Normalizing Masculinity: Explaining Processes, Factors, and Contexts That Influence How Rural Male Farmers Seek Health Information in Southwest Ontario

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ABSTRACT

Disproportionately high mortality and morbidity rates experienced by rural men are often related to the high prevalence of rural male farmers (RMFs) who are consistently exposed to chemicals, animal waste, and dust, or injured or killed while working. This dissertation aimed to explain processes by which RMFs seek health information (HI), and how these processes are influenced by rural social, cultural, political, and geographical factors.

Three studies were conducted as part of this dissertation. The first study was a literature review that explored the relationship between rural men’s health, health information seeking (HIS) theory, and masculinity theory. The second study was a retrospective analysis of Ontario health policy and planning documents published since 2006 to establish the health policy context within which RMFs in Ontario seek HI. The third study integrated constructivist grounded theory and photovoice to identify and explain processes by which RMFs in southwest Ontario seek HI and factors that affect those processes.

Findings of the literature review suggest that rural hegemonic masculinity – a socially desirable gender identity that values men’s toughness – may influence rural men to avoid HIS. Health policy and planning document analysis identified 13 documents published since 2006 that included RMFs’ health or health needs. Analysis indicated that health policy and planning document authors addressed RMFs as both: 1) token symbols of rural communities, and 2) key stakeholders to engage with to “mend fences” and improve strained relationships between healthcare providers and rural communities. Sixteen RMFs in southwest Ontario participated in the constructivist grounded theory-photovoice study. Participants revealed that their HIS was guided by an identity-related core process entitled ‘normalizing self as an RMF throughout HIS’, and that ‘normalizing’ was affected by rural social, cultural, geographical, and political factors.

These studies have implications for how rural communities, agricultural interest groups, health and non-health policy makers, and rural healthcare planners and providers can influence how RMFs seek HI. Future research is needed to understand how RMFs seek HI in different rural contexts, how rural communities can effectively support RMFs to
engage in HIS, and how future health and non-health policy can promote RMFs’ health and HIS.

**Keywords**

Rural health, male, farmers, hegemonic masculinity, masculinity theory, health information seeking, constructivist grounded theory, photovoice, retrospective policy analysis
CO-AUTHORSHIP STATEMENT

Bradley Hiebert completed this dissertation under the supervision of Dr. Beverly Leipert, Dr. Sandra Regan, Dr. Jacquelyn Burkell, and Dr. Blye Frank. For each study listed below Bradley Hiebert completed the following: study proposal, methodological design, data collection, data analysis, wrote manuscripts, revised manuscripts with feedback from co-authors.

The manuscript presented in Chapter Two entitled, *Rural Men’s Health, Health Information Seeking, and Gender Identities: A Conceptual Theoretical Review of the Literature*, was co-authored by Dr. Beverly Leipert, Dr. Sandra Regan, and Dr. Jacquelyn Burkell.

The manuscript presented in Chapter Three entitled, *Tokenism and Mending Fences: How Rural Male Farmers and Their Health Needs are Discussed in Health Policy and Planning Documents*, was co-authored by Dr. Sandra Regan and Dr. Beverly Leipert.

The manuscript presented in Chapter Four entitled, *Normalizing and Navigating: How Rural Male Farmers in Southwest Ontario Seek Health Information*, was co-authored by Dr. Beverly Leipert, Dr. Sandra Regan, Dr. Jacquelyn Burkell, and Dr. Blye Frank.
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CHAPTER 1
Introduction

This dissertation in Health Information Sciences presents research that examined processes that explain how rural male farmers (RMFs) in southwest Ontario seek health information. The research is presented in an integrated manuscript format, with each manuscript addressing a specific component relevant to understanding processes which underlie RMFs’ health information seeking (HIS). The first manuscript (Hiebert, Leipert, Regan, & Burkell, 2016) provides the necessary background literature regarding three substantive areas relevant to RMFs’ HIS processes: rural men’s health, health information seeking, and gender identity. In addition, the first manuscript presents how these three substantive areas coalesce to shape how rural men seek health information.

The second manuscript (Hiebert, Regan, & Leipert, 2018) presents the results of a qualitative research study that examined how RMFs and their health needs are included in Ontario health policy and planning documents. In doing so, the second manuscript establishes the health policy context within which RMFs in southwest Ontario seek health information. The third manuscript (Hiebert, Leipert, Regan, Burkell, & Frank, forthcoming) presents the results of a qualitative research study that integrated constructivist grounded theory and photovoice methodologies to understand processes that determine how RMFs in southwest Ontario seek health information, and how these HIS processes are influenced by personal, cultural, social, and rural contextual factors.

Since each manuscript contains its own literature review and methodological description, this introductory chapter provides a description of overlapping concepts, as well as this dissertation’s purpose, research questions, methodological design, and significance for future research, policy, and rural health.

1.1 Background

The following sections provide background information on integral concepts that overlap in each manuscript included in this dissertation: conceptualizing rural, rural male farmers’ health concerns, and health information seeking. A more substantive and nuanced literature review regarding knowledge pertinent to RMFs’ HIS concepts and processes is presented in chapter two of this dissertation, entitled Rural Men’s Health,
Health Information Seeking, and Gender Identities: A Conceptual Theoretical Review of the Literature (Hiebert et al., 2016).

1.1.1 Conceptualizing Rural

There is currently no universal definition of rural in Canada (Williams & Kulig, 2012). Common conceptualizations of rurality are based on one of the following as their defining feature: population size, density or distribution; ability to contribute to and access labour opportunities; proximity to urban centres; being located outside of an urban zone; or having a rural postal code (du Plessis, Beshiri, Bollman, & Clemenson, 2002; Pitblado, 2012). Additionally, the Ontario Ministry of Health and Long-Term Care (MOHLTC) (2010) has drafted an Ontario-specific definition of rural which accounts for both community population and travel time to a larger centre where access to appropriate care is ostensibly increased. Specifically, the MOHLTC definition considers an area rural if it has “a population of less than 30,000 [and is] greater than 30 minutes away in travel time from a community with a population of more than 30,000.” (2010, p. 8). Such multiplicity makes definition choice a crucial step to the research process, as different definitions can provide drastically different understandings of rural populations and contexts.

The MOHLTC definition of rurality was used as a guide throughout this dissertation due to the focus on RMFs’ HIS in southwest Ontario. There are two main benefits to using the MOHLTC conceptualization of rurality in this dissertation. First, its direct applicability to RMFs in southwest Ontario may facilitate a meaningful understanding and dissemination of this study’s results to Ontario residents, policy makers, researchers, practitioners, and other healthcare providers. The second benefit lies in its similarity to the rural and small town (RST) classification system commonly used in national rural health reports (Canadian Institute for Health Information, 2006; Pong et al., 2011; Standing Senate Committee on Agriculture and Forestry, 2006). The RST definition considers an area to be rural if it has a population of less than 10,000 people and if it is located outside of commuting zones for centres with a population of 10,000 or more (Mendelson & Bollman, 1998). The RST definition was expanded by Rambeau and Todd (2000) to categorize rural areas as belonging to strong, moderate, weak, or no Metropolitan Influence Zones (MIZ) based on how many individuals in a community
commute to an urban centre with a population of 10,000 or more: strong MIZ is the least rural with at least 30% of these communities’ labour forces commuting to an urban centre; in moderate MIZ rural communities between 5% and 30% of their labour force commutes to an urban centre; in weak MIZ rural communities between 0% and 5% of their labour force commutes to urban communities; and in no MIZ rural communities no members of the labour force commute to an urban centre (Rambeau & Todd, 2000).

Like the MOHLTC rural definition, the RST classification system is based on travel time to urban centres and views rural communities as those outside of the commuting zones for towns with a population of 10,000 or more (Mendelson & Bollman, 1998). The MOHLTC and RST definitions classify a similar number of Ontarians as rural (1.9 million and 1.6 million people, respectively). Thus, these similarities indicate that using the MOHLTC definition may enable cross-definition comparisons between various rural contexts, provincially and nationally. As such, the MOHLTC rural definition may facilitate transferability of study findings in similar rural populations and contexts elsewhere in Canada.

1.1.2 Rural Male Farmers’ Health Concerns

Farmers often work longer hours than non-farmers, and rely on family, friends and seasonal labourers to assist with the work required on farms which increases exposure to occupational hazards characteristic to the agricultural industry (Canadian Agricultural Injury Reporting, 2011, 2016; Turner & Gutmanis, 2005). For example, extensive work with animals exposes farmers to zoonotic diseases and accidental injury; constant exposure to the elements increases risks of asthma and stroke; long work hours during peak seasons such as spring seeding and fall harvest put farmers at risk for stress- and fatigue-related injury; and prolonged use of farm machinery can cause musculoskeletal issues, hearing loss, and chronic and fatal illness from constant chemical exposure (Canadian Agricultural Injury Reporting, 2016; Turner & Gutmanis, 2005).

Injured farmers require immediate access to direct trauma care to reduce comorbidity and mortality risks, however Haas and colleagues (2012) found that patients from Ontario’s rural regions and those over 65 years old are first directed to non-trauma centres for assessment. These findings are especially troublesome for older farmers in Ontario as
their likelihood of receiving timely specialized trauma care post-injury is relatively low, which increases their risks of comorbidities or mortality (Haas et al., 2012). Limited trauma care access for rural Ontarians reflects an overarching theme of limited rural healthcare in Ontario as services continue to be downsized and centralized (Fleet et al., 2015; Hameed et al., 2010). Healthcare cutbacks have created a smaller rural healthcare workforce that is experiencing shortages in a number of healthcare professionals such as physicians, nurses, and dieticians (Kaasalainen et al., 2014; Pitblado, 2012), which can lead farmers to rely on other sources for health information and treatment such as family members, neighbours, veterinarians, and naturopaths (Leipert, Matsui, Wagner, & Rieder, 2008; Wathen & Harris, 2007).

Current evidence suggests some farmers are aware of the potential occupational health risks posed to them and their families, however rural cultural norms that value male independence and stoicism may prevent a large portion of illnesses and injuries from being reported (Coldwell, 2007; Connell, 2005; Courtenay, 2000). Other farmers may be unaware of reporting procedures or wish to avoid reporting health and safety issues for fear of workplace sanctions and economic penalty from government workplace safety agencies such as the Ontario Workplace Safety Insurance Board or Ministry of Labour (Hall, 2007; Turner & Gutmanis, 2005).

