overview of the research study; 2) an invitation to participate; and 3) a synopsis of the background, significance, purpose, methods and potential implications of the study. This same individual made initial contact with faculty advisors and preceptors, describing the study and forwarding the invitation to participate.

Once willing student and preceptor participants were identified, the researcher met with them and provided an orientation to the study addressing its purpose, implications, and method. Each confirmed participant (student, preceptor, and faculty advisor) was provided with a 10-12 megapixel digital camera and instruction regarding its use.

***Exclusion criteria*.** No participant was related to the researcher, and no participant expressed a potential conflict of interest related to participation in the study.

Eligibility was determined based on the willingness of each student, preceptor and faculty member to take part. The intent of the research—to identify different perspectives of the challenges and opportunities inherent in rural nursing preceptorship—was not dependent upon participation of each member of the triad. Regardless of their particular roles in the triad, individual participants provided significant insights into the nature of rural nursing preceptorship challenges and opportunities.

Ethical Considerations

The photovoice method is compatible with the ethical codes of the health professions: respect for personal autonomy, promotion of social justice, avoidance of harm, and protection of subjects from exploitation (Wang & Redwood-Jones, 2001). While freedom of speech is a fundamental human right, its exercise should not violate the rights of others. PAR emphasizes emancipatory knowledge creation aimed at improving the social human condition, as opposed to knowledge creation for its own sake (Khanlou & Peter, 2005). Nonetheless, researchers must ensure research involving human participants adhere to ethical principles that protect the public.

Wang and Redwood-Jones (2001) point out four potential ethical issues involving the rights of persons appearing in photographic works: 1) violation of privacy, 2) disclosure of embarrassing facts; 3) falsification of images, and 4) deprivation or gain at another's expense. With these issues in mind, all participants were required to sign an informed consent to participate. Furthermore, all individuals depicted in participants' photographs were required to give informed consent permitting their use in the study. Where language barriers might prevent such individuals from clearly understanding the

consent process, family or staff members would be called on to interpret. However, this situation did not arise at any time during the study. Although when able, patients could consent to being photographed, at no time were patients' faces photographed. All participants and photographic subjects were informed of their right to withdraw from the study at any time, without penalty.

Ethical approval was granted by the Research Ethics Office (REO) at the academic institution in which the researcher is a doctoral student. Reciprocity of approval was evaluated, and further ethical applications were approved as required, by the affiliated academic institutions, health service providers, and regional health authorities involved in the study. The criteria of the Tri-Council Guidelines for Human Subjects Research were followed. A Letter of Invitation to Participate, outlining the purpose, rationale and research procedures, was provided to each eligible study participant (Appendix B). The right to withdraw at any time, without risk of harm or consequence, was explained to all participants. Written, informed consent was obtained from each of the study participants (Appendix C). Each participant was required to obtain signed consent from individuals appearing in their photographs, such as community members, patients, families, friends, and colleagues. To this end, each participant was provided with hard copies of the photographic consent form, to be signed and included in the dataset when human subjects were photographed (Appendix D). Extra copies of this consent were left at a convenient location, mutually agreed upon by participants, in each practice site. All participants were required to sign a letter of confidentiality (Appendix E). All participants were assigned pseudonyms; however,

anonymity could not be guaranteed in this type of study, as participants may be the subjects of their own photographic data.

All study data have been stored in a locked cabinet in the researcher's workplace office. A list of study participants has been stored separately from this data. All data and related materials will be kept for the minimum time period (five years) required by the researcher's academic institution, whereupon they will be destroyed by the researcher.

Risks and benefits. There were no known risks associated with the study. In the unlikely event of psychological distress, participants were guaranteed the opportunity to withdraw from the study without consequence, at any time. Three preceptor participants withdrew from the study. No participants reported physical danger at any time.

Participants were informed that the results of the study were unlikely to immediately influence their current practice environments. However, the knowledge gained from this study has the potential to influence nursing preceptorship programs and rural preceptorship placements, ultimately benefiting recruitment and retention of rural nurses.

Data Collection and Analysis

Data collection and analysis were carried out concurrently, throughout the academic semester, in four phases. In keeping with the principles of PAR, the participants selected their own images to represent the challenges and opportunities they experienced. These images mobilized conversations during one-to-one interviews between the participants and the researcher.

Phase One. At the outset of the preceptorship, the researcher individually oriented the students, preceptors and faculty advisors at the educational institutions and

clinical sites, explaining the data collection process. Participants were instructed to record as many images as they wished, pertaining to challenges and opportunities they experienced during the preceptorship.

Phase Two. At the midpoint of the preceptorship, the researcher met with the individual participants, who had been instructed to select 20-25 photographs portraying challenges and opportunities they experienced during the rural placement. These photographs mobilized rich, descriptive conversations between the participants and the researcher, who asked open-ended questions (Appendix F) pertaining to: 1) what they saw in the image; 2) where and why they photographed specific images; and 3) the implications of the perceived challenge/opportunity for rural practice (Leipert & Anderson, 2012; Yonge et al., 2013c). Staying true to the PAR method, the data collection process was driven by the research participants, reflecting their unique perspective relative to the research purpose and research questions. The researcher facilitated the face-to-face interviews by asking open-ended questions and allowing the participants to speak freely and openly about why they selected particular images and the ways in which the image addressed the research questions.

Phase Three. At the completion of the preceptorship, the researcher met with each participant once again. For this meeting, participants were asked to select an additional 20-25 photographs. To elicit further, rich data, the researcher asked the same original open-ended questions as well as others that emerged from the discussion by allowing the participants to direct the interview conversations around the descriptions of their rural preceptorship experience.

Phase Four. In the final phase of the study, the researcher compiled a slideshow from amongst participants' selected images, and sent this to each participant via email. The participants were asked to verify if the images captured their experience, and invited to add further remarks or input. The researcher invited all participants to participate in a final interview at a time and location of their choice. The researcher reached out to each participant twice via email and once via telephone message. Five of the 13 participants met with the researcher to discuss the final slideshow. These interviews were also tape-recorded and transcribed by the researcher. This slideshow will be used to create an E-book, an electronic copy of the images that will be provided for each participant at the end of the study.

Open-ended interview questions (Appendix F) enabled the participants to discuss the meanings of their selected photographs and why they selected them (Yonge et al., 2013b). The researcher independently conducted, audio-recorded and transcribed all of the face-to-face interviews; maintained field notes; and kept a reflective journal for the duration of the study. The researcher took brief notes during each of the participant interviews and added extensive notes at the end of the interviews to maintain reflexivity throughout the data analysis.

Thematic data analysis was carried out concurrently with data collection, following the processes described by Braun and Clark (2006). Thematic data analysis, was appropriate as it typically starts during data collection and involves searching for thematic themes or patterns of meaning across multiple data sources. Additionally, thematic analysis allows for contextual description of experiences, events, and meanings, without being wedded to a particular pre-existing theoretical framework, such

as grounded theory or narrative inquiry (Braun & Clark, 2006). NVivo10, qualitative analysis software was used for data management, as a tool to organize and analyze the text-based data. Interview recordings and participant photographs were saved in individual participant files and assigned a participant number for ease of access and reference to coded data throughout the analysis process. For the purpose of this research project, the six phases of thematic data analysis described by Braun and Clark (2006) were applied:

1. *Familiarizing self with data:* Interview recordings were transcribed in NVivo solely by the researcher. Transcripts were read in entirety by the researcher and reviewed for accuracy of transcription while listening to interview recordings. This step is key to immersion in the data and allowed the researcher to review transcripts and recordings simultaneously.
2. *Generation of initial codes:* Interview transcripts were analyzed line-by-line. Common words, phrases and descriptions were highlighted and assigned descriptive thematic codes by the researcher.
3. *Searching for themes*: After all data was initially coded, the preliminary codes were sorted and collapsed into broader thematic clusters by identifying relationships, similarities, and relevance among themes.
4. *Reviewing themes:* All themes and sub-themes were reviewed for homogeneity of meaning to ensure “accurate representation” (Braun & Clark, 2006, p. 21) of the data.

5. *Defining and naming themes:* The thematic clusters were labelled by the researcher using descriptive terms used by the participants that captured the essence of the meaning of each theme.
6. *Producing the report:* Compelling examples from the data were selected by the researcher to tell the story of the data within the context of the rural preceptorship, from the perspective of the nursing students and their faculty advisors.

For the purpose of this study, a seventh step was added: *external validation* of the preliminary codes and clusters was completed during each phase of the research process by the researcher's supervisor. At the end of the study, the researcher emailed a copy of a slideshow summary of the findings to each of the research participants for further validation of the study findings. These steps ensured continuous adherence to the participatory principles of photovoice and PAR throughout the study, ensuring the research reflected the true meaning of experiences of the participants within the context of rural preceptorship.

Rigor and Trustworthiness

In qualitative research, the credibility of data is evaluated by its trustworthiness (Leipert & Anderson, 2012), which in turn depends on researcher impartiality (Gubrium & Harper, 2013). To enable participants to tell stories that meaningfully represent their realities, qualitative researchers must engage in a reflexive praxis, known in PAR as positionality (Suffla, Seedat, & Bawa, 2015). Positionality entails reflexive activities, whereby researchers monitor how their background, values, and beliefs may covertly bias each stage of the research. To ensure continuous reflexivity, positional

consciousness (Suffla et al., 2015), and minimal bias, the researcher maintained a reflexive journal throughout the entire research process. To establish trustworthiness in the data, the researcher strove to meet the criteria of credibility, transferability, auditability/dependability, and confirmability (Leipert & Anderson, 2012; Polit & Beck, 2011, 2012; Lincoln & Guba, 1985).

Credibility. Credibility, the primary criterion of validity for qualitative research (Lincoln & Guba, 1985) refers to confidence in the truth-value of the data and interpretations thereof (Polit & Beck, 2011, 2012). To establish credibility, the researcher employed the following techniques: prolonged engagement, triangulation, and member checking. *Prolonged engagement* refers to the length of time required to capture in-depth data, representative of the study purpose; data collection for this study took no fewer than ten weeks. To further ensure credibility, the study focused on specific aspects of the rural experience—namely challenges and opportunities—an approach known as persistent observation (Polit & Beck, 2011, 2012). *Triangulation* is the use of multiple sources of data to establish truth and minimize bias. Examples of triangulation in this study included: 1) multiple formats such as interviews, photographs, and presentations; 2) multiple participants collecting data in different locations; and 3) multiple participants actively interpreting data. Last, *member checking* occurred at each stage of the research process to review and verify analysis and interpretation of data.

Transferability. Transferability refers to the applicability and relevance of data to other settings (Polit & Beck, 2011, 2012; Lincoln & Guba, 1985). The richness of description and variety of data sources contribute to its transferability. Open-ended questions were used to elicit rich descriptions of the photographs, during the multiple

stages of the study. Upon its completion, the selected images were compiled and presented to the participants at each site, to verify the findings among participants and across rural sites.

Auditability/Dependability. Dependability describes the degree to which other researchers can reach the same conclusions, and is a measure of researcher neutrality. The researcher performed an *inquiry audit* and developed an *audit trail* (Appendix G)—a systematic collection of documents—throughout the research process (Polit & Beck, 2011, 2012). For the purpose of this project, the audit trail included interview transcripts, field notes documented by the researcher during interviews and meetings with participants, and the researcher's reflexive journal. Throughout each stage of the study—data collection, analysis, and interpretation—the researcher's supervisor validated the findings. At the end of the data collection, a slideshow of participant-selected photos was presented to all participants for findings validation. This type of *inquiry audit* is a measure of dependability which enables other participants to scrutinize the data.

Confirmability. Researcher positionality and reflexivity are the primary means of establishing confirmability—that is, objectivity and neutrality of data (Polit & Beck, 2011, 2012). To this end, the researcher maintained a reflexive journal throughout the research study. This is especially critical for PAR; ensuring the findings represent the authentic reality of the participants.

Limitations

As with any research endeavour, this study contained inherent limitations:

1. Transferability of the data to other rural settings is limited as a result of the non-probability purposive sampling method. While the sample was homogenous, and saturation is limited with purposive sampling (Morse, 1995), saturation was achieved after the first set of participant interviews. Findings were re-iterated and confirmed during the second and validation interviews. The researcher attempted to address this issue by collecting data from participants at different rural communities in southwestern and central Alberta and at two different times throughout the preceptorship. Nonetheless, transferability of the findings to other settings and may remain limited by the unique nature of the preceptorship course and setting, which is limited to one province.
2. Participants' capacity to capture unique, authentic, rural experiences—the data collection strategy placed demands on participants as they integrated it with their day-to-day activities.
3. Personal judgment and self-censure (or lack thereof) regarding appropriate photographic subjects.
4. Participant fatigue and attrition, owing to the extended period of data collection—despite evidence of both, the sample participants produced large quantities of photographic data and gave multiple interviews.
5. The primary preceptors assigned to the students at the rural settings were invited to participate in the study. Three preceptors initially agreed to participate and were provided cameras. All other preceptors declined and the

original three preceptor participants later dropped out of the study. Hence the preceptor perspective is not included in the study and represents a limitation.

6. Researcher bias is always a consideration. The researcher employed various strategies throughout the research process to guard against this. For example, during interviews, the researcher asked open-ended questions (Appendix F) to allow participants to speak freely and openly. The researcher maintained field notes and reflective memos throughout the data collection, analysis and writing to maintain researcher objectivity. Lastly, the researcher's supervisor performed data audits of the interview transcripts and data analysis.