### 1.1.3 Health Information Seeking

In this dissertation, health information seeking is understood as the processes used to clarify concerns or uncertainties about a health-related decision (Lambert & Loiselle, 2007). HIS behaviours can be broadly categorized as monitoring and blunting (Miller, 1995; Rees & Bath, 2001; Williams-Piehota et al., 2009). When monitoring, an individual will aim to seek any information related to the health concern they are addressing, regardless of how positive or negative the information may be. In contrast, when blunting an individual will access the minimum amount of information that they deem to be useful and required to enable them to cope with a perceived health concern. Men are more likely than women to adopt a blunting approach to HIS as a way to minimize the time spent engaging in non-masculine activities (Evans, Frank, Oliffe, & Gregory, 2011; Herbst, Griffith, & Slama, 2014) and may rely on their healthcare providers as their primary health information source (Addis & Mahalik, 2003; Galdas,
Cheater, & Marshall, 2005; Williams-Piehota et al., 2009). Additionally, rural men are noted to avoid healthcare interactions as a method to avoid health information (Spleen, Lengerich, Camacho, & Vanderpool, 2014). Since developing effective health information requires an in-depth understanding of the target population’s valuing of and approach to health information (Burkell, 2004), consulting rural men about their health information needs could help to inform the development of effective future health communication strategies.

Limited research has been conducted to understand rural Canadians’ HIS processes (Harris et al., 2006; Harris, Veinot, Bella, & Krajnak, 2012; Leipert, Matsui, Wagner, & Rieder, 2008; Wathen & Harris, 2007), and no research has been found that has investigated specific processes that underlie RMFs’ HIS. Since approximately 71% of Canadian farmers are men (Statistics Canada, 2017), uncovering processes used by RMFs to seek health information and factors that can affect those HIS processes could inform future policies and practices designed to prevent and reduce agriculture-related injury, morbidity, and mortalities, and help create health information resources that promote RMF health and meet other health needs of rural male farmers.

1.2 Research Purpose

The purpose of this dissertation was to explain processes by which RMFs in southwest Ontario seek heath information and factors that affect these processes, and how RMFs’ health and health needs were included in healthcare policy and planning documents in Ontario. To effectively address this research purpose, two separate qualitative studies were conducted and are presented in chapters three and four of this dissertation.

1.3 Research Questions

The first qualitative study, presented in chapter three of this dissertation, is a retrospective analysis of selected Ontario health policy and planning documents. This study sought to explain how RMFs’ health and health needs were included in healthcare policy and planning documents in Ontario in order to establish the political context in which RMFs in southwest Ontario seek HI. This study was guided by the following questions:
1. How and in what contexts are RMFs discussed in health policy and planning documents in Ontario?

2. How do health policy and planning documents in Ontario include RMFs in their recommendations?

The second qualitative study, presented in chapter four of this dissertation, is an integrated photovoice-constructivist grounded theory study that aimed to explain processes by which RMFs in southwest Ontario seek health information. This study was guided by the following questions:

1. What are processes that explain how rural male farmers in southwest Ontario seek health information?

2. How do social, cultural, and other rural contextual factors influence how rural male farmers in southwest Ontario seek health information?

## 1.4 Relevance to Health Information Science

This research presents processes which underlie how rural male farmers seek health information and how these processes are influenced by rural social, cultural, geographical, and political factors. In doing so, this dissertation engaged with an understudied and difficult to reach population in RMFs to uncover how their approaches to HIS resembled monitoring and blunting in different contexts, their preferred methods for engaging with health information, and how their HIS processes were innately linked to their masculine identity. Furthermore, this research provides insight into how RMFs’ health and health needs are included in Ontario health policy and planning documents, which may contribute to the availability, or lack thereof, of health information resources designed specifically for RMFs.

## 1.5 Methodology

### 1.5.1 Retrospective Policy Analysis

Chapter three of this dissertation, entitled *Tokenism and Mending Fences: How Rural Male Farmers and Their Health Needs are Discussed in Health Policy and Planning*
Documents (Hiebert et al., 2018) utilized a retrospective policy analysis methodology to examine how RMFs and their health needs were included in selected health policy and planning documents in Ontario. A retrospective policy analysis enables researchers to evaluate the content of extant policy documents to determine if and how specific issues and/or populations are accounted for in a policy agenda (Buse, Mays, & Walt, 2012). The retrospective analysis of health policy and planning documents presented in this dissertation focused specifically on those published by Ontario government organizations (Ontario Ministry of Health and Long-Term Care), organizations acting on their behalf (local public health units), and non-government organizations which aim to influence healthcare structures to benefit specific populations. In focusing specifically on health policy and planning documents, researchers can gain a better understanding of their content, intended outcomes, or the actors involved and excluded from their creation (Buse et al., 2012; Cheung, Mirzaei, & Leeder, 2010). Thus, this approach was well-suited for a study examining how and in what contexts RMFs were included in health policy and planning documents in Ontario, as it enabled the researcher to understand: the content of the documents, the extent to which RMFs were included or excluded from their creation, and the types of organizations concerned with RMFs and their health needs.

1.5.2 Integrated Constructivist Grounded Theory-Photovoice

Chapter four of this dissertation, entitled Normalizing and Navigating: How Rural Male Farmers in Southwest Ontario Seek Health Information (Hiebert, Leipert, Regan, Burkell, & Frank, in progress), combined constructivist grounded theory (Charmaz, 2014) with photovoice methodology (Wang & Burris, 1997) to examine processes by which RMFs in southwest Ontario seek health information and how they are influenced by rural social, cultural, and contextual factors.

1.5.2.1 Constructivist Grounded Theory Methodology

This study utilized a constructivist approach to grounded theory (Charmaz, 2014). The emergent theory produced in a constructivist grounded study tells a story about the participants and the social processes that affect their lives (Hallberg, 2006), such as those behind RMFs’ HIS and how they are shaped by social, cultural, and contextual
characteristics of their rural setting. A constructivist grounded theorist holds knowledge as co-constructed by the researcher and participants, meaning the emergent theory is heavily contextualized by the participants’ and researchers’ experiences and interpretations (Charmaz, 2014). One of constructivist grounded theory’s greatest methodological strengths is its flexibility to be used by researchers of various epistemological and ontological positions (Charmaz, 2014). For example, a feminist lens was applied to a constructivist grounded theory approach used to explore women’s experiences with health in rural and remote Australia to frame the study in terms of women’s subjugation (Harvey, 2014). Additionally, masculinity theory was used to frame a constructivist grounded theory exploring men’s gender identities’ relationship to their provision of informal care (O’Lynn, 2010). Therefore, since gender can be embodied in a variety of ways (Connell, 2005; Little, 2006) a constructivist grounded theory methodology was an ideal approach to understand how relevant personal factors, such as RMFs’ gender identities, influenced their HIS due to the inherent assumption of individual realities embedded within constructivism (Crotty, 1998).

1.5.2.2 Photovoice Methodology

With its origins in photo novella research that featured participant-produced photographs to illustrate women’s narratives of oppression in rural China (Wang, Burris, & Ping, 1996), photovoice is an inherently critical research methodology. Photovoice gives participants an opportunity to capture and discuss their own photos to enhance their understanding of their community in ways that may influence political change (Wang & Burris, 1997). The goal of photovoice is threefold: to record and reflect on strengths and weaknesses of a community; to promote critical dialogue through discussions of photographs; and to reach policymakers to influence political action (Wang & Burris, 1997). To accomplish these goals, photovoice participants take and use their own photographs to discuss their health, social, or other situations and learn about strategies for emancipation in their own terms, a teaching process known as the pedagogy of the oppressed (Freire, 1970). Such teaching processes can foster a critical consciousness in participants that helps enable them to engage in their own interventions and transform their social world (Crotty, 1998). Photovoice methodology has been used in Canadian rural communities to promote a critical dialogue about the importance of community
organizations, such as curling rinks and churches, for individuals’ health and wellbeing (Leipert et al., 2011, 2012; Plunkett, Leipert, Ray, & Olson, 2015). Thus, using photovoice methodology to examine the processes by which RMFs seek health information may enable participants to become more aware of how their rural contexts or masculine identity as an RMF affect their health and HIS, which may motivate them to create new methods of seeking health information that may better meet their needs and fit their rural context.

Combining constructivist grounded theory with photovoice methodology can generate deep understanding of processes that underlie RMFs’ HIS by providing participants with multiple modes to convey their HIS processes that work within and around rural cultural norms that value men’s independence and stoicism (Courtenay, 2006). For example, previous research has (Oliffe & Bottorff, 2007; Oliffe, Bottorff, Kelly, & Halpin, 2008) successfully used photovoice to engage men in discussions about potentially sensitive subjects, such as their own health and masculinity. During these studies male participants interacted with and explained their own photos to address the researchers’ questions regarding their health and gender. This study integrated photovoice with constructivist grounded theory to facilitate participant engagement in potentially sensitive lines of questioning, such as how their HIS was influenced by their social position as a rural male farmer.

1.6 Background of the Researcher

Growing up in a small farm town in southwest Ontario I was raised within a culture that valued men who are “macho”, can hide their pain and emotions, and are able to fend for themselves, which is how I understand rural culture and what it means to be a man in a rural area in southwest Ontario. I have shed some of the beliefs about what it means to be a man, such has needing to hide my emotions from others, since I moved to the city for university; but that background, those cultural imperatives of how a man ought to behave, the importance of independence and pride, those are still very much a part of who I am.

My background as a rural male was an asset when conducting this research, especially when generating rapport with my participants. I was able to understand and relate to their rural geographical, political, and social contexts, and when appropriate share information
about myself to demonstrate my “insider-ness” as a rural male. In addition to demonstrating my “insider-ness” as a rural male, sharing personal information helped me to establish an atmosphere and rapport where it was acceptable and more comfortable for participants to discuss health and other personal struggles with men, a behavior often viewed as being outside the realm of acceptable masculine behavior for RMFs (Brandth & Haugen, 2005; Coldwell, 2007). Fostering such an environment and developing an effective research relationship with participants was crucial to developing and engaging in relevant questions and in gaining a rich understanding of participants’ HIS processes and factors that affected these, as it helped the participants feel more comfortable disclosing personal and other sensitive information (Charmaz, 2014; Tracy, 2010).

My rural background could have also limited how I perceived my participants’ health experiences, gender performances, and HIS processes, which would have reduced the trustworthiness of this research had I allowed my experiences to skew how participant responses were collected, interpreted, and presented (Tracy, 2010). Approaching all participants and their data with an open mind and accepting their experiences of rurality as equally real as my own helped to manage these effects. Reflexive journaling (Ortlipp, 2008) also helped in this process by providing a space for my own thoughts and opinions on the data collection and analysis processes. Member-checking, by presenting emerging analytic insights to several participants across several interviews, helped me ensure the emerging grounded theory resonated and fit with the rural experiences of my participants. As noted in chapter four, most of my participants viewed themselves as “straightforward” and they clearly stated when they agreed or disagreed with the information I presented them. Finally, my dissertation committee members were instrumental to ensuring I reflect on biases, as they were able to consider data collection, analysis, and reporting issues that I had become unaware of due to my immersion in the data.

1.7 Significance of this Research

This dissertation has contributed significant new knowledge about processes used by RMFs in southwest Ontario to seek health information and factors that affect those processes, and how RMFs, their health, and health needs are included in Ontario health policy and planning documents. A strength of this research lies in the focus on and inclusion of RMFs, an understudied rural population who Ontario health organizations
have difficulty engaging in discussions about their health and health information seeking needs (The Ontario Rural Council, 2008). Engaging RMFs in such discussions was especially significant given that rural gender norms often embodied by RMFs prioritize privacy and resistance to openness with others as a method to demonstrate their toughness and value as an RMF (Herbst, Griffith, & Slama, 2014; Liepins, 2000). This resistance was evident during recruitment for the constructivist grounded theory-photovoice study presented in chapter four. For example, when meeting Steve (pseudonym), a potential participant, in a coffee shop to discuss the study, he indicated that he was very interested to participate but that he was meeting his friends momentarily and asked to be called later in the day. When Steve was called later in the day, he indicated that, after discussing the study with his friends, he changed his mind about the study and that none of his friends were interested either. Thus, that this research was able to engage some RMFs in in-depth discussions about their health, health information seeking, and gender, represents a significant contribution to future research with RMFs, a reclusive rural population.

This dissertation also importantly advances the limited knowledge base regarding rural male farmers’ health information seeking processes. It shows that RMFs’ HIS processes are influenced by stereotypical constructions of rural men as tough, stoic, hard-working individuals whose masculine performance depends on physical displays of strength. It also demonstrates that close female social supports, such as spouses, daughters, or sisters, are often relied upon to seek and interpret HIS for RMFs who do not wish to or cannot seek HI for themselves. Finally, this research frames the importance of rural cultural and social norms to RMFs’ HIS and health-related decisions. In doing so policy makers, practitioners, agricultural interest groups, and rural communities may be better equipped to design healthcare services, health information resources, and health promotion initiatives that account for cultural and social norms that may be absent from or poorly represented in current rural policies and healthcare practice standards.

The integration of constructivist grounded theory and photovoice methodologies into a unified approach facilitated in-depth meaningful explanation of RMFs’ HIS processes and cultural, social, personal, and rural contextual factors that affect them. This approach also demonstrated the utility of using photovoice with RMFs for future research into their
and other rural men’s health, HIS, and other health-related behaviors. Thus, research presented in this dissertation has established a beginning for future research into the health and health-related behaviors of RMFs’ and other subpopulations of rural men.
1.8 References


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CHAPTER 2
Rural Men’s Health, Health Information Seeking, and Gender Identities:
A Conceptual Theoretical Review of the Literature

A version of this chapter appears in American Journal of Men’s Health, 12(4) and is included in this dissertation with the publisher’s permission (see Appendix A).

Recent shifts in Canadian healthcare beginning as early as 2009 have focused on information dissemination as a means to promote population health and wellbeing (Taylor, 2014). This emphasis on information dissemination carries an underlying assumption that greater availability of information translates to well-informed patients who can better assess their own risks and manage their own health (Harris, Wathen, & Fear, 2006). Limited research has been conducted to understand rural Canadians’ health information seeking experiences (Harris et al., 2006; Harris, Veinot, Bella, & Krajnak, 2012; Leipert, Matsui, Wagner, & Rieder, 2008; Wathen & Harris, 2007), and no known research has investigated the specific experiences of rural men’s health information seeking. Therefore, this paper will present the results of a conceptual theoretical literature review that explored how heterosexual non-aboriginal rural men seek health information, and how this is influenced by different rural contexts and gender identities.

First, key components to a discussion of Canadian rural men’s health information seeking will be contextualized to highlight the challenge of defining rurality, gender differences in health outcomes and service utilization, and challenges and opportunities of healthcare delivery in a rural setting. Next, health information seeking will be operationalized as a specific information seeking practice that incorporates perceived personal knowledge, personal emotions and coping responses, with the use of formal and informal social networks. Finally, rural gender identities will be examined using a brief description of leading masculinity theories to frame how socially constructed rural gender ideals dominate both rural and urban culture. Following the conceptualization of core concepts, each will be included in an integrated discussion to illuminate how rural men’s health information seeking experiences are influenced by and reflected in rural cultural norms and social constructions of gender. Women’s central role in health information seeking in
a rural context will be included in this integrated discussion as their health information seeking processes may influence rural men’s access to health information.

2.1 Literature Search Strategy

This conceptual theoretical review covers various aspects of rural men’s health information seeking processes due to its potentially complex nature. Literature was retrieved from the following databases: LISTA, Library Literature & Information Science, PubMed, CINAHL, PsycINFO, Google, Scopus, and Web of Science. Scopus, Google, and Web of Science were particularly relied on for grey literature. Combinatory Boolean operators were used to ensure literature contained at least three of the following search terms: rural, health, men’s, information, seeking, information-seeking, and healthcare access. The literature search was restricted to articles, reports, and books published since 2005. Older sources were consulted if they appeared to be seminal works, which was indicated by frequent citations across the literature sample. Seventeen seminal works were included in this review, and were selected due to their importance to their substantive field (rural health, health information seeking, or rural gender identity) as demonstrated by extensive citation in other works published since 2005. Antecedent searches were carried out through each article to capture any relevant literature that may have not been retrieved during the primary database searches. Each title and abstract was reviewed to assess its relevance to rural men’s health information seeking. Ninety-one sources that addressed the intersection of health in rural Canada, rural men’s health patterns, access to rural healthcare services, health information seeking, gendered experiences of health information seeking, and rural gender identities were retained and reviewed. The literature was grouped into three broad themes that will serve as a framework for this integrated discussion of rural men’s health information seeking: 1) Health in Rural Canada, 2) Health Information Seeking, and 3) Rural Gender Identities.

2.2 Health in Rural Canada

Prior to describing the health status and utilization patterns of rural men, and the challenges and opportunities characteristic of rural healthcare delivery, the challenges of defining rural must be noted.
2.2.1 Defining Rural in Canada

In Canada, common conceptualizations of rural areas are typically characterized by at least one of the following features: population size, density, or distribution; ability to contribute to and access labour opportunities; being located outside of an urban zone; or having a rural postal code (du Plessis, Beshiri, Bollman, & Clemenson, 2002). Additionally, the Ontario Ministry of Health and Long-Term Care (MOHLTC) (2012) has drafted an Ontario-specific definition of rural, which considers an area rural if it has “a population of less than 30,000 [and is] greater than 30 minutes away in travel time from a community with a population of more than 30,000.” (2012, p. 8). This MOHLTC definition accounts for both community population and travel time to a larger centre where access to appropriate care is ostensibly increased, which makes it an appropriate classification system for planning the allocation of rural health resources. Such multiplicity makes definition choice a crucial step to the research process, as different definitions can provide drastically different pictures of and implications for rural populations and contexts.

Compared to urban regions, rural regions in Canada typically have a higher population of seniors and a lower population of people aged 30-59 years (CIHI, 2006; DesMeules et al., 2012) which can lead to deteriorated social support networks (Ramsey & Beesly, 2012) and increased strain on community-based volunteer organizations (Leipert et al., 2011). Rural populations are also categorized as having lower educational attainment, lower average income, and higher unemployment rates compared to urban populations (CIHI, 2006; DesMeules et al., 2012); which, when combined with transportation and healthcare access issues common in rural areas, create poverty, health, and other marginalizing experiences that amplify the effect of geographic isolation unlike that found in urban centres (Standing Senate Committee on Agriculture and Forestry, 2006). Despite such adverse social effects of rural areas, rural communities can have greater social cohesion which may generate higher feelings of belonging than urban areas (CIHI, 2006; DesMeules et al., 2012). Social cohesion may be utilized by rural communities to support those experiencing poverty (Standing Senate Committee on Agriculture and Forestry, 2006), improve the health and wellbeing of its members through sport and recreation (Leipert et al., 2011), utilize capital and promote health aging (Ramsey & Beesly, 2012).
and aging in place for those with chronic conditions (Duggleby et al., 2011), and improve primary care experiences (Lamarche, Pineault, Haggerty, Hamel, & Gauthier, 2010).

### 2.2.2 Rural Canadian Men’s Health Patterns

Place is well documented as an influential health determinant that both protects and exposes an individual to risk for a variety of health outcomes (Canadian Institute for Health Information [CIHI], 2006; Kulig & Williams, 2012; Standing Senate Committee on Agriculture and Forestry, 2006). For example, compared to urban residents, rural dwellers are less likely to be recreationally active or eat enough fruits and vegetables, and are more likely to smoke or be exposed to second hand smoke with men experiencing higher incidence rates of smoking and exposure to second hand smoke than women (CIHI, 2006; Kitty, 2007; Standing Senate Committee on Agriculture and Forestry, 2006). Limited recreational time for rural populations could be attributed to barriers such as limited access to recreational facilities, high costs to participation, geographical isolation, or transportation issues (Humpel, 2002; Walia & Leipert, 2012). Additionally, higher smoking rates in rural men could be a stress coping mechanism (Lohan, 2007; Oliffe, Bottorff, Kelly, & Halpin, 2008), or an attempt to embody dominant male gender roles and norms depicted in film, television, and advertisements (Courtenay, 2000, 2006; Law, 2006).

Furthermore, an array of mortality rates increase for men with rurality, including: all-cause, circulatory disease, lip cancer, respiratory disease, diabetes, injury-related, poisoning, and motor vehicle accidents (CIHI, 2006). Rural areas also have higher rates of suicide, with men experiencing higher rates than women (CIHI, 2006; Komiti, Judd, & Jackson, 2006). The key national CIHI (2006) study, How Healthy are Rural Canadians?, failed to identify significant differences between rural and urban mental health disorders to explain the differences in suicide mortalities; in fact, the study demonstrated rural residents carry less stress and have less difficulty in their daily lives than urban residents. High rates of suicide in rural areas may indicate the strength of stigma surrounding mental illness and the access patterns of mental health services in rural communities (Komiti et al., 2006) as people continue to suffer in silence and convince themselves and others they are not ill. This trend may also be associated with rural social constructions of health which consider someone, particularly men, to be healthy as long as they can still
work (Buehler, Malone, & Majerus-Wegerhoff, 2010; Courtenay, 2006; Roy, Tremblay, & Robertson, 2014).

Despite the negative health outcomes described above, living in rural areas may provide protective health benefits as they have lower cancer incidence rates for all cancers except lip cancer and prostate cancer (Canadian Institute for Health Information, 2006; DesMeules et al., 2012; Fogleman, Mueller, & Jenkins, 2015). Living in rural areas closest to urban centres appears to have a protective effect on senior men and women’s all-cause mortality rates, as they are lower than urban and more rural areas. This may be a reflection of near-urban rural populations reaping the benefits of accessible primary healthcare and other health sustaining resources such as dental services, specialty healthcare, or recreation centres that are found in urban centres, while simultaneously living in a low-stress rural environment. Near-urban rural areas also boast the lowest mortality rates for men’s circulatory disease, men’s respiratory disease, and men’s lung cancer (Canadian Institute for Health Information, 2006; DesMeules et al., 2012). Rurality’s effect on health must not only be understood as the only influence on physical and mental health outcomes, as health is also affected by the delivery of formal and informal healthcare services in rural areas.