Delimitations. There are two delimitations associated with the study:

1. The study was limited to two separate, undergraduate nursing programs. The rationale for this is two-fold. Firstly, the two programs were selected because of the known rural focus and location of the programs. Secondly, the two programs were selected for convenience and adequacy of the sample size.
2. The research was limited to the participants in the preceptorship triad. Nursing managers were not included in the sample as the research focused on the experiences of challenges and opportunities of nursing students, preceptors and faculty advisors during rural preceptorship, not nursing practice related issues.

Dissemination

Knowledge translation is the final step in the research process. Dissemination is critical to the effective translation of research-based knowledge into practice (Wilson,

Petticrew, Calnan & Nazareth, 2010). The first dissemination activity is focused on the participants. Next, the target audience(s) will be identified and then it will be determined what are the most appropriate and cost-effective dissemination strategies. Effective dissemination strategies benefit evidence-based clinical practice, collaboration between practitioners and researchers, community involvement in determination of research priorities, and patients' personal engagement in health-related matters (Mairs, McNeil, McLeod, Prorok, & Stolee, 2013).

For this study, dissemination strategies will include publication in relevant peer-reviewed journals, presentation at relevant professional nursing research conferences, and public engagement. However, refereed publications will be the primary means of academic dissemination. *Nurse Education Today* and the *Online Journal of Rural Nursing and Health Care* have been selected based on relevance to the topic, impact factor, and national and international relevance. To date, the researcher has one article, based on the literature review, published in the *Online Journal of Rural Nursing and Healthcare*.

Oral presentation of findings at conferences is another academic dissemination strategy. An abstract for oral presentations will be submitted to:

1. *International Institute for Qualitative Methodology* (IIQM), October 17-19, 2017, Quebec City, QC.
2. *Rural Nursing Organization,* bi-annual conference (2018, TBA*)*.
3. *Western North-Western Region of Schools of Nursing Conference* February, 2018, Calgary, Alberta.

These conferences have been selected for relevance to the topic and national and international exposure.

Public engagement is a growing dissemination strategy for research findings. A summary of this research study will be shared with local newspapers and other local publications. Newsletters in the rural communities can also provide summaries of the study, its findings, and its potential community benefits (i.e. The Weekly Review [Viking Alberta]; The Camrose Booster [Camrose, AB]; Fort Saskatchewan Record [Fort Saskatchewan, AB]). The final slideshow presentation will be published online by the researcher. Each participant will receive an E-book of the finished collection, entitled *Challenges and Opportunities of Nursing Preceptorship: A Photovoice Perspective,* in recognition of their unique contributions to the study. Each participating clinical site will receive a hard copy of the book.

Chapter Four: Findings and Discussion

Four thematic clusters—sense of rurality, rural versus urban placements, travel, and making do with limited resources—emerged from the participant interviews and photographs (Table 2).

Table 2

Thematic Clusters

Sense of Rurality	**Rural vs Urban Placements**	**Travel**	**Making Do with Limited Resources**
• Community spirit • Communication • Cultural contexts	• Breadth of experiences • Relationships and support • Challenges associated with isolation	• Landscape • Opportunities for reflection • Safety	• Technology • Equipment and space utilization • Recruitment, attrition, and retention

The participants overwhelmingly identified with these themes, and they related them to preceptorship in the rural setting as they described their experiences throughout the preceptorship placement. Moreover, the main objectives of the study were found threaded throughout the findings. For example, the opportunities and challenges were discussed within the context of every photographic image selected by the participants. The students described in detail how the challenges or opportunities enhanced their learning and ability to cope with the unexpected or unusual circumstances unique to rural practice. While the participants were largely focused on success of the preceptorship experience including maximizing their experiences and learning, they did address rural employment. As such, many of the students were offered employment at the completion of their preceptorship. Few of the student participants were originally

from rural communities, but those that were, intended to stay. Others were from urban centres and acknowledged that out of necessity, they would follow the jobs, starting nearest to home. However, each participant that was offered employment at the rural site, accepted.

Sense of Rurality

Rurality was described by the participants as more than a geographic location (Jackman, Myrick, & Yonge, 2010; Kulig et al., 2008; Kulig et al., 2015) but as a sense of place, and a way of being and doing, that represented rural life. Rurality was depicted more specifically by participants in terms of *community spirit, communication, and cultural contexts*. The participants' depictions of rurality within the context of community spirit, communication and cultural context extended beyond the health care setting and were observed in various ways throughout the rural community. For those participants who lived in the rural community during the preceptorship, this sense of community spirit extended beyond the health care setting.

Community spirit. Close-knit, community spirit is central to rural life (Sedgwick & Rougeau, 2010). Examining international immigration patterns, Krivokapic-Skoko and Collins (2016) found that community spirit is a natural attraction of rural communities. The participants photographed numerous, symbolic representations of rural spirit: murals (Figure 1), sculptures (Figure 2), signs, and advertisements for local celebrations and locally-owned restaurants (Figure 3). These images captured the unique nature of the rural community.

Figure 1. Mural

Hannah photographed a sculpture of a tractor (Figure 2). She thought the sculpture represented a way of life that was “emblematic of the town and what's around it.”

Figure 2. Tractor sculpture

She went on to say a great deal could be learned from observations made in the community, remarking, “it cues you to what kind of community you are going to be in, because if there are a lot of farmers; there might be challenges associated with that, or the types of patients you're going to see.”

Robert found that a number of immigrants had opened restaurants (Figure 3) in some of the rural communities he visited as part of his preceptorship placement. Robert

Figure 3. Local restaurant

suggested that this represented community engagement through support of the local restaurant. He found that the little eatery was a kind of rural attraction, “a really small… mom-and-pop kind of business, but one of the things that would make a small community more alive.” These remarks are consistent with the Yonge et al., (2013b) findings that participants’ photographs captured numerous, symbolic representations of the community, with significant personal and historical meaning to its residents.

These images captured the unique nature of the rural community and reflect the local culture and community spirit that represent the essence of the community. This reflects the congruence between the research method and the unique nature of the research setting. By employing a postcolonial framework, the research participants gave voice to the way of being of each unique rural community. The photographs were unique to each community, eliciting rich descriptions of its characteristics. However, these images also evoked scenarios the students witnessed in the hospitals, such as

farming and highway traffic accidents. Such instances exemplified patient concerns common in rural health care.

Daniel was impressed by the degree of trust he observed both in the rural community and the health care site, photographing recently sterilized equipment and instruments dropped off at a designated spot in a common hallway (Figure 4).

Figure 4. Sterile equipment

He was surprised that no one interfered with these items, and there had never been an incident of tampering. “They know not to touch stuff like that—kind of like, in a rural place, everyone leaves their front door open,” he surmised. “I feel like it kind of symbolizes, that it’s here for a reason; don't touch it.” The participants observed a sense of trust within the community and at the health care setting, among employees and visitors. Staff extended this trust to the nursing students, thereby creating a safe place for learning and asking questions.

Previously, researchers have found that extended clinical placements in the rural communities enhanced student learning as they became immersed in the rural community and rural way of life (Meyer Bratt et al., 2014; Sedgwick & Rougeau, 2010; Webster et al., 2010). The sense of community these student participants experienced during their rural preceptorship was influential to their learning experience; enhancing their engagement with the health care community and rural community by and large and sense of belonging and connectedness to the community. This, in turn, resulted in an investment in the community, and the health of its residents, thus motivating and inspiring the nursing students to achieve excellence in the provision of their nursing care, resulting in a successful preceptorship.

Communication. Communication is essential for the success of nursing preceptorships in any setting. The participants in this study described features of communication they perceived as uniquely rural.

Carol (faculty advisor) described the challenges of communication with students placed in distant, rural communities. The inability to travel to the rural community to meet in person with the student and preceptor(s) meant an increased risk for "breakdown in rapport with people, if [I'm only]… they're on the phone instead (Figure 5)."

Figure 5. Cellphone

This is critical during preceptorships, and exacerbated by the nature of rural practice. Resources such as Skype, Facetime and video-conferencing enabled her to mitigate this risk and assess the relationship between student and preceptor which is essential for student learning and to the success of the preceptorship.

When helping students prepare for rural preceptorship, James emphasized effective communication. He shared a photograph of a communication tower (Figure 6), symbolizing the importance of communication that is distinctly unique in rural practice. He described it by saying: “being at a rural [site], you have more of a chance to interact with say, physicians, who may not be there as much,” he remarked, “so they rely on the nurses’ assessments in determining if they need to come in our not.” He stressed: “there is more emphasis on effective communication because they are not onsite all the time… communication factors are enhanced in the rural setting.”

Figure 6. Communication tower

Similarly, the student participants observed that communication among members of the health care team was enhanced by the rural setting, corroborating the MacDowell et al., (2014) findings that rural preceptorship benefits interprofessional communication. The modest size of the rural health care facilities, for instance, enhanced communication among all members of the health care team, as Becky discovered:

> Even the lab (staff) know us…instead of 'here's your patient', they'll take them to their room and communicate with us. It's a nice atmosphere. The doctors too…they are open to feedback and working with you. Most of the doctors know your name—call you by your name. It's kind of communal; you work together.

Amber captured an image of the emergency, laboratory, and radiology departments, all within the same corridor to the main nursing unit she was assigned (Figure 7).

Figure 7. Multiple departments

She found that access to these services was enhanced in the rural hospital, thereby creating “opportunities to do more (patient) education because it’s easier to get in contact with the other teams… home care staff actually come over here quite often as well, just to see what is happening with the patients.”

James (faculty advisor) emphasized challenges associated with communication in small rural communities, especially with regards to maintaining patient confidentiality regarding family members or neighbours. In rural communities, he pointed out, it might appear that “ruralness [sic] supersedes health care… yet the students know they can't talk about patients.” Personal and professional boundaries took on greater significance in these communities; Sarah (faculty advisor) described being taken aback by “the effect on families you might have. People come up two years later and introduce me to the child I helped deliver… it is very profound.” Stacey (faculty advisor) recounted numerous situations wherein she was approached outside of work by community members with health-related inquiries, some of which she received by phone or text. Yonge, Myrick, Ferguson, and Grundy (2015) point out that rural nurses struggle to

maintain boundaries outside the hospital, where they are easily recognizable by community members.

While the blurring of personal and professional roles in the community betokens the tremendous respect accorded nurses by community members, it can be stressful nonetheless (Yonge et al., 2015). Sarah (faculty advisor) was mindful of preparing nursing students for this challenge, suggesting they should be oriented to the community as a whole, not just the health care setting. “[Have them] go look through the town to discover… churches… [and] services,” she said, by way of example; “help them to see the prettiness, not just the bareness.” Sarah took her students to the “good” restaurant in town to introduce them to community members, whom she knew well. She believed this prepared the students for the reality of rural work, where everyone in the community would know their names and approach them outside work hours, seeking advice. Awareness of potential boundary issues prepares students to respond professionally as they adjust to a different way of life, unique to each rural community. “Being asked about patients by community members; family members; even staff members; people working in different parts of the hospital—what do you do?” mused James. “Students are burdened with that, so if they're not prepared for those types of situations, that could be a challenge.”

Some of the students encountered dilemmas, unknown to them in their urban rotations, related to anonymity and confidentiality. “Working at the hospital, I see people that I've seen in the community and they are like *where do I know you from*, and I'm just a student,” remarked Beth. “Even going to the gym, people recognize me from the hospital.” Jenn found that her professionalism was constantly being tested. “I kind of like

the anonymity of being in the city and not having people know who I am," she admitted. "Here, everyone knows each other's business, for better or worse…. People [in the community] will ask about patients at the hospital, and you can't say anything. You know they are there, but you can't tell them anything." Even over the course of a 10-week preceptorship, the students confronted some of the anonymity and confidentiality issues of rural nursing. Corbett and Williams (2014) found that boundary issues are further complicated by the social needs of older adults living in rural settings, who value and seek out personal connectedness. Ava discovered that patients well known to hospital staff might even encounter prejudice: "I guess there is room for bias, if you remember everyone so closely and know their situation(s)," she surmised. "For example, a mom that comes in, and you've delivered her first eight kids, and they've all been apprehended… you might be a little more worried about this next one." These findings reflect some of the unique aspects of personal and professional relationships in rural communities. This unique, community ethos may be unfamiliar to nursing students, requiring additional support and mentorship from the faculty advisor and preceptor and is a common finding in previous research (Bushy, 2002; Killam & Carter, 2010; Webster et al., 2010).

The benefits for the student however were twofold: providing enhanced opportunities to develop collaborative communication habits; and, providing opportunities for enhanced learning around communication and patient teaching. Moreover, this communication facilitated collaborative discharge planning by involving patients and families. The proximity of the various health care teams, either within or near the rural health care center, presented unique opportunities for interprofessional

collaboration in turn promoting numerous health care outcomes, such as patient understanding, involvement, and compliance with discharge planning; staff morale, satisfaction, and teamwork; and cost effective care (McNair, Brown, Stone, & Sims, 2001). These findings are consistent with other researchers' conclusions that interprofessional communication and collaboration are enhanced in rural practice settings, during precepted learning experiences, despite the constraint of geographic isolation (McNair et al., 2001).

Cultural contexts. Rural communities are steeped in tradition and cultural symbolism. The following image (Figure 8) exemplifies the juxtaposition of the rural versus urban themes that emerged from the findings representing the dichotomy of urban—rural life and capturing an example of cultural identities that are uniquely prominent in many rural communities.

Figure 8. Rural vs Urban

A number of participants discussed the cultural context of the rural communities. Becky described how her exposure to cultural groups in rural communities differed from her prior experiences: "In the city, you have more diverse ethnicities, but out here it is

pretty much… one major culture.” She was struck by the signage and documents at the hospital, almost all of which were bilingual in English and Cree (Figure 9).