### 2.2.3 Rural Healthcare Services

In addition to physician shortages, rural Canada is experiencing shortages in 24 of 27 healthcare occupations such as nurses, dentists, pharmacists, optometrists, surgeons, and specialists (Pitblado, 2012). Such shortages in health human resources create inequitable access to care for rural populations (Federal/Provincial/Territorial Ministers Responsible for Seniors, 2008; Kitty, 2007), which influences their aforementioned high rates of injury-related mortality (Haas et al., 2012; Hameed et al., 2010). Due to health human resource shortages, rural populations have access to and use a different and narrower range of services compared to their urban peers. Rural residents visit the hospital more regularly than do residents of urban areas (Pong et al., 2012), reflected in 50% higher hospital discharges rates in rural Ontario (Pong et al., 2011). This service use pattern could be attributed to the fact that significantly higher proportions of rural inhabitants report not having a family physician or nurse practitioner (Pong et al., 2011) due to recruitment, retention, or other issues related to rural contexts such as geographic
isolation or cultural changes (Freeman et al., 2013; Wenghofer, Timony, & Gauthier, 2014). When a physician is available in a community, rural men are the group least likely to seek a consultation (Pong et al., 2011), and they have been noted to actively avoid healthcare interactions in general (Spleen, Lengerich, Camacho, & Vanderpool, 2014). Compared to both urban men and women, and rural men, rural women are the most likely to consult with a physician (Pong et al., 2011), and will actively seek healthcare when they believe it is needed (Spleen et al., 2014).

While access to physicians is an important factor in determining equitable healthcare service distribution, the role of nurses and nurse practitioners in rural service delivery, health promotion, and information dissemination to rural populations cannot be ignored. Rural nurses play a pivotal role in providing care to the geographically and socially isolated, and are integral components in rural patient-centred care (Kaasalainen et al., 2014; Leipert, Regan, & Plunkett, 2015; Leipert, 2010) and recent initiatives that promote aging in place and in-home palliative care (Federal/Provincial/Territorial Ministers Responsible for Seniors, 2008; Kaasalainen et al., 2014). Despite their integral part in continuity of care, rural nurses’ perspectives are often ignored in lieu of financial considerations, system reorganizations, and gender and power differentials common in rural healthcare environments (Leipert et al., 2015). Thus, the rural nursing workforce is beginning to experience burnout as they must overcome access barriers such as geographic distance, as well as lack of support from healthcare management (Kaasalainen et al., 2014). Rural nurse burnout will intensify the pressure on informal care networks in rural areas to fill gaps in service delivery (Crosato & Leipert, 2006). Thus, in order to understand the evolving nature of rural healthcare delivery it is imperative to understand how informal networks generate and share health information.

### 2.3 Health Information Seeking

Although there is neither a formalized nor universally agreed upon definition of health information seeking (HIS), Lambert and Loiselle (2007) attempt to consolidate the field by offering a generalized definition that describes HIS as, “ways in which individuals go about obtaining information, including information about their health, health promotion activities, risks to one’s health, and illness” (p. 1008). Central to this conceptualization of HIS is the notion of information networks that an individual must draw on to obtain
information about their health and available healthcare resources. Borgatti and Cross (2003) argue that when an individual relies on social networks for information exchange, they are most likely to develop ties with those whom they perceive to have traits similar to their own. Such social ties that develop into close personal relationships or friendships are known as strong ties (Granovetter, 1973). Strong ties are beneficial for tacit knowledge transfer due to the close bonds that exist between those involved, such as between a master plumber and his apprentice. However, due to the high number of shared information sources, strong ties can act as an insular network that limits the addition of new information sources and reflects the knowledge and perspectives that already exist in the relationship. To best access new information, members from a social network built on strong ties may connect with someone from a distant part of the social network (Borgatti & Cross, 2003; Granovetter, 1973).

Granovetter (1973) characterizes distant members of an individual’s social network as weak ties, which can typically be sports team members, work associates, or neighbors. As such, weak ties still share a connection with an individual, however they are viewed as acquaintances instead of close friends (strong tie) and are not a part of an individual’s immediate social network; thus they will have access to information that the individual’s strong ties might not (Granovetter, 1973). In this manner, weak ties are crucial for bridging social networks to facilitate information exchange as they represent potential connections to other networks of strong ties (Borgatti & Cross, 2003). For example, curling organizations in rural communities foster social cohesion through strong interpersonal relationships (that is, strong ties) (Leipert et al., 2011) and could thus be valuable sites for information transfer. However, curling rink members may cease to encounter much new information if distant social actors (weak ties) are not consulted as well; for example, members of a curling rink from a neighboring community, or members from a different organization from the same community.

Taken together, the set of all of the possible sources an individual may consult constitutes their information field (Johnson, 2003). How an individual interacts with their information field is context dependent, and is influenced by factors such as cultural norms, a person’s social situation, familiarity with information sources, accessibility of information sources, and the type of information sought (Harris et al., 2012; Johnson,
2003; Lambert & Loiselle, 2007). A person’s information field provides a starting point for their information seeking process, and ultimately defines their daily sphere of information exposure (Johnson, 2003). Savolainen (1995) argued how a person’s life is ordered by work and cultural factors will influence what information they are exposed to and will thus frame how they seek information in everyday life; McKenzie (2003) expanded this idea by characterizing four distinct information seeking practices that are used in everyday life. First, active seeking involves purposefully seeking out information and potential connections to new information regarding a specific issue. Second, active monitoring involves consciously scanning one’s environment for information regarding a specific issue, but avoiding direct efforts to seek specific information. Third, passive or non-directed monitoring occurs when an individual relies on chance encounters with information in their environment; the absence of conscious awareness to receive new information differentiates this from active scanning. Finally, proxy searching involves vicariously searching for information about an issue through an intermediary channel such as a friend or family member (McKenzie, 2003). In terms of seeking health information, using an intermediary search strategy such as proxy searching can complicate the search, information synthesis, and decision making processes for individuals with limited health literacy since the information seeker must appraise the intermediary’s opinions in addition to the health information presented (Abrahamson, Fisher, Turner, Durrance, & Turner, 2008; Kuhlthau, 1991).

People who search for health information on another’s behalf have been described as proxy searchers (McKenzie, 2003), lay information mediaries (Abrahamson et al., 2008), and health info(r)mediators (Wyatt, Harris, & Wathen, 2008), with each type of information searcher implying increasing involvement in the information search and decision making process. For example, a proxy searcher will often find and deliver information with little – if any – interpretation, usually at the information seeker’s request (McKenzie, 2003). A lay information mediary is most often a well-educated female informal caregiver who is looking into a specific health condition or service (Abrahamson et al., 2008). In rural areas, women are typically more educated than men (Canadian Institute for Health Information, 2006), making them more likely than men to act as a lay information mediary, which means a rural man’s HIS may depend on the ability of his wife, partner, or other female family member to seek information.
Additionally, lay information mediaries are more involved in the search process than proxy searchers as they attempt to find information that the seeker will understand, however they will usually not offer an interpretation of it. Health info(r)mediators are the most involved searchers as they transform information into a usable form for the seeker in a manner that acknowledges the seeker’s sociocultural context and the multiple social influences that affect the information exchange (Wyatt et al., 2008). The aim of health info(r)mediators’ information synthesis and exchange is to influence positive health behaviour change for the information seeker, meaning health info(r)mediators must be aware of the health information seeker’s goal, coping attitudes, financial status, and emotional involvement in the HIS process (Wyatt et al., 2008). The advancement of Internet-based information dissemination technologies may be an important factor in determining how rural populations access health info(r)mediators and health information, as such initiatives can help rural populations overcome the negative effects that geographical isolation can have on healthcare access (Webb, Joseph, Yardley, & Michie, 2010). For rural men, additional factors that affect the information exchange may include financial status, geographical isolation, and the nature of their health condition (Courtenay, 2006; Standing Senate Committee on Agriculture and Forestry, 2006). Examples of health info(r)mediators may include health literate friends and family members, medical librarians, social workers, or health professionals such as nurses, physicians, physician assistants, or pharmacists.

### 2.3.1 Gendered Experiences of HIS

Many authors agree that HIS is a gendered, goal-oriented and purposeful process (Addis & Mahalik, 2003; Anker, Reinhart, & Feeley, 2011; Hoyt, Conger, Valde, & Weihs, 1997; Lambert & Loiselle, 2007; Wathen & Harris, 2007). Health information seeking occurs in three main contexts: coping with a health threat, participation in healthcare decisions, and engagement in preventive health behaviour or health behaviour change (Lambert & Loiselle, 2007). When coping with a perceived threatening health issue, individuals will often seek information about their health issue by monitoring or blunting relevant health information (Rees & Bath, 2001). Individuals monitor a perceived health threat by accessing as much information about their health issue as possible, regardless if it conveys positive or negative details, while individuals blunt information by accessing
the least amount of information to address their concerns (Williams-Piehota et al., 2009; Williams-Piehota, McCormack, Treiman, & Bann, 2008). Men are most likely to blunt potentially threatening health information by avoiding interactions with healthcare professionals and information sources (Addis & Mahalik, 2003; Galdas, Cheater, & Marshall, 2005; Hoyt et al., 1997). For rural men, the perception that more health information could hasten their return to work appears to be a major factor determining how readily they will seek health information (Roy et al., 2014). Additionally, some rural men rely on a close peer-confidant for health information as these confidants are likely aware of social and cultural expectations regarding masculine gender performances in their rural area (D. Gorman et al., 2007); as such rural men’s peer-confidants may embody Wyatt et al.’s (2008) health info(r)mediation. In contrast, women have an affinity to monitor their own and others’ (often male relatives) health situations (Hoyt et al., 1997; Leipert et al., 2008; Wathen & Harris, 2007).

Seeking health information to participate in healthcare decision-making follows a similar gendered pattern, since women are more likely to acknowledge and engage with their illness (Kilpatrick, King, & Willis, 2015), which increases their likelihood of accessing healthcare services (where participation in decision-making often occurs) (Pong et al., 2011). The limited portion of men who seek healthcare on a regular basis tend to consider a variety of sources in addition to their physician – such as pharmacists, nurses, and friends – as valuable sources of health information (Witty, White, Bagnall, & South, 2011). This is consistent with recent studies that revealed the importance of pharmacists to rural women’s health information practices (Leipert et al., 2008; Wathen & Harris, 2007), which indicates the use of a broad range of health information sources may be applicable to rural men’s HIS since this behaviour has been observed independently in men and in a rural setting. Unfortunately, the group of men described by Witty et al. (2011) may be an anomaly as participants were already actively involved in treatment for a health condition. In general, men’s awareness of health issues and acceptance of seeking help may be perceived as feminine behaviour (Evans, Frank, Oliffe, & Gregory, 2011; Lohan, 2007), which may help explain men’s widespread aversion to help seeking as this process may challenge their embodiment of masculinity (Galdas et al., 2005). In fact, recent evidence suggests that men feel their gender identity is threatened by the encounter with a physician regardless of the physician’s sex, since this may lead them to
feel they no longer possess control over their own life (Oliffe, 2009; Oliffe et al., 2013). This gendered nature of health and health information practices is also embedded in traditional rural values (Coldwell, 2007), and rural women often take on the role of a primary health info(r)mediator for their family (Harris & Wathen, 2007; Wathen et al., 2006; Wyatt et al., 2008); however, to properly discuss this social phenomenon and the gendered nature of rural HIS, rural gender identities must first be discussed.