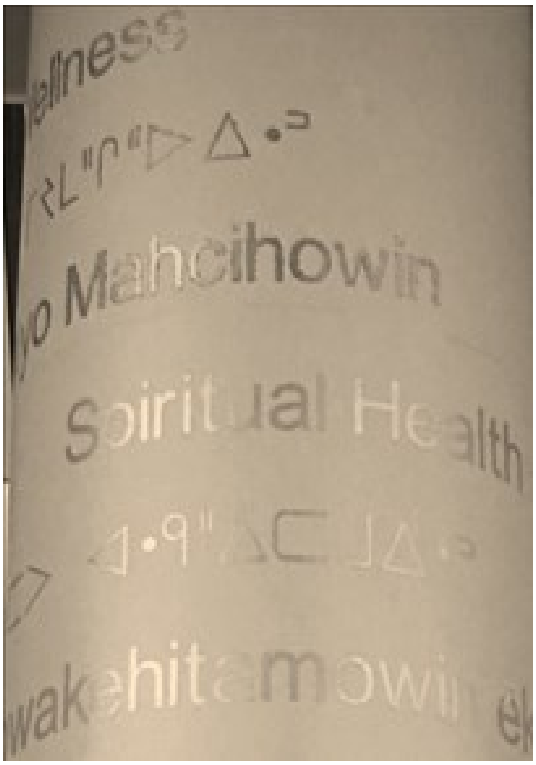

Figure 9. Cree sign

To Becky, this was a “symbolic representation” of the unique culture of the community, meaningful to community members, and also an opportunity for learning: “[Students] need to get in touch with what community is like… we are close to the reserve. We get a lot of reserve residents, but I think if you were near a [Hutterite] colony, you would get more Hutterites,” she pointed out. “It is important to know… certain cultures, related to respect and how you talk to them. You should be aware of that.” Becky and her classmates grew to understand the diverse cultural groups residing in rural communities, and the need to be cognizant of their unique health care profiles.

In describing rural preceptorship, James (faculty advisor) drew a parallel between rural work and rural life, citing the “potential for increased learning, through immersion in

the culture. You are out there; you're in it… you have to use all your knowledge to make things work. And that is kind of related to rural life too, right?" One must learn not only about distinct cultural groups who reside in the community, he pointed out, but also be cognizant of the health care workplace culture; key staff members therefore acted as gatekeepers, facilitating students' assimilation into this culture.

Stacey (faculty advisor) described the importance of recognizing and investing in the cultural context of the community. She shared an image of the entrance to one of the health care settings that was written in Cree and English (Figure 10).

Figure 10. Entrance sign

She said:

> This is a picture of their 'enter' sign to show that they work in two different languages. For cultural diversity and cultural sensitivity teaching, we have an elder come out and speak to our students and he actually teaches them some Cree. Some basic words that might actually help you to build that relationship. A lot of the home care patients that students go and see, are quite elderly and they appreciate if you try to speak their language. It just shows that you are a little

more invested in them as a person, and not just seeing them for their wound or their ailment that they have at the time.

Ava found herself in a predicament when her primary preceptor was away, and her new preceptor did not fit in with the staff. “You are guilty by association,” she remarked. “If somebody didn't like that nurse, they just didn't really give me a chance.” Such a staff dynamic can have devastating consequences for students, whose graduation is dependent upon the success of their preceptorships (Meyer Bratt et al., 2014; Sedgwick & Rougeau, 2010). The inability to navigate this staff dynamic, by contrast, can be detrimental to student success, confidence, and willingness to ask questions or seek out learning opportunities (Meyer Bratt et al., 2014; Sedgwick & Rougeau, 2010).

Students who successfully navigate the close-knit, rural practice community experience are empowered by a sense of belonging that enhances their learning throughout their preceptorship. Rural communities are commonly home to complex populations encompassing diverse religious, ethnic, cultural, and multigenerational families (Crow et al., 2011; Lake Morgan & Reel, 2003). These participants described how the rural preceptorship contributed to a greater understanding, appreciation and respect for cultural diversity that grew alongside their relationships with the community members for whom they cared for.

Rural Versus Urban Placements

The majority of emergent themes pertained to contrasts between rural and urban living and learning. Unique opportunities and challenges associated with rural practice fell into several categories: breadth and unpredictability of patient care; opportunities for

reflection; challenges associated with rural preceptorship; relationships among staff; and support for students.

Breadth of experiences. Faculty advisors and students associated the breadth of rural, clinical experiences with unpredictability of patient care. From an urban perspective, rural nurses assume a number of atypical roles, such as clearing food trays, cleaning patient beds upon discharge, carrying out a phlebotomy, and basic laboratory testing. The students grew to incorporate these tasks into their plans of care. Rural preceptorship moreover afforded experiences extending beyond the units where students were assigned. James remarked that many students choose the emergency department as their first preceptorship preference, only to find placements are limited and difficult to secure in urban centers. These students are often unaware that rural preceptorships are diverse, encompassing a range of additional, acute care learning opportunities. “There is no way to standardize what rural means,” states James, “and I think that is part of the benefit of it, because you get such a mixed, rich experience.” This remark is corroborated by Pront et al., (2013) who observed that rural practice is both complex and unpredictable. These qualities assure a rich, broad and diverse preceptorship experience for students placed in rural settings. “You're not just oriented to the emergency department,” commented Sarah (faculty advisor). “You are oriented to everything, and that is just part of being rural.”

Amber’s first night shift in her rural preceptorship drove home the nature of rural nursing. “This patient came in with chest pain,” she recalled, “but the lab wasn't available after hours of course, so we had to do the electrocardiogram and troponin labs for him (Figures 11 & 12).”

Figure 11. Student conducting laboratory testing

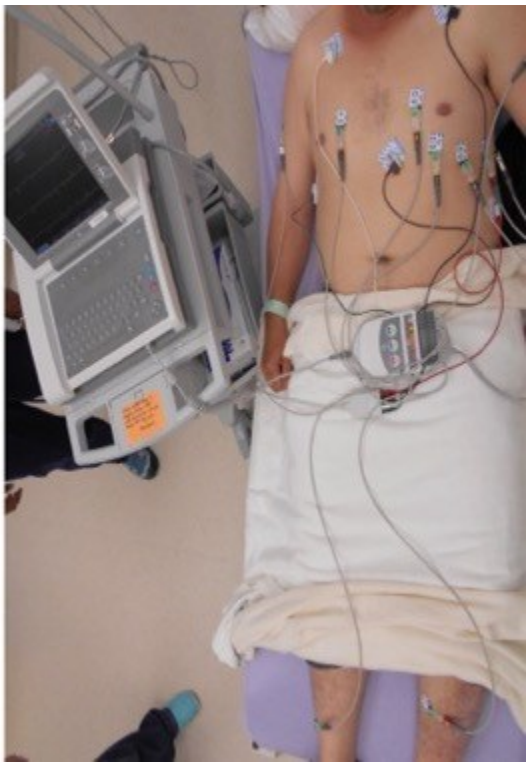

Figure 12. ECG monitoring

In most cases, laboratories were limited to daytime hours, although some settings offered evening hours and availability on call at night. “The lab is only open until 2300 and doesn't open again until 0600,” said Daniel, “and there have been a few times during the night [when] we have had to call in someone from the lab, to get a test

drawn.” For patients requiring urgent lab work, this was a significant challenge. In some communities, qualified nursing staff made do by performing lab draws, testing and interpretation when the lab was closed. Amber discovered this kind of circumstance during the evening and night shifts, when laboratory staff were not on site. “In addition to starting IVs you get to do blood sampling, and then we take it to the lab, get one of those small pipettes and draw the sample and run it in the machine to do the test,” she explained. “You have to be familiar with what's happening in the lab as well, so it can be pretty daunting at first.” The additional knowledge and skills, required to perform these tasks, benefited Amber’s overall care by providing a more comprehensive understanding of the whole picture regarding her patient’s situation. These additional responsibilities helped her consolidate her learning:

> You're able to get a better understanding of lab values because when you are doing the troponin, for example, you are able to look at the reference [sheets] that they have in the lab, and that solidifies the knowledge.

Sarah (faculty advisor) characterized the rural nursing role thus: “you don't have to be the expert; you have to just be a generalist and your education will help you in the generalist role that you play in rural.” Sarah found that generalist, undergraduate nursing education prepared students for a broad scope of practice, but unique settings demanded independent study:

> Students need to do their research (clinical preparation) before they come…as an educator, you have to say, ‘bring your books, you need to ask for resources’. They need to ask and find other ways (of doing things) and use some critical thinking.

Ava indicated that, as a new graduate, she would “have to take a bunch of obstetrics courses and stuff” as her basic education was limited in some areas. This realization evinced the nature of rural practice as a specialty, much like Emergency or Neonatal Intensive Care, yet lacking specialist criteria for placements therein. Undergraduate nursing education nonetheless prepares students for entry to practice, as Sarah remarked; “critical thinking skills, developed throughout the program, prepare students to engage in unique and specific learning on a site or unit.”

As a student, Jenn found that the unpredictable nature of the patient assignments throughout the rural preceptorship forced her to view the patients holistically, in a way that differed from her urban experiences. “If you are on a thoracic surgery unit, all you're ever going to see are thoracic surgeries; you're never going to see someone with a leg amputation or someone going into labor,” she remarked, recalling her previous, urban experiences. “You get good at that one thing, but the second you have someone with thoracic surgery, that had congested heart failure, or also pregnant, how do you deal with that? You have to look at people holistically.” James used an image of train tracks (Figure 13) to create a powerful description of the richness of the rural experience from the faculty advisor perspective:

Figure 13. Train tracks

> You can make parallels… but there is always going to be something different between rural vs an urban centre. So, these tracks… if you are right on the tracks, they aren't ever going to converge, they look like they're coming close. You are going to come out… you're going to be just as good at IVs, or basic care, or whatever nursing skills you want to attach to it (nursing)... that is the beauty of nursing. It's new every day, even if you think it's not going to be… just getting used to it, not getting in a rut. Being open to that change and just go with it, because in rural there's always going to be something different.

The challenge therefore lay in preparing students to generalize in various settings, while at the same time imparting specific skills. Rural practice can overwhelm nursing students in its complexity while providing for rich learning opportunities unique to the rural setting (Pront et al., 2013). It is necessary to prepare these students for the breadth and unpredictability of rural nursing care across the life span, including general medical/surgical patient care, cast removal, assisting with sutures, deliveries, and resuscitation. Houndsgaard, Jensen, Praest Wihche, and Dolmer (2013) observed that

the unpredictable nature of rural practice is challenging even for experienced nurses. However, as was expressed by these student participants, the variety of experiences enhanced their acquisition of knowledge and skills required to enter practice. This was in part accomplished through refinement of critical thinking and critical reasoning skills that are required by novice nurses during acquisition of advanced knowledge and skills. This perspective has been described by Dweck (2014) as a growth mindset. She suggests that students who realize their growth potential and ability to learn are empowered and motivated by their successes.

Relationships and support. For students placed in rural communities, the connection with the faculty advisor is essential. Carol struggled to maintain her work-life balance as faculty advisor, especially when she was required to travel to the rural community for meetings. Nonetheless, she indicated that face-to-face meetings throughout the preceptorship are crucial for relationships and effective communication among members of the preceptorship triad. “[It was a] challenge trying to balance everything,” Carol recalled. “Not being able to be there face-to-face, and only on the phone, could lead to breakdown in rapport.” Such a breakdown could potentially have a negative impact the preceptorship experience for students and preceptors. In time, Carol adapted her routine to meet the needs of the students and preceptors, but her concerns evinced the complexity of her role, and the skills required to support students at a crucial point in their education. Faculty advisors also have unique teaching needs, relevant to the preceptorship. During the validation interviews, Stacey (faculty advisor) recounted some of the challenges she faced, such as coordinating student meetings

and budgeting travel time associated with the rural preceptorship. She worried that inadequate support would be detrimental to her students during their preceptorships.

The students praised the relationships between the rural health care staff and valued the way they themselves were treated. “[The doctors are] really nice,” remarked Ava. “They buy pizza and wraps, which is really lovely. Everyone is really nice—really approachable.”

Beth reflected on the opportunities she experienced during her rural preceptorship, recalling an emphasis on “getting together, de-stressing, (going) outside, and enjoying nature. We had a campfire the one day and a crib group…people are more willing to do stuff with you.” Claire described a similar experience: “we actually had a staff mixing party and I ended up going…it was out on a farm. There was a campfire…it was super fun (Figure 14).” This is noteworthy as many precepted students were not themselves from rural communities. Welcomed by community members and

Figure 14. Campfire

staff, the students felt supported both personally and professionally during their preceptorships, decreasing their sense of isolation in unfamiliar rural settings. Such a safe, safe supportive learning environment is conducive to student learning throughout the inherently stressful, high stakes preceptorship (Sedgwick & Pijl-Zieber, 2015).

Some students observed that the relationships among staff were closer in the rural setting than in urban centers and these relationships extended to the students as well. Said Jenn, “it wasn't just one unit, one teacher; you work with the whole team.” While she was initially assigned to three preceptors, she rarely worked solely with them. “Everyone just kind of took me on as a student,” she remarked. “If something was happening, they’d say, *you’re coming with me and I’ll walk you through it*.” Claire described the relationship she developed with the staff at the rural hospital, near the completion of her preceptorship (Figure 15):

> This is a card that I got from my preceptor when I finished my hours. I thought it was a good reflection of rural nursing because of the relationships you make and how personable it can be… we got gifts for each other. I thought this was maybe a unique aspect of rural nursing… you really are one-to-one, and everyone knows you; and everyone was sad to see me go.