2.4 Rural Gender Identities

Traditional dichotomized gender norms permeate rural social structures in Western cultures around the world such as Norway (Brandth & Haugen, 2005), New Zealand and Australia (Liepins, 2000), the United States of America (Barlett, 2006), Ireland (N. Gorman, 2006), and Canada (Reed, 2003). In a traditional rural culture, gender orders are embedded in power relations, financial activity, and social networks to privilege the man’s role in family and societal operations, while often marginalizing the work done by women (Bock, 2006; Morris & Evans, 2001; Panelli, 2006). Stereotypes often suggest that rural men should perform acts of bravery and physical strength to demonstrate their masculinity, and are expected to seek employment that facilitates the enactment of their physical prowess (Courtenay, 2006). In contrast, social and cultural norms often suggest that rural women should stay at home and care for the family (Heather, Skillen, Cross, & Vladicka, 2012; Kilpatrick et al., 2015), and those who attempt to join traditionally masculine work environments may be met with systemic barriers that prevent or at the very least limit their involvement in the field (Reed, 2003). Social constructions of gender such as those embodied by traditional rural values expressed here essentialize gender to reduce a person’s abilities and traits to a function of their sex (Coles, 2009; Hearn, 2004; Morris & Evans, 2001).

The social and cultural norm of masculine domination in rural cultures can be understood by framing it according to Connell’s (2005) theory of masculinity, which critically considers historical discourses that dichotomize masculine and feminine to gain a better understanding of how to effectively challenge modern gender discourses. As with the conceptualizations of rurality and HIS, no single definition for masculinity is agreed upon; however, Connell’s definition of masculinity has become widely accepted in health research, and is thus offered here:
Masculinity, to the extent the term can be briefly defined at all, is simultaneously a place in gender relations, the practices through which men and women engage that place in gender, and the effects of these practices in bodily experience, personality, and culture. (2005, p. 71)

Gender is thus a fluid construction created by a person’s interaction with their environments. Due to its fluidity, it can be difficult to pinpoint the specific gender identities that coexist within a social network. However, Connell (2005) argues that a culturally idealized embodiment of masculinity, termed hegemonic masculinity, directs gender performances as it embodies currently accepted methods to legitimate patriarchal norms of male domination.

Most men will not occupy a space of hegemonic masculinity as this identity is reserved for the most idolized members of society such as professional athletes, actors, or successful businessmen (Connell, 2005). Rather, the largest portion of men can be described as enacting a complicit masculinity; that is, they seek to share various aspects of hegemonic masculinity, such as business prowess, physical capabilities, or domination over women, but their social position precludes their ability to achieve hegemonic status (Coles, 2009; Connell, 2005). Men who are neither hegemonically masculine nor complicit to the ideal are categorized as embodying either a subordinate masculinity that is assessed to be akin to a feminine gender performance, or a marginalized masculinity which embodies facets of society that contravene hegemonic norms (Connell, 2005; Connell & Messerschmidt, 2005).

The example provided at the beginning of this section on rural gender identities that highlighted rural men’s role as breadwinner and rural women’s role as homemaker exemplify how traditional rural norms typify a hegemonic masculinity; it is the rural hegemonic masculinity. Rural areas are also romanticized in popular culture and mainstream media as home to rugged men who conquer nature with brute strength (Brandth & Haugen, 2005; Law, 2006; Morris & Evans, 2001); this is the romanticized rural masculinity. The distinction between rural hegemonic and romanticized masculinities is an important one to be made to frame the remaining discussion: rural hegemonic masculinity is imbued with rural traditional values often resembling religious conservatism, while romanticized rural masculinity is an idealized masculinity based on colonial domination and settlement of the land.
Rural hegemonic and romanticized rural masculinities influence each other’s gender dynamics (Coles, 2009), however, the romanticized ideal often has more influence over rural hegemonic masculinity as it has the weight of Western culture at its side. For example, advertising campaigns construct a romanticized rural masculine gender identity as they portray rural life as rugged, untamed, individual, desirable, and masculine (Law, 2006). As a result, rural communities find themselves catering to the interests of urban tourists who seek this idealized rugged rural experience of hunting and camping in the woods, or visiting artisan farms (Brandth & Haugen, 2005; N. Gorman, 2006; Kitty, 2007). However, men in Norway’s enviro-tourism industry have had to incorporate compassion into their dominant embodiment of masculinity as this trait enables them to effectively communicate and relate to their customers’ requests (Brandth & Haugen, 2005). Thus, the romanticized rural ideal has successfully commodified rural masculinity, and in the process has influenced rural men’s gender performances, which may in turn influence rural men’s health and HIS behaviours as these are both intimately linked to a man’s gender identity (De Visser, Smith, & McDonnell, 2009; Galdas et al., 2005).

Rural is a unique place to perform gender, and it is therefore fitting that unique gender identities have developed to fit its various contexts. Due to masculinity theory’s inclusion of work and economic productivity as an influence over one’s gender identity (Connell, 2005), the following discussion will use the agriculture industry as a case study to highlight how rural hegemonic masculinities have evolved in response to interaction with romanticized rural ideals. The example provided at the outset of this discussion that highlighted traditional rural gender roles such as men being the breadwinner and women the homemaker not only captured rural hegemonic masculinity, it also framed a traditional agricultural gender identity, monologic masculinity (Coldwell, 2007). Farmers who embody monologic masculinity, a rural hegemonic masculinity related to agriculture, are characterized by traditional beliefs built on gender dichotomization and essentialism, strictly controlled gender performances, little attention paid to others’ needs, limited discussion of feelings and emotions, and a limited range of topics deemed appropriate for men to discuss (Coldwell, 2007; Peter, Bell, Jarnagin, & Bauer, 2000).

Monologic farmers usually adopt an industrial perspective of masculine success that approaches farming as a capital venture, establishes the man’s role as breadwinner, and
views women’s off-farm work as a failure on the farmer’s behalf to provide for his family (Barlett, 2006; Little, 2006). Industrial agricultural success builds masculine identities on neoliberal individualism and Western capitalism, which makes it easier for a farmer’s gender identity to be challenged in harsh economic climates. For example, the severe economic hardships experienced by farmers during the bovine spongiform encephalitis (Mad Cow Disease) outbreak in the Canadian beef herd caused intense psychosocial distress in male industrial cattle farmers due to an inability to provide for their families (Pletsch, Amartunga, Corneil, Crowe, & Krewski, 2012). Therefore, monologic industrial farmers embody a complicit masculine performance due to their role’s emphasis on gendered division of labour and men’s financial success, which predisposes men in this group to depression and anxiety over their masculine position if or when the economy slows (Barlett, 2006; Little, 2006).

Continued interaction between rural hegemonic masculinity and romanticized rural ideals has given rise to a new form of farming masculinity that seeks to engage men and women in partnerships in work and home life: dialogic masculinity (Coldwell, 2007). Dialogic farming masculinity is characterized by its limited need for control, and the incorporation of a broader conceptualization of masculinity that acknowledges the fluidity of gender (Peter et al., 2000). Additionally, dialogic farmers will engage in open dialogue with other men and women (generally their wives) about their mistakes, emotions, and fear of change (Coldwell, 2007). Dialogic farmers are associated with emerging sustainable farming versions of masculine success that focus on community-level prosperity over individualistic competition and market gains (Barlett, 2006). Dialogic sustainable farmers have noted they feel out of place when discussing farming issues with monologic farmers and often have difficulty voicing their opinions (Barlett, 2006; Coldwell, 2007). Being dismissed by their dominant monologic peers due to being open with their feelings, alongside the high value given to women’s involvement on the farm and home indicates dialogic farmers’ position as a subordinate masculinity that may move further away from the hegemonic to a marginalized masculinity depending on the farming context of the region (Coldwell, 2007; Liepins, 2000). Alternatively, if dialogic farmers’ peers begin to adopt a dialogic masculine identity, this subordinate masculinity may become established as a dominant male gender identity (Connell, 2005) and may eventually supplant
monologic masculinity as the hegemonic embodiment of masculinity in a specific rural context.

A third embodiment of masculine success in farming has been described as agrarian farming, and it offers a unique perspective into the nature of evolving gender identities and resistance to hegemonic masculinity’s controlling influence on individual gender performances. Agrarian masculinity appears to have combined aspects rural hegemonic (monologic) and romanticized (dialogic) masculinities to create a version of masculine success that merges industrial and sustainable perspectives (Barlett, 2006), such as merging the industrial focus of a farm’s economic success with a sustainable focus on family and community involvement. Agrarian success resembles a sustainable approach as an agrarian values farm life, family and responsible farming practices to ensure continued family use of the land. Additionally, agrarians view women as partners in home and business, and recognize a woman’s off-farm work as beneficial to the family’s wellbeing. However, similar to an industrial approach, an agrarian ensures farm success by accumulating wealth, although the aim is to pass it down to the next generation instead of buying better equipment for the sake of generating greater wealth (Coldwell, 2007; Little, 2006). The importance of attending and being involved in the rural church and local community organizations are perhaps the most influential factors that determine how a man embodying agrarian masculinity will seek health information (Barlett, 2006). Both the church and community organizations are noted to sometimes be influential to health maintenance, support, and promotion of rural women and communities at large (Kaasalainen et al., 2014; Plunkett, Leipert, Ray, & Olson, 2015), therefore participating in these groups and social settings may have similar benefits for agrarian masculine rural men. The discussion will now turn to an intersectional approach to understanding health, HIS, and gender identities in a rural context.

2.5 An Integrated Discussion of Rural Men’s Health Information Seeking

As demonstrated in this paper, the three core constructs of rural men’s HIS (rural health, HIS, and rural gender identities) are individually composed of dynamic definitions that describe the various contexts in which they occur. However, an integrated conceptualization of rural men’s HIS which acknowledges that this process is influenced
by a combination of social, cultural, and environmental factors is required to demonstrate how rural men’s health information seeking is driven by social gender norms and cultural values specific to rural contexts. To do so, how rural masculinity promotes and inhibits rural men’s HIS will first be discussed using empirical examples to contextualize the interaction. Then, discussion will focus specifically on dialogic masculinity’s potential to promote HIS in rural men due to its association with different rural social norms, namely social cohesion and the importance of informal social and formal care networks, and how they interact with masculine gender performances to guide rural men’s HIS experiences.

2.5.1 Rural Masculinity’s Benefits and Challenges to Rural Men’s Health Information Seeking

As previously discussed, most help-seeking behaviours have been categorized as feminine in Western culture (Evans et al., 2011; Lohan, 2007), which may prevent men who identify with hegemonic or complicit masculinities from engaging in health information seeking due to perceived negative repercussions to their gender identity (Addis & Mahalik, 2003; Wenger, 2011). This is especially true for rural men who embody monologic masculinity, as they may worry that seeking help will be perceived as sharing emotions with others (Addis & Mahalik, 2003; Coldwell, 2007; Roy et al., 2014), which violates the strict boundaries they set around gender performativity, which increases the likelihood that they will avoid healthcare entirely (Spleen et al., 2014) or to delay seeking care until physical symptoms limit their ability to work (Galdas et al., 2005; Oliffe et al., 2013). The romanticized rural ideal may be implicated in rural care aversion, as seeking healthcare is believed to indicate reduced independence and self-sustainability (Courtenay, 2006), which may reduce respect from peers and result in diminished recognition of masculinity by physicians (Mroz, Oliffe, & Davison, 2013). Furthermore, such romanticized rural ideals may promote risky behaviours among rural youth such as impaired driving (Little, 2006) or the engagement of unsafe farm practices (Barlett, 2006) that contribute to exorbitantly high rates of rural male’s injury-related mortality (CIHI, 2006).

Despite the barriers posed by hegemonic masculinity and the arguably negative overall effect on a man’s health resulting from limited HIS or help-seeking, hegemonic masculinity can be harnessed by health promotion programs to influence men’s health
behaviours. For health promotion messages to be effective, health issues must be framed in a manner that will not threaten the essence of a man’s own gender identity (Addis & Mahalik, 2003). For example, men often have difficulties seeking help for prostate related issues, and report feeling emasculated during recovery from prostatectomy due to impaired sexual function (Oliffe & Bottorff, 2007; Oliffe, 2009); therefore messages should be framed that help preserve their gender identity by normalizing the condition (Addis & Mahalik, 2003). When a mental health condition is normalized by making it seem like a common issue that most men encounter, it will pose lower threats to a man’s self-esteem, and increase the likelihood that he will seek help for the condition since it will be less likely to be perceived as a threat to his masculine identity (Addis & Mahalik, 2003). Fear and embarrassment are also noted inhibitory factors for men’s help-seeking and information seeking regarding cancer symptoms and treatment methods (Fish, Prichard, Ettridge, Grunfeld, & Wilson, 2015). Perceived control over the healthcare interaction is another factor to consider when promoting men’s health (Addis & Mahalik, 2003; Galdas et al., 2005) as the most successful healthcare interactions occur when men retain their locus of control (Witty et al., 2011); for example, men are more likely to adhere to prostate monitoring protocols if they retain an element of control over the healthcare decision making process (Mroz et al., 2013). However, sensitivity to masculine identities may not be effective in all instances of health promotion initiatives targeting men’s behaviours. For example, instances of intimate partner violence can be reduced by characterizing violence against women as an inferior and marginalized embodiment of masculinity that will exclude a man from ever performing hegemonic masculinity (Jewkes, 2002).

2.5.2 Dialogic Masculinity May Promote Health Information Seeking

Just as monologic masculinities lead men to avoid HIS, dialogic masculinities appear to encourage it. Dialogic masculinity’s impetus on open and supportive community values promotes rural men’s HIS due to a willingness to share their personal issues with and seek help from others (Addis & Mahalik, 2003; Coldwell, 2007), which may ultimately improve their receptivity and access to new health information. Additionally, dialogically masculine men’s regard for women’s roles may encourage help seeking behaviours by appropriately valuing the gendered nature of work; thereby enabling men to seek and
accept assistance in healthcare and HIS related work from their female partner and other women.

An openness to femininity that is characteristic of dialogic masculinity may predict rural men’s involvement in informal care networks and community organizations as both have high proportions of women volunteers (Crosato & Leipert, 2006; Federal/Provincial/Territorial Ministers Responsible for Seniors, 2008; Harris et al., 2012). This may position dialogic masculinity as a health-supporting gender identity as it facilitates access to informal social supports common in rural areas. Access to social networks is crucial for understanding rural men’s HIS as a man’s social network will determine how readily he can access health information from close friends (strong ties) who have had familiar experiences, or from acquaintances (weak ties) that may be able to provide him with potentially unknown information that is close friends are unaware of. For example, rural men’s help seeking for mental health issues can be facilitated by the development and maintenance of strong social ties with other men with similar experiences (Roy et al., 2014). Additionally, access to social supports found within rural communities, such as informal care networks (Leipert, 2006) or recreational groups (Courtenay, 2006; Leipert et al., 2011), where strong social ties are fostered, may be increasingly important as men age and their personal support networks of spouses and children often diminish in the process (Keating & Eales, 2012).

Alternatively, monologic men may find themselves outside strong support networks or with limited weak ties because of their disregard for others and social fear of sharing emotions. As monologic farmers age they have difficulty leaving farm work behind (Amshoff & Reed, 2005), as farming is their most comfortable gender performance and they may feel retiring from farming threatens their masculine status by compromising their position as breadwinner (Ollie et al., 2013). Without access to social networks and the variety of potential health info(r)mediators (Wyatt et al., 2008) and lay information mediaries (Abrahamson et al., 2008) they contain, monologic men may be forced to either rely on their own HIS abilities or the health info(r)mediation abilities of their spouses. This limited exposure to different sources of health information may limit the breadth and scope of content received by monologic men and disadvantage them compared to dialogic men’s potential access to health information.
Rural women have an integral role in the promotion and maintenance of health in rural communities, which makes them a potentially valuable resource for rural men’s HIS. For instance, rural women will seek new health information and care provision education from public health nurses to compensate for gaps in rural healthcare service delivery caused by budget constraints (Heather et al., 2012; Leipert, 2010); they are the most prominent informal caregivers in rural Canada, and they consider this a core characteristic of being a woman (Crosato & Leipert, 2006; Little, 2012); they organize community activities that promote physical activity and socialization (Leipert et al., 2011); and they are the primary seekers of health information in rural communities (Wathen & Harris, 2007). Rural women often seek care and health information for themselves and family members from their family physicians (Wathen & Harris, 2007), and discuss their husbands’ health issues without their knowledge (Kilpatrick et al., 2015). Rural women consult their pharmacists for care advice and treat the pharmacists health info(r)mediators to describe recent diagnoses and treatment options (Leipert et al., 2008; Wathen & Harris, 2007), a practice which was also performed by urban men seeking healthcare (Witty et al., 2011). While the specific practices of rural men with respect to HIS remain unknown, the combination of men’s healthcare interaction with a rural setting suggests rural men may consider their pharmacist a viable source of health information; of course, whether they seek information may be contingent on previously mentioned criteria such as perceived normalcy (Addis & Mahalik, 2003), stigma (Komiti et al., 2006), control over decisions (Oliffe, 2009; Oliffe et al., 2013), and familiarity with the pharmacist if one is present in their rural community (Witty et al., 2011).

Therefore, it appears a rural man’s practice of HIS may be shaped by the interaction of several factors: his financial, social, or cultural positions within his rural setting, the presence and nature of healthcare services available locally and at a distance, his position along the monologic-dialogic rural masculinity gender spectrum, and the level of involvement of women in his life. Regarding the last two factors, a man’s gender position may shape the level of involvement of women in his life as a man’s embodiment of monologic or dialogic masculinity will determine their openness to and acceptance of women’s roles. However, limited openness to women’s roles does not translate to limited exposure to women in daily lives. For example, while monologic men may not discuss their health concerns with other men, they may feel comfortable doing so with their
spouse, which contributes to her bearing the entirety of a family’s health-related responsibility (Coldwell, 2007; Courtenay, 2006; Roy et al., 2014), creating other health and social issues. As previously noted, such disclosure issues are not a concern for dialogic men, exposing them to potentially expansive social support networks.

Monologic men may rely on their spouses for health information and informal care (Amshoff & Reed, 2005), thereby placing an undue burden on the spouse to become an effective health info(r)mediator. Doing so establishes the man’s health concerns as a motivator for the woman’s HIS and may often interfere with her own health promoting practices as she feels a responsibility to care for others before herself (Crosato & Leipert, 2006). Thus, in this situation the woman’s health literacy, everyday life information seeking practices (McKenzie, 2003; Savolainen, 1995), time, financial status, and other contextual factors will affect the man’s health information access consumption. By contrast, dialogic men’s openness to gender fluidity may facilitate the establishment of additional connections within the community from which they can draw health information. Doing so capitalizes on high levels of social cohesion characteristic of rural areas, widens the man’s sphere of information exposure (Johnson, 2003), and enables a man to establish multiple health info(r)mediation connections and develop his own HIS abilities.

2.6 Conclusion

In this article, the authors sought to elucidate the overarching influence of gender identities on both health and HIS in a rural context. The initial section framed the difficulty of describing the essence of rural areas while highlighting the deleterious and protective health effects of rurality. Health information seeking was then discussed to demonstrate its complex social characteristics and the multiplicity of methods one can rely on to seek health information. Finally, rural gender norms were explored using masculinity theory to demonstrate how cultural ideals of hegemonic masculinity and a romanticized rural masculinity direct gender performances and cause farming attitudes to evolve. Rural masculinity performances were then used in an intersectional discussion to frame both rural health and HIS, and to contextualize the experiences of rural men’s HIS.
The integrated analysis suggests at least two distinct patterns of rural men’s HIS: one categorized by monologic masculinity and the other by dialogic masculinity. The monologic masculine performance is associated with increased risky behaviours linked to injury-mortality, delayed treatment and healthcare aversion, and thus negatively influences a man’s wellbeing. When seeking health information, monologic men may be forced to rely on their own abilities and those of their spouses due to limited community social support caused by a disregard for others and a social aversion to discussion of illness and emotion. Dialogic masculinity’s influence on men’s health offers a stark comparison to monologic masculinity as it may actually promote positive health behaviours and men’s help seeking through open dialogue and an altered perspective on gender norms. When seeking health information, dialogic men’s large social networks may enable them to draw on a broad range of information sources, establish strong social ties within their communities that are invaluable sources of psychological support, and access new information by connecting with distant members of their social network. Any study that seeks to explore rural men’s HIS must do so in a fashion that explores all possible manifestations of the experience, including those related to spouse, social contexts, and community resources and values.

This study is not without its limitations. Restricting our review to heterosexual non-aboriginal men limited the range of HIS processes that were discussed in this review. However, this was a necessary restriction in order to conceptualize the intersection of three broad topics – rural health, health information seeking, and rural gender identities. An additional limitation of this review is drawn from our focus on how rural men seek health information while omitting how health information providers may reach out to rural men. Further research is needed to uncover how non-heterosexual and aboriginal rural men seek health information, as this can contribute to a more complete understanding of rural men’s HIS. Additionally, future studies are needed to fully explore how health information providers perceive rural men’s HIS needs and preferences, and how this influences the information they provide.