Figure 15. Greeting card

Becky described how her experience as a student in a rural setting differed from her previous experience in a larger, urban center. “Most of the doctors (here) know your name; call you by your name,” she said. “It’s kind of communal; you work together (Figure 16).”

Figure 16. Working together

Hannah likewise described how she was supported by the staff throughout the preceptorship, recounting a particular instance during her last week:

> I have been super-spoiled here. I scrubbed solo for the first-time last week, so they bought me pizza to celebrate. I don't know if you get that in an urban centre.

She went on to reflect on how consistent staff support impacted her learning throughout the preceptorship:

> I feel incredibly supported here… even if you do something that is not quite right, they're not yelling at you or making you feel like you're stupid. From the anesthetists to the surgeons… everybody was willing to teach me. Everybody taught me a lot, and not just so their job is easier, but so that I know more and I am more informed. It was really great.

These findings attest to the nature of professional working relationships in the rural settings. The participants in this study overwhelmingly agreed they felt supported throughout the preceptorship, thereby benefiting their learning and the overall process. Helen described this as a “network of support,” integrating students during rural preceptorship placements and differentiating rural from urban practice. Sedgwick and Rougeau (2010) found that rural practice relationships are close-knit and complex, presenting a navigational challenge for nursing students and new graduates. However, they found that a supportive learning environment enhanced learning and feelings of belonging, which in turn have a significant impact on newly graduated nurses’ feelings of confidence and competence. These authentic collaborative experiences are especially important in rural practice settings, where new graduates commonly practice alone or with minimal staff support.

Challenges associated with isolation. The participants described a variety of challenges and limitations they experienced during the rural preceptorship. Some challenges pertained to the isolation of rural life and the cost of travel to rural communities. Sarah (faculty advisor) photographed an image of a barren highway to illustrate her perspective on rural isolation: “see the road? I don't see any help there. I don't see anything. There’s no traffic signs, no stop signs. There’s nothing—just nothing (Figures 17, 18).”

Figure 17. Barren highway

Figure 18. No road signs

Daniel speculated that rural isolation would pose a particular challenge for some of his classmates. “None of the girls in my class would like that at all,” he remarked. “They would think there’s nothing to do in the town, and you kind of have to learn to make your own fun—more so than in the city.” In a previous photovoice study, Leipert and Anderson (2012) found that professional isolation was problematic for senior, undergraduate nursing students and newly graduated nurses in rural settings, especially in terms of opportunities for professional development and continuing education. Their participants nonetheless valued the experience of belonging to a close-knit rural practice community, as the current study has borne out.

For a time, Beth struggled to cope with the demands of the preceptorship. She photographed an image of her pet who was left at home in the city for the duration of the preceptorship. She indicated that the image of her pet represented an attachment and connection to home that was missing while living in the rural community (Figure 19).

Figure 19. Pet

The absence of nearby familial support was particularly painful. “I could call them, I could drive, but when you live in a rural setting, and you don't live near your family because you moved away… you don't have that support available when you want it,” she admitted. “When things were going downhill, I would rather have [had] my family right there. Even for a couple of days.” Beth’s powerful recollections illustrate the potentially devastating consequences of physical and emotional isolation, and the importance of the faculty advisor in providing both emotional as well as educational support, especially in rural settings. “[You’re] kind of like a lifeline,” said James of his role as faculty advisor. “If they're from the city, they are just isolated… and living isolated… may cause students to feel alone, even though we provide support.”

Rural life presented a variety of personal, logistical and financial challenges, as the students discovered. “If you're staying out here, what are the amenities; where do you stay; where do you eat; where do you get food?” remarked Jenn. “[It’s] kind of just learning a new environment… trying to find new ways and go different places to get things that you need every day.” Carol (faculty advisor) sympathized with these concerns, particularly financial burdens such as high gas prices: “maybe the students don't have the disposable income to get to the rural sites,” she remarked.

Logistical challenges were apparent in the ways students had to prepare for their daily shifts. Sarah (faculty advisor) photographed a closed cafeteria in one small rural hospital (Figure 20) to remind her students of the typically reduced hours and limited food choices therein, if such amenities were present at all.

Figure 20. Rural cafeteria

Claire discovered this for herself: “in the rural setting, you can't just zip back home if you forgot something. You kind of have to pack up for the day… just always be prepared. I always bring a little more food, in case I need to stay late.”

It is widely acknowledged that rural practice juxtaposes tight-knit community spirit with social and professional isolation (Jackman, 2011; Jackman et al., 2012; Leipert & Anderson, 2012; Sedgwick & Rougeau, 2010; Sedgwick & Yonge, 2009; Yonge et al., 2013a). Students and faculty advisors alike were cognizant of the implications of both. Educators and researchers must endeavour to grasp these phenomena and identify strategies for students and faculty advisors to prepare for them. Doing so will not only set students up for successful preceptorship, such strategies have the potential to boost recruitment and retention of newly graduated nurses in rural communities (Jackman, 2011). This is especially relevant for rural communities, where the nursing shortages that are exaggerated by more quickly aging populations and a declining nursing workforce than in urban centers (Place, Macleod, Kulig, & Pitblado, 2014).

Travel

Numerous participants in this study described their experiences and perspectives of travel, associated with rural preceptorship. Overall, faculty advisors and students enjoyed the rural landscape for its beauty, peace and serenity. Students and most faculty advisors were not from the rural communities where they were placed. Few students relocated to the rural community for the preceptorship; most travelled to and from the rural community for their shifts. For those placed in home care placements, travel to and from rural homes to provide care was common. Travel to and from the practice setting moreover provided time to mentally prepare for the day ahead, or to decompress and reflect on the shift after it was completed.

Landscape. Many participants valued the beauty of the rural landscape (Figure 21). “You always see nice things driving home, from being out of. There’s a cow in there, all by himself,” said Becky. “It’s not a hectic drive… it’s just peaceful driving

Figure 21. Cow

home. Sometimes I stop to enjoy the scenery”.

Figure 22. Vastness

Sarah (faculty advisor) acknowledged that rural vastness (Figure 22) could be intimidating or challenging for an urban student: “there’s not a mall across the street… you don't see a Tim Hortons.” She nonetheless found countless opportunities therein: “There’s lots to do… it’s very peaceful, very serene... and there’s opportunity in the mountains [nearby] for lots of recreation: skiing, hiking, fishing.”

Jenn photographed an approaching storm (Figure 23), saying, “I just thought it was pretty with a storm coming in… the vastness of it. You drive forever and there is nothing there. Not even a car, horses, animals or anything. Just empty space… there’s not a soul out there.”

Figure 23. Approaching storm

The students and faculty advisors saw rural preceptorship as an opportunity to capitalize on space and place. Open, unspoilt landscapes were felt to represent the identity of the rural community (Yonge et al., 2013b) in drastic contrast to highly populated urban areas. Rural travel provided the participants a window into the rural life of the communities. The landscape depicted many of the ways of being relevant to rural life that are unique to the community. The economic livelihood of rural residents can be ascertained by the nature of the rural landscape. Moreover, this landscape provides clues for the novice nurse as to what to expect in terms of patient health concerns, injuries and exposures (Bushy, 2002). Being attuned to these community attributes is advantageous and contributes to the richness of learning that extends beyond the health care setting.

Opportunities for reflection. Students characterized driving to and from the rural health care site as an opportunity to prepare for the day ahead, and to de-stress and reflect on experiences after a shift. For Claire, the drive to the hospital had clear benefits: “just the scenery, and having a quiet drive into work, versus stop and go traffic, traffic lights, horns honking—maybe [it] puts me in a better mood.” Driving home after her shift, Becky found “time to unwind and reflect on the day. When I get home…I find [I’m] never stressed out.” The opportunity to reflect, during the drive in the country, contrasted with the stress of driving in the busy city. Jenn likewise capitalized on her travel time: “I can go over things in my head. Mostly it's negative things: “*oh, I should have done that better, or differently*… but when you get home you have thought about it and that’s not the priority anymore”. Similarly, Beth, who lived a short distance from the health care site, typically walked to and from her practice placement (Figure 24).

Figure 24. Green space

She said: “I felt like, this path, this greenspace...I have the time before I go… I can just walk there.” Not only did she not rely on her car as much in her situation, but this walking path provided a natural opportunity to prepare for the day ahead and reflect on the events of the shift she left had just completed.

James (faculty advisor) regarded travel as a “huge opportunity” of rural preceptorship. “In the very beginning, I said it could be a challenge just based on cost and things,” he acknowledged, “but it is valuable because, to me, it is time to reflect on either what just happened on the shift, or if you are going out [to work], some mental preparation for what’s coming.” Similarly, Carol (faculty advisor) pointed out that carpooling (Figure 25) also had distinct advantages for her, allowing time for reflection and debriefing with colleagues.

Figure 25. Carpooling with colleagues

“If I had some anxiety, or one of my colleagues had some anxiety about an issue, we used that time to be able to talk and debrief and reflect,” she recollected. “By the time we got to the site, we felt better.”

Stacey (faculty advisor) described a unique image she captured on the side of the highway. She described it as “just keep swimming” (Figure 26). These figures

Figure 26. Just keep swimming

change every few months, but these two fish and the caption caused her to stop and reflect on the student experience and her role as a faculty advisor during preceptorship.

> Sometimes I have to tell my students, ‘just keep swimming’, keep your head above water, when you feel like you're done and can't do it anymore, just keep your head above water. That is all you have to do, and you will get there!

These statements illustrate how road travel presented a natural space and time, unavailable in other practice settings, to purposefully reflect on experiences, to examine what went well and what might need improvement, and to cope with the stress of a busy shift. Reflection is a vital component of critical reasoning, essential for rural nurses faced with the breadth, depth and unpredictability of rural practice (Sedgwick, Grigg, & Dersch, 2014). Throughout the preceptorship, nursing students continue acquiring and refining knowledge and skills in terms of entry to practice competencies. The rural preceptorship however, provides not only for unique and unpredictable practical experiences, but also dedicated times and space for reflection. Engaged reflection throughout the preceptorship during travel to and from the preceptorship, was found by these participants to contribute to development of reflective practice habits that are required not only from a regulatory perspective, but as a form of professional development. Faculty advisors similarly found that travel requirements inherent in rural preceptorship provided them with opportunities to reflect not only on their role, but on the student experience as well. These times of reflection inspired them to identify strengths and nuggets of wisdom they shared with their students.

Safety. The abundance of nearby parking, usually inexpensive or free, was yet another pleasant aspect of traveling to rural health care sites. “It’s more economical. I never have to go into underground,” said Sarah (faculty advisor). “It’s not very scary to walk to my car at night, because I'm not walking a long way, or underground; I am

walking right from the door… so that's very positive." Even such modest benefits of rural travel have the potential to draw new recruits to rural health care centres.

While the students largely saw travel as a strength and an opportunity of rural practice, some were mindful that poor weather conditions could present a significant challenge during winter months. "I'm sure it would be a challenge in compromising weather," Ava acknowledged. "Luckily it is summer, so [there is] daylight on either side of the night or day shifts." Amber was more ambivalent about the prospect of winter driving, weighing the hazards against certain benefits she had come to value:

> I can imagine its challenging in the winter, but at the same time I really like the drive because I get to reflect on my day… coming in [to work], it gives me some time to get into that frame of mind to start working.… It also gives you an opportunity to see, for example, the farms; I find I am better able to understand what the patients are talking about when I drive by the farms.

James (faculty advisor) enumerated the potential hazards of travel during inclement weather: "You might be on the road for an hour by yourself without any other traffic… it could be blowing or snowing… your cell phone might not work, so you really might be on your own." He saw a role for faculty in preparing students accordingly: "We have to let them know they're going to have to use other skills—[to] be a little more prepared, even just for the physical [environment) in rural Alberta." Indeed, faculty advisors experienced their own challenges, such as mileage. "You put on a lot of kilometers," said Stacey (Figure 27). "You need reliable transportation; you can't drive old vehicles because you're on the highways a lot."

Figure 27. Kilometers

While winter weather was not a factor, the students encountered a range of other travel-related challenges. Ava learned the hard way about the unpredictability of fuel prices in the countryside. “The very last day, when I was driving into the city… I had been filling up, and it was like 94.9, [when] it was like 82.5 in the city, and I had thought (sigh) it would be cheaper rural (Figure 28),” she recalled ruefully. “I didn't even pay attention… and I had to fill up all the time because I was there so often.”

Figure 28. Fuel prices

Jenn captured an image of a train (Figure 29) passing through one of the rural communities, musing, “what happens when a train goes by, and you have someone that needs to get in or out of town, because there's only the main highway? …I thought that could be a really interesting challenge.”

Figure 29. Train

This gave her an insight into the realities of rural life:

> You have your environment…working against you in some way. You can't get out because there’s a train. You could go the other way, but it would take another half an hour. …when you need to be somewhere in a hurry, there is always going to be an obstacle in your way at some point in time and sometimes it’s going to be an entire house” (Figure 30).

Figure 30. Obstacles

Obstacles came in all shapes and sizes, and could arise at any point along the route, as Ava discovered on the way to her shift:

> I almost hit these three baby chicks. I was driving and turned onto the street the hospital is on. I had to stop so I didn't hit them…they were underneath my car…just sitting by my tire…this farmer stopped and…helped me shoo them out, and put them in his hat. (Figure 31)

Figure 31. Baby chicks

The experience bore out one other, positive aspect of rural community spirit: anyone stuck, stranded or lost could always fall back on the help of strangers, if nothing else. “Eventually a farmer will come along,” said Daniel, “and they’ll help you.”