The findings of this literature review have direct implications for rural healthcare practitioners as understanding social and cultural factors that influence how rural men seek health information can help inform future practices, such as the development of new
best practices for disseminating health information related to male farmers’ mental health issues during economic recessions. Healthcare initiatives directed at increasing rural men’s engagement with healthcare services may be better able to reach this underserved population by taking factors such as the importance of individual social networks and local gender norms into account; for example, health promotion initiatives designed to improve tractor safety behaviours among rural male farmers may be designed in a way that accounts monologic and dialogic masculinity as well as all three versions of masculine agriculture success (industrial, sustainable, and agrarian). Increased patient engagement by rural men could ultimately improve patient-centered policy development and implementation, and may lead to better health outcomes for rural men as gender-appropriate health information is made available in locations and formats that are both socially and culturally acceptable.
2.7 References


Wyatt, S., Harris, R., & Wathen, N. (2008). The go-betweens: Health, technology and info(r)mediation. In C. N. Wathen, S. Wyatt, & R Harris (Eds.), *Mediating Health*
CHAPTER 3
Tokenism and Mending Fences: How Rural Male Farmers and Their Health Needs are Discussed in Health Policy and Planning Documents

A version of this chapter appears in Healthcare Policy, 13(4) and is included in this dissertation with the permission of the publisher (see Appendix B).

Approximately 19% of Canadians reside in rural areas (Statistics Canada 2011b). Place, that is, residing in a rural or urban setting, is a noted independent determinant of health (Brundisini et al. 2013; DesMeules et al. 2012) that contributes to rural Canadians having an all-cause mortality rate that is 14.1% higher than that of urban residents (Canadian Institute for Health Information [CIHI] 2006; Ostry 2012). Additionally, compared to their urban counterparts, rural Canadians experience higher risks and mortality rates for a number of chronic conditions, including a 10.4% higher circulatory disease mortality rate, a 10.6% higher respiratory disease mortality rate, a 19.7% higher diabetes mortality rate, as well as a 125.8% higher accidental mortality due to injury and poisonings (Canadian Institute for Health Information [CIHI] 2006; Ostry 2012). When accounting for gender, injury and poisoning in men represents the greatest rural-urban disparity as rural men’s injury-related mortality rate is 130.2% higher than that of urban men (CIHI 2006; Ostry 2012). Disproportionately high injury mortality rates are associated with high prevalence of motor vehicle accidents in rural areas (CIHI 2006; Ostry 2012; Williams and Kulig 2012) and high prevalence of workplace injuries associated with the agricultural industry (Canadian Agricultural Injury Reporting [CAIR] 2011; Morassaei et al. 2013; Turner and Gutmanis 2005).

Rural health inequities are often influenced by health policy decisions to regionalize healthcare services to larger urban centers in efforts to reduce system costs, streamline service delivery and improve healthcare providers’ professional development (Fleet et al. 2015; Fleet et al. 2013). Despite such system improvement goals, healthcare centralization creates accessibility barriers for rural communities due to limited availability of most healthcare professionals (Nair et al. 2016; Pitblado 2012). As a result, a 33.6% of rural men and 20.3% of rural women in Canada have no access to a regular
primary care provider, and thus rely on rural hospitals as their main point of interaction with healthcare services (Pong et al. 2012). Rural health human resource shortages may also influence high rates of injury-related mortality and morbidity by limiting access to health promotion and information resources designed to prevent injury and illness (Haas et al. 2012; Hameed et al. 2010). Recent initiatives in Ontario have attempted to improve access to healthcare in rural areas by establishing collaborative care networks based specifically on the needs of the rural communities they serve (Multi-Sector Rural Health Hub Advisory Committee 2015). This approach has also been proposed in Alberta (Rural Health Services Review Committee 2015), British Columbia (British Columbia Ministry of Health 2015), and Nova Scotia (Health Association Nova Scotia 2013) as a viable means to improve access to rural healthcare in each of their provincial contexts.

Rural male farmers (RMFs) represent an appropriate target population for health policy designed to reduce high injury-related mortality and morbidity rates in rural areas as they account for 93% of agriculture-related mortalities and 83% of agriculture injury-related hospitalizations (CAIR 2011). In Ontario, there is a relatively low likelihood that patients from rural regions will receive timely specialized trauma care, which increases their risks of comorbidities or mortality (Haas et al. 2012; Hameed et al. 2010). Limited trauma care access for rural Ontarians reflects policy decisions that prioritize a downsized and centralized healthcare system characterized by a smaller rural healthcare workforce (Kaasalainen et al. 2014). Without access to local healthcare professionals, RMFs may rely on other sources for health information and treatment that have been utilized by rural communities to offset limited healthcare access, such as neighbours, veterinarians and naturopaths (Leipert et al. 2008; Wathen and Harris 2007). Furthermore, RMFs may be unaware of reporting procedures or wish to avoid reporting health and safety issues for fear of workplace sanctions and economic penalty from government workplace safety agencies (Hall 2007; Turner and Gutmanis 2005).

Despite healthcare system centralization remaining on the policy agenda, the Ontario Ministry of Health and Long-Term Care (MOHLTC) has prioritized the improvement of rural healthcare access and delivery in efforts to reduce geography-based health inequities (MOHLTC 2010). The MOHLTC’s (2010) guiding rural healthcare reform policy, Rural and Northern Healthcare Framework/Plan, establishes provincial, regional
and municipal priorities to improve rural healthcare, such as how to address the limited range of healthcare services used by rural communities and the need to engage rural communities in their own healthcare reform. Following the policy stages heuristic (Sabatier and Smith 1993) this study examines how RMFs are included and how their potentially high healthcare needs are recognized in Ontario health policy and planning documents. In doing so, this study seeks to address the following questions: (1) How and in what contexts are RMFs discussed in health policy and planning documents in Ontario and (2) How do health policy and planning documents in Ontario include RMFs in their recommendations?

3.1 Methods

A retrospective analysis of Ontario rural health policy and planning documents was conducted to examine how and in what contexts RMFs are discussed, and whether their health needs are incorporated into policy recommendations. A retrospective analysis of policy was conducted since this approach enables researchers to critically review and evaluate the content of existing health policy documents (Buse et al. 2012). In doing so, researchers can evaluate how health policy documents include and discuss the needs of various groups within the population, such as RMFs. This study followed Buse et al.’s (2012) definition of health policy, which holds that health policies “embrace courses of action (and inaction) that affect the set of institutions, organizations, services and funding arrangements of the health and health care system. It includes policy made in the public sector (by government) as well as policies in the private sector” (Buse et al. 2012: 6). Thus, health policies may include documents published by federal or provincial governments and subsidiaries acting on their behalf such as regional health authorities or local public health units, as well as non-government (private) organizations which aim to influence the arrangement of the healthcare system to benefit specific populations. Health policies may be analysed to gain an understanding of their content, their outcomes, the process that led to their creation or the actors involved in or excluded from their creation (Buse et al. 2012; Cheung et al. 2010). This study analyzed the content of Ontario rural health policy and planning documents since rural healthcare improvement is currently on the health policy agenda in that province, as evidenced by the creation of the Rural and Northern Healthcare Framework/Plan (MOHLTC 2010).
3.1.1 Document Selection

Documents are often a primary source of data when conducting a retrospective analysis of health policy (Buse et al. 2012) as they can provide valuable insight into the contexts and values that helped inform policy decisions (Cheung et al. 2010); however, policy and planning documents should only be included in a study if they contain information that addresses the study’s purpose (Bowen 2009). Concerns about sample size (for example, the number of documents) should be secondary to document relevance as a limited sample size may suggest that the policy issue under investigation is rarely on the policy agenda (Bowen 2009). This study included publicly available Canadian rural health policy and planning documents collected from grey literature resources including: formal databases including the Canadian Public Policy Collection, the Canadian Health Research Collection, the Canadian Research Index, and Cochrane Library; provincial healthcare websites including those of the MOHLTC, Ontario’s Local Health Integration Networks (LHINs) and Ontario’s Public Health Units; and rural working group websites published by the Rural Ontario Institute. Following consultations with an academic research librarian, the following Boolean search query was used: “subject: Ontario AND farm* AND rural AND male”. Using (*) ensured all permutations of a term, such as farmers, farmed or farming, were included in the search results. For the purposes of this study, a “farmer” is understood to be a person who performs agricultural labour in any capacity, including full-time, part-time or contract labour commitments on any size and type of family-run or commercial agricultural operation.

Initial search results yielded 131 documents that included: rural community profiles, economic reports, legal proceedings, agricultural planning documents published by both the Ontario provincial government and agriculture commodities groups, health policy and planning documents published by both the MOHLTC and LHINs, rural funding initiatives and reports on the status of healthcare and health services delivery in rural Ontario. To ensure the sample included recent and relevant policy issues, documents were included if they were published since 2006. Titles and executive summaries were scanned to include documents that held a primary focus on rural healthcare in Ontario. Finally, the full text of each document was scanned to ensure there was at least one reference to farm* or agricultur* in the document. A total of 13 documents were retained
for the study sample after all inclusion criteria were applied. Figure 1 provides a detailed outline of the inclusion process, and Table 1 provides a list of the 13 documents retained for analysis. Of note, a single rural policy document published since 2013 were relevant.

Figure 3.1. Health policy and planning document inclusion and exclusion process.
Table 3.1. Health policy and planning documents included in analysis.

<table>
<thead>
<tr>
<th>Document author (Publisher)</th>
<th>Document title</th>
<th>Year</th>
<th>Document type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitty, H.L. (Haldimand-Norfolk Health Unit)</td>
<td>Rural Health: A Qualitative Approach to Understanding Best Practices for Rural Health Service Delivery in a Public Health Setting.</td>
<td>2007</td>
<td>Public health report</td>
</tr>
<tr>
<td>Moro, F., Z. Pasek, K. Pfaff and T. Sands (Erie-St. Clair Local Health Integration Network)</td>
<td>Rural and Emergent Health Care: Selected Perspectives for the Erie-St. Clair Local Health Integration Network.</td>
<td>2009</td>
<td>Healthcare service evaluation</td>
</tr>
<tr>
<td>Rural and Northern Healthcare Panel (Ontario Ministry of Health and Long-Term Care)</td>
<td>Rural and Northern Health Care Framework/Plan: Stage 1 report.</td>
<td>2010</td>
<td>Provincial health planning report</td>
</tr>
<tr>
<td>The Ontario Rural Council (The Rural Ontario Institute)</td>
<td>Local Health Integration Networks (LHINs) and the Future of Rural Health: TORC Issues Paper from the Rural Health Forum Held September 25, 2006.</td>
<td>2007</td>
<td>Public consultation findings</td>
</tr>
<tr>
<td>The Ontario Rural Council (The Rural Ontario Institute)</td>
<td>Summary of the Adult Working Group’s Seaforth Consultations on Health and Learning with Adults Living in Rural and Remote Areas.</td>
<td>2008</td>
<td>Public consultation findings</td>
</tr>
<tr>
<td>The Ontario Rural Council (The Rural Ontario Institute)</td>
<td>Rethinking Rural Healthcare: Innovations Making a Difference. Discussion and Recommended Actions Toward an Integrated Comprehensive Rural Health Strategy.</td>
<td>2009</td>
<td>Healthcare service evaluation</td>
</tr>
</tbody>
</table>
3.1.2 Data Analysis

Conventional content analysis (Hsieh and Shannon 2005) was used to inductively code each health policy document as this process allows codes and dominant coding categories to emerge naturally from the data. The process of inductive coding enabled the researchers to immerse themselves (Hsieh and Shannon 2005) in this sample of health policy and planning documents to discover the context in which RMFs’ health and healthcare needs are discussed. Data analysis and organization was conducted using N*Vivo 11 (QSR International 2016). Eleven dominant categories of codes emerged from this sample of health policy and planning documents that help to contextualize how RMFs’ health and healthcare needs are discussed. These categories include: rural healthcare service delivery, how to characterize “rural”, health policy and planning recommendations, the government’s role in rural healthcare, rural healthcare planning, rural health communications, rural health human resources, rural health promotion, health-related technology, farming and agriculture, and rural leadership in healthcare.