The students found that travel-related challenges, given time and perspective, could become opportunities as well. “It might [be] hard to get out to their site,” remarked Amber, “but also it provides an opportunity to build a relationship with [other nurses or students] if they have to carpool.”

The above images and descriptions illustrate the unique opportunities and challenges inherent in road travel, for rural nurses and their students. Overall, the participants in this study used travel time to their benefit. The ability to overcome challenges reportedly enhances the students’ personal and professional growth in terms of autonomy, maturity, and independence (Killam & Carter, 2010). Learning to overcome the challenges or barriers experienced as part of the rural preceptorship, while focusing on opportunities, cultivated growing confidence, contributing to a positive rural experience, thus empowering the nursing students as they grow nearer to entry to practice.

Making Do with Limited Resources

Students and faculty advisors learned to cope with limited resources and technology in rural settings, as well as the “chaos” of rural nursing preceptorship, through making do. Scarce resources and supplies, dated technology, and limited lab and allied health services presented challenges for the students during the rural preceptorship.

Technology. The participants confronted a variety of technological challenges in the rural communities and health care sites. Malfunctioning or inaccessible computers were common. The few computers available for staff use were typically dated and slow.

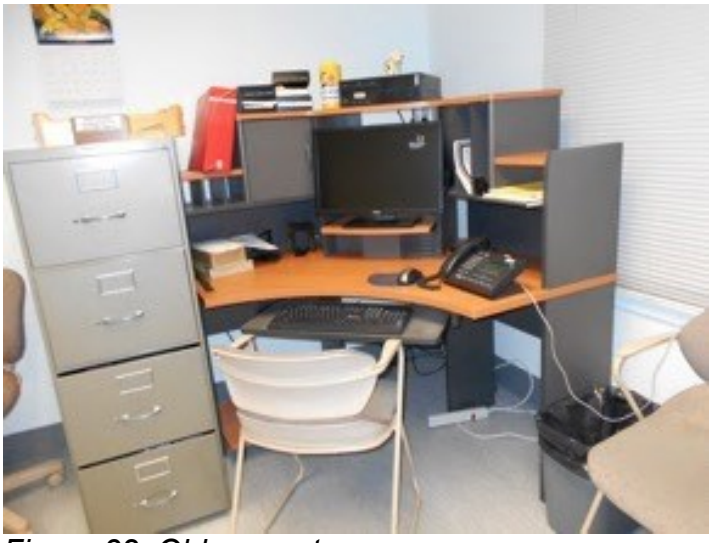

Figure 32. Old computer

When students were able to access the (often solitary) computer terminal on the unit to document patient care, they were frustrated by the length of time involved (Figure 32). There's one computer in the holding area, and then there's a computer in each operating room theatre," said Hannah, "but all of them are so old and… so outdated [that] charting on them is such a pain." Sarah (faculty advisor) shared a similar concern with regard to one particular rural setting: "there's one computer for 100 people. So, the implications for students is that it doesn't look like there's very many resources… they're just not there." In other instances, resources were available but not utilized to their full effect. Ava was surprised to discover that her rural placement had telehealth, but had not made use of it until the preceding week. "Someone said, *I didn't know we had telehealth here... that thing in that room*... so that's an opportunity to consult with the city and see what they're saying… it's a good communication tool."

Becky found certain patient tests and services, typically provided in urban hospitals, were unavailable in the rural health care setting. “We don't have certain [treatments or procedures] here, so [patients] would have to travel to get it… if they need a cath (sic) lab, we don't have one so they are going to have to go up [to the city].” Jenn’s perspective of such challenges changed, however, as the term progressed. Near the end of the preceptorship she found she was “finding new ways of doing things [and] making the old things work, like an old car at a service station (Figure 33).”

Figure 33. Old and new

Claire was confronted by a unique challenge related to technology as it applied to medication administration. She was surprised to learn that the setting in which she was placed for the final preceptorship utilized a medication administration system that was largely obsolete in most current health care settings. Here, medications were prepared and double checked using paper medication cards (Figure 34). The use of these medication

Figure 34. Medication cards

cards has been eliminated in most health care settings more than a decade ago, yet, at her placement site, these were the *only* method for medication administration. She said: “there's no Pyxis medication system, its hand-copied MARS (medication administration record) on transcribed med-cards, high chance of error, but that’s the way it works at our facility”. Initially she found this extremely time consuming, requiring one card for each medication. However, by the midpoint of the preceptorship, she found that she was able to safely and correctly prepare and administer all the medications required by the RN with whom she was working. She indicated that her level of efficiency improved in correlation with her growing confidence in her knowledge and skills around this uniquely rural practice.

These experiences of success are moments of empowerment for nursing students who are on the cusp of graduation and entry to practice. The confidence in their ability to acquire sound knowledge building upon the knowledge they obtained throughout their undergraduate program further enriched the consolidative experience of the preceptorship. Learning to maintain best practice while functioning within

limitations requires nurses to creatively adapt critical thinking and clinical judgement skills in flexible new ways (Webster et al., 2010). Initially, faced with a rural practice challenge, these students learned to *make do* by providing care in new ways without altering or diminishing the level of care they provided.

Equipment and space utilization. Throughout the study, the participants took note of limited resource allocation and accessibility. Resources such as crash carts, often found on individual units in larger centers, were limited to one or two per rural site, depending on the size of the facility. As well, the students found that often the carts themselves were older and supplies on the carts were outdated or expired (Figure 35). Daniel said: “It was dated. It was (made) before I was born even! Like late 80s or 90s… so way older material and supplies within the cart.”

Figure 35. Old code cart

During a code, nursing staff from every unit might respond, as opposed to the urban practice of a designated hospital or site code team. To Claire, this limitation was in fact a strength. “[The nurses] come from every unit, so everyone loses a nurse when that happens. I feel like it kind of makes them more—not specialized in that sense—but

versatile, because it’s the nurse bagging, not a respiratory therapist,” she explained. “You need to know your skills, and quick assessments.”

Becky pointed out rural patients faced challenges of their own. “We don't have certain [treatments and procedures] here, so [patients] would have to travel to get [them],” she remarked. “If they need a catheterization lab, we don't have one, so they are going to have to go up to the city.” Rural staff working on call also had to contend with distances, as Hannah observed: “anyone who is on call [lives] within 30 minutes. I think in the city it’s 15, but here it’s 30. They get called in for any number of things—stat Caesarean sections, usually.”

Rural health care requires nurses and patients alike to be flexible, adapting their daily routines and their lifestyles to cope with its inherent limitations. Robert captured an image of a gate (Figure 36) at the entrance to a property at the end of a long gravel road that saw little traffic nor shared other properties. Robert noted that the individual who lived on the property suffered numerous physical disabilities but was able to

Figure 36. Property gate

purchase equipment needed to meet his needs. Robert realized that without the financial means to purchase his own equipment, this individual would not have been able to stay living in his home in the country, in part related to the isolation of rural life. He said it the following way:

> He is kind of lucky that he is financially pretty good… he is all set up at home, loaded with everything, lifts, specialized bathtubs… it is just interesting… this is not sustainable for everyone. Not everyone has these resources and would be able to live out their days at home.

This example illustrates challenges experienced by those individuals who choose to live in rural communities. Independence is often a goal for patient care, but in rural communities, the degree to which individuals are able to assert their independence can be influenced by a number of factors that may not be faced by their urban counterparts.

The rural nurse therefore, must remain flexible and creative in planning and implementing patient care, especially when provided in the home under extraordinary circumstances such as those described by Robert.

Hannah described how the rural nursing staff pulled together and made do in a variety of ways, such as converting a storage room and repurposing old, unused equipment to create a sleep room for on-call staff on nights. “We converted this... using our old cataract beds,” she said proudly; “it was a project.” Ava was particularly grateful for such ingenuity while on break during night shifts, noting that staff previously took breaks on a chair in the hospital lobby. “I get my own room—a postpartum room—warm blankets, [and] a bathroom. No one disturbs me.”

On occasion, there were more patients than rooms and supplies. “We only have one labor and delivery room (Figure 37),” said Jenn. “A second mom, who delivered twenty minutes after [the first mom], delivered just in a regular room and they brought in emergency supplies.” Ava described how rural nurses made do on such occasions. “A mom came in at nine centimeters… we admitted her right away,” she recalled. “There was another mother in the next room laboring… so the doctor went in that room, and the nurse ended up delivering this baby.”

Figure 37. Single labor and delivery room

This scenario is not uncommon in labor and delivery nursing. However, rural nurses are more likely to be working alone or with minimal support, thus requiring advanced knowledge, skills and critical thinking in unexpected situations. This example speaks not only to how nursing staff make do in rural practice, but also to the scope and unpredictability of learning and working in rural settings. Adequate preparation, in terms not only of education but also of confidence and competence, is thus vital to successful outcomes. James observed that faculty advisors should be proactive in alerting students to the realities of rural practice. “You have to prepare students,” he said. “They've got to be flexible.”

Issues of inequity in rural practice became central to these findings within the postcolonial feminist framework. The participants regarded limited resources and supplies as an opportunity to learn new ways of doing things. “The students have the preceptor there for guidance,” said James, “but they have to shift gears to learn another way” to provide care, maintain best practices and adhere to policy. James stressed that flexibility is key to success when working in rural settings with limited supplies and

resources. Rural practice limitations made it necessary for students to “be prepared, but be prepared to change,” he explained. “You're going to see things [done] differently… as long as it doesn't go against best practice… they are just learning different ways of doing things.” Bish, Kenny, and Nay (2012) found that resourcefulness, flexibility and creativity are vital characteristics of rural nurses. Sarah (faculty advisor) expressed similar sentiments regarding student preparation for rural practice. Rural nurses need to fend for themselves, she stated, “because sometimes you are the only person.” She recommended that student preparation should address areas of care, such as neonatal resuscitation, common to specific rural settings.

It has already been established that preparation for rural practice is essential to success in a rural preceptorship (Jackman, 2011; Jackman et al., 2012; Leipert & Anderson, 2012; Sedgwick & Rougeau, 2010; Sedgwick & Yonge, 2009; Yonge et al., 2013a). This current study corroborates the necessity of preparation prior to a rural placement. Nurses who work in rural settings are frequently faced with challenges associated with limited resources, compounded by working often in isolation (Killam & Carter, 2010). The rural nurse must gain confidence in critical thinking and reasoning skills required to plan and deliver care under such challenging circumstances. Nonetheless, most participants were found to adapted quickly to the rural setting. The kinship-like rural environment, described by one participant as a “network of support,” was instrumental to the success of the preceptorships and the confidence of the students as they prepared to graduate. These experiences further contribute to development of advanced communication skills while empowering nursing students through their growing confidence and expertise in critical reasoning and clinical

judgement as they developed new knowledge and proficiency related to specific skill activities which have been shown to be unique to the rural preceptorship experience.

Recruitment, attrition, and retention. A number of participants were mindful of rural recruitment issues. As a student, Claire felt that rural nursing was the ideal setting for new graduates, citing the pace of the community and the accommodating nature of the staff toward her abilities. “If I didn't feel comfortable doing something, I [felt] like more people would support my decision and say *ok, just watch me this time and you can do it next time,* versus the high-paced urban environment,” she remarked.

From the perspective of a faculty advisor, Stacey described how this sense of community and helping attitude extends beyond the health care setting. “Tight knit rural communities can offer support and act as a resource contributing to individual and community resiliency.” She shared an image of a rural homestead with two residences (Figure 38).

Figure 38. Rural homestead

She suggested that:

> In rural communities, the residents tend to be a little bit closer than say, people who live in a city… people who live in the city put up a fence, wall off their stuff, want to be separate. People may not know their neighbors, or see their neighbors… in a rural community, even though you may be living a distance from your neighbor you usually know them and they know you, and you usually help them and you wouldn't be afraid to ask from help.

Daniel photographed a road sign (Figure 39) outside the community, indicating its amenities, one of which was a rodeo. “There's three hundred people [in town],” he remarked, “but then [with] the rodeo, [the] population increases—more than twice or three times as many people. It just brings the whole town together.” Daniel described this as a strength associated with living in this small rural community.

Figure 39. Road sign

However, he recognized that not everyone saw it that way. He said:

> I’d say it’s a challenge to retain nurses... none of the girls in my class would like that at all. They would think there’s nothing to do in the town and you kind of have to learn to make your own fun more so than in the city… Like the closest place is a half an hour drive and even when I was in high school, they really didn't have much there. They do now, but they were just getting a Tim Hortons

when I was moving away. Anything like that was an hour to Calgary. So… I don't know, you grew up totally different. But I feel that it's for the better.

Becky expressed concern regarding the challenge of recruiting and retaining nurses and other health care professionals, noting that the community showed signs of abandonment. "There's lots of run-down things… [and] more and more *For Sale* signs," she observed. "Lots of people are moving away from rural and into the more urban centers (Figure 40)." The exodus of long-time rural residents potentially compounds the

Figure 40. For sale

challenge of recruiting and retaining nursing staff.

The preceding statements illustrate the inherent challenges of not only recruiting, but retaining newly graduated nurses to small rural communities. These findings represent both an abundance of activities and things to do in the rural community, or a lack thereof. Hence, these are considerations that while not addressed directly by the participants should be considered in relationship to recruitment and retention of newly graduated nurses. Simply motivating nurses to relocate to small rural communities that appear to offer little in the way of amenities, services or entertainment, but retaining

them is wrought with challenges. Moreover, attrition of newly graduated nurses in the first five years' post-graduation reveals troubling statistics ranging from 19% to as high as 61% in specialized areas (Cochrane, 2017; Hayes, et al., 2012; O'Brien-Pallas, Tomblin Murphy, & Shamian, 2008; Windey, Lawrence, Guthrie, Weeks, Sullo, & Chapa, 2015). Hence, strategies must be identified and clearly defined, implemented and evaluated to address the looming nursing shortage that is expected to be exaggerated in rural communities where the nurse-to-patient ratio has continued to decline since 2010 (Place et al., 2014).

While it is beyond the scope of this research to address retention of new graduates in long-term positions, these findings are disconcerting relative to recruitment and retention of newly graduated nurses and other community residents to these rural communities. However, other researchers have found that positive rural placements—preceptorships in particular—appear to have an impact on the intent of new graduates to seek employment in rural communities, even if those graduates have urban backgrounds (Charleston & Goodwin, 2004; Schoo et al., 2008).

Philosophical Connections

This study was informed by a postcolonial feminist philosophical framework, reflecting a realist ontology. Ensuring congruence between the philosophical underpinnings and methodological operationalization of research activities is crucial when the priority is knowledge translation at the community level. This required the researcher to recognize societal influences related to gender, race, culture, and social class (Denzin & Lincoln, 2003). This critical standpoint emphasizes social context in relationship to real-world and real-life problems while recognizing the impossibility of

asserting one truth or complete representations of truth. Subjectivity of truth is appreciated and gives meaning to contextual experiences (Denzin & Lincoln, 2003), producing knowledge that represents the needs of communities from the perspective of the populations who are central to the research process. These research participants took ownership of the research process, independently selecting images for inclusion that illustrated their unique experiences. In spite of the subjectivity of individual experiences, the findings revealed many commonalities among participants and gave voice to the challenges and opportunities of preceptorship that are uniquely rural.

A postcolonial feminist perspective on knowledge development provides a critical analytic lens through which the researcher views the world that emphasizes collaboration, emancipation, and empowerment (Patton, 2002). Significant and meaningful connection with community members is essential not only to engage community member participation, but to improve effective knowledge transfer at the community level. Photovoice has been used as a method of data collection to enhance knowledge transfer among marginalized groups. Within the context of this study, photovoice is not only congruent with the epistemological and ontological assumptions of postcolonial feminism, but was an effective method for engaging participants and representing the unique nature of rural nursing preceptorship. This form of inquiry places the voice of the individual or community at the forefront thus producing knowledge that represents their unique needs and experiences (Racine, 2003). For the purpose of this study, the postcolonial feminist framework was congruent with PAR. The photovoice method gave voice to the unique experiences of the rural-based

participants, who were learning or teaching in a context which in some areas, was representative of underserved populations.

The five principles of PAR described in chapter three were addressed in the following ways:

1. Sustained, ongoing, active engagement of participants throughout and during each step of the research process was a priority. The research participants collected data in the form of photographic images throughout the preceptorship, which took place over ten weeks. The researcher met with each participant at the beginning of the study to explain the procedures and obtain a signed consent and confidentiality agreement. All research participants were emailed a copy of the validation slideshow and invited to participate in a validation interview. Five participants agreed to participate in these interviews, three participants emailed the researcher and indicated that they were out of the country, and four participants did not respond to the researcher's requests to participate.
2. Participants were informed during the orientation to the project and via the invitation and consent to participate that "*the findings of this study will be used to inform nursing educators responsible for rural nursing education preceptorship programs of the challenges and opportunities that should be considered when developing rural nursing placements. This knowledge may also be used to inform future recruitment and retention strategies of nurses to the rural settings, which is a growing priority as a national nursing shortage looms across Canada, most pronounced in rural communities* (Appendix B;

C)". Hence, benefits associated with participation in this project would likely benefit current students with opportunities for reflection on their personal journey during the rural preceptorship journey.

3. The cyclical process of steps aimed at co-creation of knowledge between researchers and participants occurred throughout the research study. The participants and researcher co-created knowledge throughout the data collection process through the production and selection of photographic images. Lastly, the results of the data analysis were verified by the researcher, research participants and the researcher's supervisor throughout each phase of data collection and analysis.
4. A minimum of two face-to-face interviews between the researcher and each participant allowed the participants to describe in detail, the relevance and meaning of each of the images as they saw it.
5. Inherent in PAR methodology and the photovoice method, strategies for data collection facilitated participant engagement in the co-creation of knowledge throughout each stage of the research project and were adhered to by the researcher.

By and large, the student participants found that the distinctive nature of rural practice enhanced their learning by providing for unique, and sometimes unexpected learning opportunities. The student and faculty advisor participants also reported that the unique workplace culture contributed to enhanced learning for students; the entire rural workplace was invested and participated in the students' learning. The students were overwhelmingly satisfied with their rural preceptorship placements. While the

students focused predominately on skill and knowledge attainment and successful completion of the preceptorship, near the completion of the preceptorship, the students began applying for employment to their rural sites and were offered relief shifts. Anecdotally some students indicated that they would also like an urban employment experience, but they would not turn down employment in the rural community (outside or away from their home community) especially during the ongoing hiring freeze.

Summary

The students experienced many strengths and benefits unique to rural preceptorship, such as varied experiences in Pediatrics; Labour and Delivery; and Emergency; thereby promoting and enhancing knowledge and skill development, resourcefulness, flexibility, and consolidation of their basic, undergraduate nursing knowledge. During validation interviews, Robert (faculty advisor) and Amber (student) agreed, suggesting that, when possible, as many rural practice areas as possible—Home Care, Public Health, Long Term Care, Inpatient Acute Care, and Emergency—should be purposefully incorporated into the rural preceptorship. Doing so, they pointed out, would add to the richness of the experience, enhance students' rural nursing knowledge and bolster their confidence in implementing care after graduation.

Relationships have been treated here as a sub theme of rural versus urban practice, but they underlay the supportive learning environments, belongingness, and faculty encouragement that pervade the entire discussion. Faculty and staff support was critical not only to the students' success, but to their willingness to ask questions and seek out assistance. Faculty advisors recognized their primary responsibility was to support students. Fittingly, Helen (faculty advisor) drew a parallel between her role and

that of a farmer: to nourish and support students to be strong, to produce, and to thrive in the rural setting.

The students and faculty advisors who took part strongly supported the integration of a rural practice component into undergraduate nursing education, wherever possible. At the same time, they were mindful of the challenges involved in procuring rural practice placements, and in competing with other health care students also vying for practice placements. While the rural experience is unique, having been described as a specialty placement, the student and faculty participants indicated that basic undergraduate education was sufficient preparation for rural preceptorship. Throughout their placements, the students proved themselves able to think critically; to seek out learning opportunities; to ask appropriate questions; to work independently; and to function within the interdisciplinary team. However, it remains unclear if the basic undergraduate nursing curricula truly prepares students for preceptorship in rural settings, which have been described as a specialty practice area on account of the complexity and unpredictability of care (Sedgwick & Pijl-Zieber, 2015). Rural nurses furthermore struggle to access opportunities for professional development, which would clearly be beneficial for nurses working in the unique rural practice setting (Leipert & Anderson, 2012).

Chapter Five: Recommendations and Conclusions

The purpose of this study was to explore the challenges and opportunities of rural preceptorship as experienced by nursing students, preceptors and faculty advisors. While no preceptors participated in the study, five faculty advisors and nine nursing students took part; the findings illustrate their experiences. Four main themes—rurality, rural versus urban, travel, and making do—emerged from the participant interviews and photographs. Rurality remains an elusive concept, difficult to define. Nevertheless, the participants' photographs and comments captured the sense of community spirit, patterns, habits of communication and cultural contexts that comprised the distinct nature of each rural community to which they were assigned.

The contrasts between rural and urban life and work emerged as a prominent theme, comprising the breadth and unpredictability of practice; opportunities for reflection; the nature of relationships and support; and the inherent challenges and limitations. The students were surprised by the breadth and unpredictability of practice, which put their clinical skills to the test. They nonetheless found they were able to adapt to the rapidly changing work environment, aided in no small part by positive and supportive relationships with their assigned preceptors, faculty advisors, and other health care team members. Differences between rural and urban preceptorship may have an impact on students' sense of belonging, and the efficacy of the interprofessional team. Additional research is needed to understand how students experience belonging in rural preceptorship, and how belonging influences interprofessional team effectiveness. Interprofessional, experiential learning

opportunities aimed at recruitment, retention, and improved patient outcomes, require deliberate planning and implementation.

The participants faced challenges and limitations in the rural practice setting, such as a lack of amenities and social connections, but they quickly learned to manage and cope. Travel presented both challenges and opportunities. The drive to the rural setting afforded space and time to mentally prepare for the shift ahead; the drive home allowed for decompression, relaxation, and reflection on the successes and challenges of the day. The challenges of travel were offset by the beauty of the countryside. Throughout their rural preceptorships, the nursing students learned to make do. From limitations in technological supplies and assets to the scarcity of human resources, they experienced firsthand how to address and adapt to these challenges. The students witnessed how nursing staff created break spaces out of unused closets and patient rooms. They learned how and when to perform laboratory tests and employ other clinical skills, unique to rural nursing; these became a natural part of their daily routines.

The students found some stressors were less easily managed. Rural isolation and its consequences—chiefly travel burdens and the inaccessibility of psychosocial support—require more effective coping strategies and further investigation. A senior preceptorship is a crucial period in a nursing program. Failure to successfully complete the preceptorship can produce a devastating cascade of events: potential delay of graduation, inability to write the licensure exam, and failure to secure employment. The stress of isolation may compound the weight of these prospects for nursing students undertaking rural preceptorships.

Students placed in their rural home communities may struggle to maintain confidentiality and boundaries. More research is needed to address the challenges and opportunities experienced by these students and their preceptors, as well as strategies to assist these students navigating the close, personal relationships that are common in small, rural settings.

The relationship between rural placements and rural employment likewise requires further exploration. Possible contributing factors include the current employment markets in the rural and corresponding urban centers, and individual students' motivations to go rural, beyond the desire to return to their home communities.

Recommendations for Future Research

Gaps persist in the growing body of knowledge on rural nursing preceptorship. To date, no published findings have specifically addressed the challenges and opportunities intrinsic to rural nursing preceptorship. The findings from this study suggest that newly graduated nurses do not lack interest or employment opportunities in rural communities. However, retention of nurses in rural settings is an issue requiring urgent attention. Insights into the challenges and opportunities of rural preceptorship may inform sustainable recruitment and retention strategies, aimed at recent nursing graduates who are engaged and invested in rural communities. It is vitally important to better prepare nursing students, preceptors and faculty advisors for rural preceptorships.

Photovoice shows promise as an innovative research method to foster student learning about rural nursing (Leipert & Anderson, 2012) but its full potential to elicit the challenges and opportunities experienced by nursing students, preceptors and faculty

members during rural preceptorship placements remains unexplored. This study was guided by a postcolonial feminist perspective that sought to give voice to rural communities, particularly those underserved and marginalized. A commitment to critically examine the issues that persist for these communities is urgently needed to not only examine the existing landscape in rural health, but increase understanding of the root causes of the inequities of health care experienced there (McGibbon, Mulaudzi, Didham, Barton, & Sochan, 2013). Further research is required to address the issues above, as well as the following questions:

1. What strategies are needed to prepare nursing students and preceptors for the unique challenges and opportunities of preceptorship in rural settings?
2. Do educators in undergraduate nursing curricula prepare new graduates for rural nursing practice?
3. What are the motivators of newly graduated nurses who seek employment in rural communities?
4. What are the issues faced by newly graduated nurses that impact rural employment attrition and retention?
5. How do nursing students and new graduates cope with isolation and other challenges inherent in rural nursing?
6. How could photovoice be used to further explore other issues in rural preceptorship?

Finally, comparative research in non-rural settings, during preceptorship, would extend the findings of this study. Moreover, it is unclear whether the challenges and

opportunities experienced during supervised, clinical courses in rural settings are comparable to those experienced during the same courses in urban settings.

Implications and Recommendations for Nursing Education

The ways in which educators create a focus on social justice in the current nursing literature from a postcolonial feminist perspective is growing but requires examination and application (Anderson, 2003, Boutain 2004; Browne, Smye, & Varcoe, 2005; McGibbon et al., 2013). Educational activities grounded in postcolonial feminism ensure equal treatment of all persons by recognizing and valuing the complex relationships among gender, race, culture, power and sociopolitical factors (Anderson, et al. 2003). Other authors have also identified a critical need to increase awareness of and exposure to values and beliefs around social justice in nursing education (Van Herk, Smith, & Andrew, 2011). These authors assert that concepts of social justice are introduced in nursing education but represent a significant gap not only in nursing education, but also nursing professional development.

During participant interviews, the unique nature of rural practice was explored using photographs to mobilize discussions. Throughout the interviews, participants described the ways in which rural practice experiences differed from urban ones. It became apparent that educators must address particular considerations in planning and implementing rural practice experiences that address the challenges experienced by nursing students and nurses engaged and invested in rural practice. Orientation of each member of the preceptorship triad is essential for success in any preceptorship setting. Poor understanding of the roles, responsibilities and expectations of each of the members of the triad can lead to miscommunication and unrealistic expectations.

Faculty advisors need strategies to orient preceptors in rural locations, with whom they may not be able to meet face-to-face; such are the unique challenges of rural preceptorship planning. The findings of this study suggest that the nature of rural practice is conducive to interprofessional collaboration in part as a result of the physical proximity of the on-site multidisciplinary services. Previous researchers have found that implementation of interprofessional rural practice placements have reaped multiple benefits by providing for collaborative team based learning opportunities among interprofessional students, peer mentorship and support during rural placements, and effective utilization of typically limited practice placements (Ralph, Walker, & Wimmer, 2008). Additionally, these authors suggest that these interprofessional rural practice placements have benefitted rural communities by attracting prospective employees post-graduation.

The following recommendations for nursing educators are based on the themes and subthemes that emerged from the data. These recommendations are intended as a basis for collaborative endeavors between educational institutions and practice partners:

1. Identify and address rural practice challenges that have the potential to negatively impact students' learning.
2. Create and implement strategies to ensure consistent support for students and preceptors throughout the duration of the preceptorship.
3. Develop and deliver annual preceptor-orientation sessions or workshops to address issues related to rural preceptor preparation.

4. Delineate the roles and responsibilities of each member of the interprofessional team and the preceptorship triad, and provide these definitions to students, preceptors and faculty advisors during site orientations.
5. Ensure site-specific orientation takes place prior to the commencement of nursing students' practice placements.
6. Explore the potential to increase or introduce opportunities for supervised, interprofessional practice placements in rural communities, for nursing programs not currently providing such placements.
7. Explore creation of bursaries or scholarships for nursing students who select rural preceptorships. Inherent in the challenges associated with rural practice, are costs associated with travel to and from the rural practice site, and for some students, relocation to the rural community of which, students are not typically compensated. Financial assistance may encourage students to take advantage of the rich opportunities offered in rural practice (Killam & Carter, 2010).
8. Incorporate photovoice as a teaching strategy and assignment for the purpose of providing student feedback during practice courses, not limited to preceptorship.

Recommendations for Nursing Practice

Professional nurses are well known to engage in innovative and creative ways to manage care while balancing demands of the practice setting, often within physical and fiscal constraints (Macleod et al., 1998). Moreover, nurses can be credited for

increasing health care access to underserved individuals and communities in rural and remote locations (Kulig et al., 2015; Kulig & Williams, 2012; Laurent, 2002). Hence, strategies to address the current state of health care in rural and remote areas require nursing involvement and collaboration at multiple levels. Nurses, as the most prominent immediate health care providers witness the challenges faced by rural residents and are their primary advocate for change. In relationship to the findings of this study, rural nursing staff are best positioned to identify, plan and implement strategies to address staff concerns. The findings of this study revealed areas of concern for nursing students and newly graduated nurses that potentially compound existing recruitment and retention issues. In addition to the aforementioned collaborative recommendations for education, the following recommendations are suggested for the practice arena:

1. Address issues related to entry-to-practice transition, to promote rural recruitment among newly graduated nurses. This process will require extensive orientation and mentorship of newly graduated nurses. Previous research supports implementation and maintenance of professional mentoring programs (Cochrane, 2017; Dowdle-Simmons, 2013; Sedgwick & Pijl-Zieber, 2015). Development of positive workplace relationships are crucial to successful retention of new staff, especially recent graduates who report high levels of stress throughout the first-year post-graduation (Cochrane).
2. Invest in training and educational resources. Numerous participants reported they faced issues related to resource limitations. Likewise, at some sites, resources such as telehealth existed but were poorly utilized due to inadequate training.

3. Examine the role of the nurse manager in terms of recruitment and retention of nursing staff. The nurse manager is best situated to identify and address workplace concerns that may impair recruitment and retention of nursing staff (Hayes et al., 2012; Macleod et al., 1998; Myer Bratt et al., 2014). Hence, strategies to address workplace concerns, such as incivility in the workplace should be considered.

Recommendations for Policy Development

In Canada, provincial health authorities are responsible for the management of health care, from health care program funding, to implementation and evaluation of health services. As such, the health authorities have responsibilities to the residents who reside there. Ineffective transition to practice is an ongoing predicament for newly graduated nurses (Meyer Bratt et al., 2012; Sedgwick & Pijl-Zieber, 2015), seriously compounding the nursing shortage. As the current nursing shortage continues to grow, retention of newly graduated nurses must become a policy priority. The following recommendations are provided to address these issues:

1. Funding must be prioritized for new graduate transition programs. Sustainability of transition programs must be addressed during implementation to ensure continuity for new graduates.
2. Creation of clinical nurse specialist positions should be examined to enhance clinical support of existing staff in the rural setting who report having limited or unreliable access to educational resources and supports.
3. Creation of sustainable employment incentives. The first step to developing a sustainable workforce is recruitment. The findings of this study revealed that

in some cases, long-term residents are leaving rural communities. Incentives must be created to attract nurses to the rural community. Successful incentives must extend beyond employment packages and orientation, and address the realities of the employee, such as relocation, accommodation and childcare needs (Francis & Mills, 2011).

4. Prioritize continuing professional development opportunities. This is especially critical for rural nurses who do not have access to the quantity and quality of professional development resources and activities as their urban counterparts (Francis & Mills, 2011).

Research Reflections: Listening for Understanding

As a rural Albertan, I conceived this study from a passion for rural communities and practice, in particular the health care needs of underserved and vulnerable rural populations. As a nurse educator, I am also passionate about students, having been a faculty advisor to many during their preceptorships—more than a few of them in rural communities—for over a decade. I have also taught clinical in acute care and rural settings. These passions and experiences drew me to my research question and to my supervisor, Olive Yonge.

The purpose of this study was to examine the challenges and opportunities associated with undergraduate nursing preceptorship in rural settings. Just getting the study started was not without major challenges, the first of which arose during the recruitment phase. I hoped and expected that students, preceptors, and faculty advisors would been keen to contribute knowledge about rural preceptorship, considering their intimate involvement therein. I was surprised and disappointed to receive not a single

reply amongst the students or preceptors I contacted from the initial sample. After a subsequent attempt, I actually received some harsh responses. Students stated that they couldn't possibly consider or be expected to participate, being focused on the heavy burden of learning as much as possible during the preceptorship, graduating, and finding work. The preceptors indicated that they just couldn't "take on one more thing." I understood that workplace culture likely influenced the preceptors' willingness to participate, but the students? I was baffled and disappointed. Having previously taught the undergraduate nursing research methods course, I felt that my colleagues and I had failed to impress upon the students the importance—indeed, the professional obligation—to take part in current research and knowledge development.

Just when it seemed that I essentially had no study, the stars aligned. Olive and I learned the Camrose collaboration with the University of Alberta nursing program would place students in rural preceptorships for the upcoming summer term. The faculty advisor there was keen to participate, as were almost all of the students. I had a study! The majority of preceptors responded much as the previous sample had—they "couldn't possibly take on one more thing"—but they were happy enough to support the students.

The processes of data collection and analysis took me on a journey parallel to those of the research participants. I observed the landscape during my many trips between the various rural communities and the city of Edmonton, where I was completing my own residency (not without its own personal, professional and financial challenges). I logged more than 1000 km in one week alone. I ate at the local restaurants, and shopped at the local shops. I met the students at the hospitals where they had been placed, and I was struck both by the similarities and the differences

among these health care facilities. In some parts of Alberta, the rural hospitals were little carbon copies of each other, making it very easy to find my way around, while others were completely unique. I was also surprised by the diversity of services offered in some of these small communities.

The participants generated an abundance of rich photographic data, further enriched during the individual interviews and validation sessions. Through this data, I shared in their individual experiences and perspectives of rural nursing, and how they viewed the challenges and opportunities associated with working at rural health care sites. The students opened up about the profound, supportive relationships they developed during their preceptorships, not only with their primary preceptors, but often with the entire health care team and with other members of the community. At the same time, some students shared the loneliness of being in a strange place, far from home, experiencing the combined stressors of being a student and being isolated from friends and family. Nonetheless, the students were largely upbeat about living and learning in the rural communities. Many returned to commence employment.

The potential impact of this study is twofold. The study generated new knowledge in the area of rural preceptorship, particularly regarding the challenges therein, upon which previous research was limited. Dissemination of these findings will be directed at nursing educators and professionals: 1) to inform strategies for the preparation of students for rural preceptorship, and 2) to inform strategies for the recruitment and retention of newly graduated nursing students to rural communities.

As an educator and faculty advisor, responsible for nursing students in settings both urban and rural, I took from this study the importance of giving a voice to those

with the most at stake—students, preceptors and faculty advisors—thereby shedding light on the issues they face during final preceptorships. I faced my own significant challenges, relatable to many researchers, such as recruitment of participants and the logistics of data collection. Nevertheless, the opportunities to learn with and from the study participants; to share in their unique experiences; and to illuminate their preparatory and supportive needs before and during rural placements, made this study rewarding and transformative—a privileged, insider view of rural nursing preceptorship.

Conclusions

Nursing preceptorship is the final practice course students complete at the end of the undergraduate program upon completion and achievement of program requirements. The preceptorship typically affords nursing students an opportunity to self-select a placement in a practice setting of their interest. The preceptorship is structured around a relational triad among the nursing student, a faculty advisor and the preceptor. The faculty advisor is responsible to monitor and facilitate the development of this relationship that his crucial to student success. Rural preceptorship is the vehicle through which students learn about the unique challenges and opportunities of rural practice, relevant to the individuals and families who reside in rural communities.

The purpose of this study was to explore the challenges and opportunities associated with rural preceptorship from the perspective of the nursing students and faculty advisors. PAR methodology was employed by the researcher for its fittingness with the purpose of the research study. Photovoice was used as a creative method to capture the experiences of the participants. By engaging the nursing students and faculty advisors as co-researchers, knowledge production was generated through their

eyes and their stories. Preceptorship in rural settings provides nursing students with an introduction to the role of the rural nurse. This role is unique in that it affords the nurse the opportunity to develop meaningful connections with the community, by identifying and being responsive to specific community needs. This project generated an abundance of rich, qualitative data that will contribute to the knowledge base on rural preceptorship, specifically the challenges and opportunities experienced therein by nursing students, preceptors and faculty advisors. The photographic record of the rural preceptorship experience provided an impetus for conversations with nursing students and faculty advisors, regarding how their experiences influenced the overall preceptorship practicum. During the interviews, both the nursing students and faculty advisors gained insights relevant to their experiences of the challenges and opportunities experienced as part of the teaching and learning experience in the rural setting. These insights were illuminated by the participants as they took time to describe and ponder the meaning and significance of the photographic images, considering why they first took the photograph and what it came to mean to them through the passage of time during the preceptorship. Numerous challenges were described by the participants. However, in describing the challenges, the participants also talked through how they managed and overcame these challenges. This contributed to their growing appreciation for rural practice, but also in their ability to face and conquer challenges, in turn enhancing their learning and empowering their ability to develop independence and confidence.

Sustenance of the rural workforce is critical. Investment at all levels, from institutional to political, must be engaged to address and correct system deficiencies

that impact staffing realities, in turn having potential devastating consequences on the health of rural residents. Educational strategies aimed at preparing future nurses to meet the unique health needs of rural residents are essential. Employers are responsible for maintaining safe practice environments. Doing so can only be accomplished through awareness and acknowledgement of the realities of the practice setting that present challenges for the employee. Investment in the success of the employee is imperative to and critical to successful recruitment and retention strategies.

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Appendix A

Literature Review of Rural Nursing Preceptorship

#	Author/Date	Sample	Design	Ethics/Rigor	Outcomes
1	Charleston & Goodwin, 2004	n=167	quant survey	NA/NA	Rural preceptorship (RP) workshop imp/evaluation
2	Jackman 2011	n=	qual GT[b]	√/√	Relational process r/t RP
3	MacDowell, Glasser, Weidenbacher-Hoper, & Peters, 2015	n=52	quant PP[c]	√/NA	Interprofessional RP
4	Meyer Bratt, Baernholdt, & Pruszynski, 2014	n=468	quant LC[a]	NA/NA	Rural/urban preceptorship outcomes
5	Pront, Kelton, Munt, & Hutton, 2013	n=7	qual CS[d]	√/NA	RP and student learning
6	Schoo, McNamara, & Stagnitti, 2008	n=110	qual PP	√/√	Recruitment/retention r/t RP
7	Sedgwick 2011	n=8	qual ED[e]	√/√	Rural interdisciplinary preceptorship
8	Sedgwick & Rougeau 2010	n=32	qual CIT[f]	√/√	Belonging r/t rural preceptorship
9	Sedgwick & Yonge, 2008	n=12	qual FE[g]	√/√	Meaning of socialization r/t rural preceptorship
10	Sedgwick & Yonge, 2009	n=12	qual FE	√/√	Student perception of faculty involvement in R/P
11	Sedgwick, Yonge, & Myrick, 2009	n=12	qual FE	√/√	Multidisciplinary approach
12	Yonge 2009	n=11	qual GT	√/√	Boundaries r/t rural preceptorship
13	Yonge, Ferguson, Myrick, 2006	n=49	qual GT	√/√	Preceptor/student RP experiences
14	Yonge, Hagler, Cox, & Drefs, 2008	n=12	qual SR[h]	√/√	Limited evidence r/t preceptor development
15	Yonge, Myrick, & Ferguson, 2011(a)	n=23	qual GT	√/√	Evaluation framework for rural preceptorship
16	Yonge et al., 2011(b)	n=23	qual GT	√/√	student perspectives of feedback during RP

17	Yonge et al., 2011(c)	n=26	qual GT	√/√	Evaluation processes r/t RP
18	Yonge, Myrick, Ferguson, & Grundy, 2013(a)	n=8	qual PAR[i] pv	√/√	Rural context r/t team preceptorship
19	Yonge et al., 2013(b)	n=8	qual PAR pv	√/√	Rural landscape perspectives r/t RP
	Note: [a] longitudinal cohort design; [b] grounded theory; [c] pre-posttest; [d] case study; [e] exploratory descriptive; [f] clinical incident technique; [g] focused ethnography; [h] systematic review; [I] participatory action research				

Appendix B

Invitation to Participate

Study Title: ***Challenges and Opportunities of Rural Nursing Preceptorship***

Research Investigator:
NAME: Tracy Oosterbroek
ADDRESS
Faculty of Health Sciences
4401 University Drive W
Lethbridge, AB, T1K 3C4
EMAIL: oosterbr@ualberta.ca
PHONE NUMBER: 403.393.8924

Supervisor
Professor Supervisor: Dr. Olive Yonge
ADDRESS
Faculty of Nursing
University of Alberta
Edmonton, AB
EMAIL: olive.yonge@ualberta.ca
PHONE NUMBER:780-499-6553

Dear participant: Date: _____

You are invited to participate in a research study that seeks to explore the challenges and opportunities experienced during undergraduate nursing preceptorship in rural settings.

Background and Purpose
The purpose of the study is to explore the challenges and opportunities inherent in rural practice from the perspective of nursing students, preceptors and faculty members. The findings of this study serve a dual purpose; to highlight the importance of rural placements in undergraduate nursing education to prepare future nurses who are competent to meet the unique challenges of rural practice, and to inform recruitment and retention strategies to tackle the shortage of the rural nursing workforce. Photovoice is the research method that will be used for the study. Participants will be provided with digital cameras and instructed to take images that illustrate challenges or opportunities of rural preceptorship.

Your participation in the proposed study will include:

1. an orientation session at the rural practice site for nursing students, preceptors and faculty advisors and agency staff at the beginning of the preceptorship,
2. two face-to face interviews with the researcher expected to last approximately one hour each; the first interview occurring at the mid-point of the preceptorship and the second near the end of the preceptorship,
3. contribution to a slideshow presentation of the photographs self-selected by the study participants and compiled for viewing at the end of the preceptorship.
4. a copy of an E-book containing the compiled photographs selected by all study participants.

Study Procedures
As a participant, you will be provided with a digital camera and instructions for use during the study. You may only use the camera for purposes of the study but are free to

take as many photographic images that you like that illustrate your experiences related to the challenges and opportunities of a rural preceptorship placement. It is expected that the images captured by all study participants will provide a wealth of rich data.

Prior to each of the interviews you will be asked to select 20-25 images that best represent the challenges or opportunities of the rural preceptorship experience. This collection of images will be the impetus for conversations with the researcher during the confidential, face-to-face interviews. At the end of the preceptorship, the images self-selected by all the study participants throughout the study will be compiled into one slideshow presentation. The researcher will display the slideshow presentation to all participants at each of the rural practice sites at the end of the preceptorship.

Benefits

The findings of this study will be used to inform nursing educators responsible for rural nursing education preceptorship programs of the challenges and opportunities that should be considered when developing rural nursing placements. This knowledge may also be used to inform future recruitment and retention strategies of nurses to the rural settings, which is a growing priority as a national nursing shortage looms across Canada, most pronounced in rural communities.

Risks

There are no foreseeable personal, physical or psychological risks to you that would occur from your participation in the study. However, the researcher will immediately share unexpected risks that may develop during the research study that could affect your willingness to participate. If at any time you wish to withdraw your participation in the study, you are free to do so without negative consequences.

Confidentiality

Confidentiality of participants will be ensured and pseudonyms will be assigned to each participant. A list of participants will be stored separately from the study data. Anonymity however cannot be guaranteed due to the nature of the study, whereby participants may be the subjects of photographs. Consent to be photographed and appear in images will be obtained from each subject throughout the research project. You will be provided with a consent form for these purposes. Upon completion of the study, all data will be stored and locked in the researcher's professional workplace office for a minimum five years according to institutional requirements of the University of Alberta.

Study findings will be disseminated in the form of peer-reviewed publications and oral presentations at a national and international level that are relevant to rural health research. A photographic hardcopy of the final collection of photographs used for the slideshow will be provided to each study participant and clinical site.

Voluntary Participation and Freedom to Withdraw

Your participation in the study would be greatly appreciated and is entirely voluntary. If you choose to withdraw from the study after commencement, you may also request that your data collected up until the time of your withdrawal also be withdrawn. This can be

done upon your request at any time throughout the research process. In other words, if you change your mind about participating in the study, you can withdraw at any time.

If you have any questions at any time, please contact me at:

email: oosterbr@ualberta.ca
phone: (403) 317-5067
mail: Tracy Oosterbroek
4401 University Drive W
Lethbridge Alberta T1K 3C4

The plan for this study has been reviewed for its adherence to the ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participants' rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615.

Sincerely,

Tracy Oosterbroek

Appendix C

Letter of Informed Consent: Participants

Study Title: ***Challenges and Opportunities of Rural Nursing Preceptorship***

Research Investigator:
NAME: Tracy Oosterbroek
ADDRESS
Faculty of Health Sciences
4401 University Drive W
Lethbridge, AB, T1K 3C4
EMAIL: oosterbr@ualberta.ca
PHONE NUMBER: 403.393.8924

Supervisor
Professor Supervisor: Dr. Olive Yonge
ADDRESS
Faculty of Nursing
University of Alberta
Edmonton, AB
EMAIL: olive.yonge@ualberta.ca
PHONE NUMBER:780-499-6553

Dear Participant: Date: _____

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Background and Purpose
The purpose of the study is to explore the challenges and opportunities inherent in rural practice from the perspective of nursing students, preceptors and faculty members. The findings of this study serve a dual purpose; to highlight the importance of rural placements in undergraduate nursing education to prepare future nurses who are competent to meet the unique challenges of rural practice, and to inform recruitment and retention strategies to tackle the shortage of the rural nursing workforce. Photovoice is the research method that will be used for the study. Participants will be provided with digital cameras and instructed to take images that illustrate challenges or opportunities of rural preceptorship.

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1. an orientation session at the rural practice site for nursing students, preceptors and faculty advisors and agency staff at the beginning of the preceptorship,
2. two face-to face interviews with the researcher expected to last approximately one hour each; the first interview occurring at the mid-point of the preceptorship and the second near the end of the preceptorship,
3. contribution to a slideshow presentation of the photographs self-selected by the study participants and compiled for viewing at the end of the preceptorship,
4. a copy of an E-book containing the compiled photographs selected by all study participants.

Study Procedures
As a participant, you will be provided with a digital camera and instructions for use during the study. You may only use the camera for purposes of the study but are free to

take as many photographic images that you like that illustrate your experiences related to the challenges and opportunities of a rural preceptorship placement. It is expected that the images captured by all study participants will provide a wealth of rich data.

Prior to each of the interviews you will be asked to select 20-25 images that best represent the challenges or opportunities of the rural preceptorship experience. This collection of images will be the impetus for conversations with the researcher during the confidential, face-to-face interviews. At the end of the preceptorship, the images self-selected by all the study participants throughout the study will be compiled into one slideshow presentation. The researcher will display the slideshow presentation to all participants at each of the rural practice sites at the end of the preceptorship.

Benefits

The findings of this study will be used to inform nursing educators responsible for rural nursing education preceptorship programs of the challenges and opportunities that should be considered when developing rural nursing placements. This knowledge may also be used to inform future recruitment and retention strategies of nurses to the rural settings, which is a growing priority as a national nursing shortage looms across Canada, most pronounced in rural communities.

Risks

There are no foreseeable personal, physical or psychological risks to you that would occur from your participation in the study. However, the researcher will immediately share unexpected risks that may develop during the research study that could affect your willingness to participate. If at any time you wish to withdraw your participation in the study, you are free to do so without negative consequences.

Confidentiality

Confidentiality of participants will be ensured and pseudonyms will be assigned to each participant. A list of participants will be stored separately from the study data. Anonymity however cannot be guaranteed due to the nature of the study, whereby participants may be the subjects of photographs. Consent to be photographed and appear in images will be obtained from each subject throughout the research project. You will be provided with a consent form for these purposes. Upon completion of the study, all data will be stored and locked in the researcher's professional workplace office for a minimum five years according to institutional requirements of the University of Alberta.

Study findings will be disseminated in the form of peer-reviewed publications and oral presentations at a national and international level that are relevant to rural health research. A photographic hardcopy of the final collection of photographs used for the slideshow will be provided to each study participant and clinical site.

Voluntary Participation and Freedom to Withdraw

Your participation in the study would be greatly appreciated and is entirely voluntary. If you choose to withdraw from the study after commencement, you may also request that your data collected up until the time of your withdrawal also be withdrawn. This can be

done upon your request at any time throughout the research process. In other words, if you change your mind about participating in the study, you can withdraw at any time.

I consent to participate in the study entitled ***Challenges and Opportunities of Rural Nursing Preceptorship***. This signed consent signifies:

1. my responsibility to ensure confidentiality of all data sources,
2. responsibility to acquire signed consent from all individuals that will appear in photographs taken for the purpose of the research study, and
3. release of my rights to data collected and produced as products of the research study

_____ _____

Signature of Participant Date

_____ _____

Signature of Researcher Date

Appendix D

Letter of Informed Consent to Appear in Photographs: Patients/Public

Study Title: ***Challenges and Opportunities of Rural Nursing Preceptorship***

Research Investigator:
NAME: Tracy Oosterbroek
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Supervisor
Professor Supervisor: Dr. Olive Yonge
ADDRESS
Faculty of Nursing
University of Alberta
Edmonton, AB
EMAIL: olive.yonge@ualberta.ca
PHONE NUMBER:780-499-6553

Dear Participant: Date: _____

You are invited to participate in a research study that seeks to explore the challenges and opportunities experienced during undergraduate nursing preceptorship in rural settings.

Background and Purpose
The purpose of the study is to explore the challenges and opportunities inherent in rural practice from the perspective of nursing students, preceptors and faculty members. Photovoice is the research method that will be used for the study. Your participation in the proposed study will include;

1. consent to be photographed, and
2. consent for use of the photographs in which you appear for the sole purposes of the research study.

Benefits
The findings of this study will be used to inform nursing educators responsible for rural nursing education preceptorship programs of the challenges and opportunities that should be considered when developing rural nursing placements. This knowledge may also be used to inform future recruitment and retention strategies of nurses to the rural settings, which is a growing priority as a national nursing shortage looms across Canada, most pronounced in rural communities.

Risks
There are no foreseeable personal, physical or psychological risks to you from your participation in the study. If at any time you wish to withdraw from the study, you are free to do so without any negative consequences.

Confidentiality
All sources of data will be kept confidential. Anonymity however cannot be guaranteed due to the nature of the study, whereby participants may be the subjects of photographs.

I consent to participate in the study entitled ***Challenges and Opportunities of Rural Nursing Preceptorship***. This signed consent signifies my:

1. consent to be photographed, and
2. consent for use of the photographs that you appear for the sole purposes of the research study.

_____ _____

Signature of Participant Date

_____ _____

Signature of Research Participant Date

Appendix E

Letter of Confidentiality

Study Title: ***Challenges and Opportunities of Rural Nursing Preceptorship***

Research Investigator:
NAME: Tracy Oosterbroek
ADDRESS
Faculty of Health Sciences
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EMAIL: oosterbr@ualberta.ca
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Supervisor
Professor Supervisor: Dr. Olive Yonge
ADDRESS
Faculty of Nursing
University of Alberta
Edmonton, AB
EMAIL: olive.yonge@ualberta.ca
PHONE NUMBER:780-499-6553

I, _____, the_____
(specific role description i.e. student, faculty advisor, preceptor)

Agree to –

1. keep all the research information shared with me confidential by not discussing or sharing the research information in any form or format (i.e. discs, tapes, transcripts, recordings) with anyone other than the *Researcher(s),*
2. keep all research information in any form or format (i.e. discs, tapes, transcripts, recordings) secure while it is in my possession,
3. return all research information in any form or format (i.e. discs, tapes, transcripts, recordings) to the Researcher(s) when I have completed the research tasks,
4. after consulting with the *Researcher(s),* erase or destroy all research information in any form or format regarding this research project that is not returnable to the *Researcher(s)* (i.e. information stored electronically).

_____	_____	_____
Print name	Signature	Date

Researcher(s)

_____	_____	_____
Print name	Signature	Date

Appendix F

Interview Guide

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1. What do you see in the photographed image?
2. Where were you when you photographed this image?
3. Why did you photograph this specific image?
4. How does this illustrate an opportunity or challenge of rural practice?
5. Are there implications of the perceived challenge/opportunity for rural practice?

Appendix G

Audit Trail

NVivo training (Toronto, ON): Oct 2015

Proposal defense: Nov 2015

Ethics Approval: Jan 2016

Participant recruitment: Jan-March 2016

Secondary participant recruitment: April 2016

Participant and site orientation sessions: May 2016

Residency requirement May 2016- August 2016

Data Collection: May - August 2016

Concurrent Data Analysis: May - August 2016

Midterm meetings/interviews with participants/site visits: June- July 2016

End of term meetings/interviews with participants/site visits: August 2016

Data analysis verification/validation interviews: December 2016

Interpretation of data/preparation of dissertation: Sept 2016 – February 2017

Dissertation defense: Spring 2017

First publication: May 2017

Oral presentations:

1. ***International Institute for Qualitative Methodology*** **(IIQM), (October 17-19, 2017, Quebec City, QC)**
2. ***Rural Nursing Organization,*** **bi-annual conference (2018, Location TBA)**
3. ***Western North-Western Region of Schools of Nursing Conference*** **(February, 2018, Location TBA).**