Recommendations are an important component of policy reports as they present suggested policy options to address a problem, convey government’s intent to act on the problem or express the affected population’s preferred methods to improve their current situation. Inductive coding (Hsieh and Shannon 2015) was also used to determine the extent to which RMFs’ health and healthcare needs were included in health policy and planning recommendations. The top three categories of recommendations in this sample were: 1) improve access to rural healthcare services, 2) improve funding models that account for rural challenges, and 3) improve delivery of rural healthcare services. As part of conventional content analysis (Hsieh and Shannon 2005) the top three categories of recommendations were compared to the 11 dominant categories that contextualized how
RMFs’ health and their health needs were discussed to identify any relationships or over-arching themes that might permeate the entire sample. Upon comparison, two over-arching themes emerged to characterize the sample: 1) tokenism and 2) mending fences.

3.2 Results and Discussion

The presence of rural male farmers, their health and their healthcare needs in Ontario rural health policy and planning documents is limited. As such, the policy documents, coding categories and discussions of RMFs’ health or healthcare needs can be described by two over-arching themes: tokenism and mending fences. Tokenism refers to the general invisibility of RMFs’ health and healthcare needs, except when stereotypes of a farm or farm-related injury can be used to describe rural areas. Mending fences captures both the desire of rural communities to be included in healthcare decisions, as well as the recognition by healthcare providers that improving relationships with farmers and agricultural organizations is a necessary step to improving rural health. This section will present evidence for and discuss how Ontario RMFs’ health and healthcare needs are contextualized in health policy documents by the two dominant themes of tokenism and mending fences. Additionally, the limited number of documents published since 2013 will be discussed as a possible indication that RMFs and their health needs are absent from the Ontario health policy agenda.

3.2.1 Tokenism

Policy documents often used farming and agricultural stereotypes to symbolize rurality for a policy audience that may otherwise be unfamiliar with the complexities of the rural context. Specifically, farm-related injuries were used to highlight negative health outcomes associated with living and working in rural areas, “Another important cause of death for rural residents is mortality from ‘external causes’ including farm accidents and traffic fatalities” (Waterloo Wellington Local Health Integration Network [WW LHIN] 2010: 40). An evaluation of hospital services in rural Ontario presents RMFs’ healthcare needs as being limited to the effects of having no workplace insurance to cover rehabilitation associated with farm injuries, “Another witness had surgery on his knee in 2008. He is self employed [sic] on farm without health insurance. His knee replacement was done in November 2009 in Toronto. He is still receiving physiotherapy” (Chase et al.
Additionally, an evaluation of the accessibility and delivery of rural emergency services in Ontario leveraged RMF farm injuries to rationalize the utility of a proposed model for emergency care (Scenario 2 in the following quote):

“A 63-year old farmer collapses out in the field on a 38 Celsius degree summer day. His health condition may or may not require emergent care. In the event that he requires emergent care, there are 3 possible scenarios: Scenario 1: The farmer’s wife calls 911; Scenario 2: The farmer’s wife calls the local IRPC [Integrated Rural Priority Care] Facility and asks for advice; Scenario 3: The farmer’s wife has no cellular coverage so seeks help from a neighbour and the farmer is driven by truck to the nearest hospital.” (Moro et al. 2009: 84)

Relying on injury-related farming stereotypes to convey the health challenges or adverse health outcomes associated with rural communities is commonplace in government documents and presents a limited understanding of the range of the health issues faced by RMFs.

Due to the limited inclusion of RMFs in these policy documents, discussions of farmers’ health in general were also examined by the authors. Authors of government policy documents discussed farmers’ health issues in general by relying on token farm injuries and safety risks associated with the agricultural industry (Kitty 2007; Moro et al. 2009; WW LHIN 2010; White 2011). In contrast, policy documents informed by and drafted following engagement with rural communities present a full and nuanced understanding of health issues faced by farmers in general. For example, in addition to highlighting the importance of rural emergency care, bottom-up policy documents highlight that RMFs’ mental health is affected by stress, lack of sleep and prolonged bouts of isolation while working, and that limited opportunities exist for recreational physical activity (The Ontario Rural Council, 2007, 2008, 2009). Despite including more health issues in the policy documents when the scope is broadened from RMFs’ health needs to the health needs of farmers in general, there was still limited discussion in health policy documents about possible policy or program solutions to address farmers’ health issues. Limited inclusion of general farmers’ health needs in the content of health policy documents suggests that, as with RMFs’ health needs, policy documents approach general farmers’ health needs as tokens that may help explicate the rural health context. For example, farmers in general only appear in lists of rural subpopulations or as a part of an example to support proposed policies and programs. The inclusion of general farmers in lists of
rural subpopulations such as women, infants, children, youth, elderly, Indigenous or Mennonites may also imply that “farmer” is synonymous with men in these documents, as men’s health needs are the only specific rural subpopulation not represented. The limited inclusion of RMFs’ health and health needs is also evident in the recommendations put forth by these policy documents.

RMFs’ health issues were rarely included in the policy and planning recommendations of the health policy documents reviewed in this study. When included, token farm injuries were used to advocate for improved healthcare service delivery to only a small number of rural communities. For example, RMFs’ injuries were leveraged to rationalize the need for improved ambulance response times in rural areas and to lobby the Ontario MOHLTC to implement and monitor response time standards:

“The panel heard that ambulance response times can be 30 – 45 minutes for traumas from car and farm accidents in rural areas. Thus, at optimum, baseline services should be 20 minutes from residents’ homes in average road conditions, and, at most 30 minutes from residents’ homes in average road conditions. This would allow ambulances access to a hospital emergency room within the critical ‘golden hour’ during which the intervention provided in a local emergency department can save life and improve health outcomes.” (Chase et al. 2010: 15)

In conclusion, limited inclusion of RMFs’ health needs, and general farmers’ health needs in the recommendations put forth by rural health policy documents reinforces the proposition that farmers’ health needs are not on, and have limited ability to influence, the health policy agenda as they are either invisible or stereotyped when included.

3.2.2 Mending Fences

To reinforce RMFs’ invisibility on the rural health policy agenda, the authors of these health policy documents did not specifically identify RMFs as a target population for community engagement. However, Ontario agricultural groups, whose membership is approximately 72% male (Statistics Canada 2011a), were identified as possible stakeholders for LHINs and rural hospital organizations to engage with to mend fractured relationships with rural communities caused by healthcare system reform and regionalization. Agricultural groups were considered “assets” to rural healthcare development due to their previous contributions to physical and social capital projects.
such as community health centres, local markets, hockey arenas and public water services (Caldwell et al. 2015; Kreutzwiser et al. 2010; WW LHIN 2010; White 2011).

Prioritizing improved rural community involvement in planning healthcare service delivery is a core component in the development and implementation of rural health hubs (Multi-Sector Rural Health Hub Advisory Committee 2015) and affirms recommendations put forth by Ontario’s guiding rural health policy, *The Rural and Northern Healthcare Framework/Plan* (MOHLTC 2010). Specifically, the MOHLTC (2010) recommends that the LHINs actively engage with rural communities when making healthcare decisions about service planning, funding and delivery. In doing so, the LHINs may be able to: improve their understanding of local healthcare access needs, solve local healthcare challenges and identify methods to integrate funding across health and social services. Despite these recommendations by MOHLTC, “there have been no public consultations” (Chase et al. 2010: 84) between the LHINs and rural communities, which has contributed to rural communities’ loss of faith in the LHINs’ effectiveness and accountability to rural communities (Chase et al. 2010; Moro et al. 2009; The Ontario Rural Council 2007). Rural healthcare service removal and instatement of healthcare management personnel unfamiliar with the rural context has led rural communities to develop a “deep public anger and mistrust” toward the LHINs and rural hospitals (Chase et al. 2010: 83). Additionally, a perceived “lack of proper policy and planning… [and] wasteful decision making” (Chase et al. 2010: 90) has further alienated the LHINs and rural hospitals from the rural communities they serve (Moro et al. 2009; The Ontario Rural Council 2009).

To restore faith in healthcare governance by the LHINs and rural hospital organizations, policy documents drafted by community-based organizations emphasized the need for LHINs and rural hospitals to provide rural communities with power and control of their healthcare services to improve community responsiveness to changes in healthcare service delivery (Chase et al. 2010). Community-based organizations suggested that LHINs and rural hospitals establish “health partnerships [that involve] faith groups, businesses, agriculture, and not-for profits” (The Ontario Rural Council 2009: 14) to transfer decision-making power back to rural communities. Authors of policy documents drafted by, or on behalf of, LHINs or public health units did not suggest methods nor
identify community groups to involve in efforts to mend relationships with rural communities.

Authors of policy documents drafted by healthcare organizations and community-based organizations simultaneously recognized the challenges of engaging with RMFs since they often prefer to work in isolation and were found to avoid print materials when getting their information about local events (The Ontario Rural Council 2008; WW LHIN 2010). For engagement efforts to be effective, RMFs and healthcare organizations must establish a clear purpose and set of goals, have shared control over discussions and agenda setting, and aim to be sustainable engagements so trust can develop (Kenny et al. 2015). Therefore, despite the challenges with being reached, their community influence makes RMFs a key stakeholder group for LHINs and other rural healthcare organizations to engage with as they attempt to mend fences with rural communities.

Founded on the principle of affected interests (McKenzie and Wharf 2010), involving agricultural organizations in healthcare decision-making abilities would afford RMFs an opportunity to influence three streams that contribute to understanding the contexts that shape the formulation of rural health policy: problem, policy and politics streams (Kingdon 2010). The problem stream refers to health policy makers’ awareness of and attentiveness to a specific policy issue (Kingdon 2010), such as LHINs’ awareness of attentiveness to RMFs’ high mortality and morbidity rates due to agriculture-related injury (WW LHIN 2010). By consulting with agricultural organizations and RMFs about RMFs’ agriculture-related injury, the LHINs may gain a broader understanding of the conditions that contribute to RMFs’ farm injuries, such as fatigue, stress and other mental health issues, and thus set the rural health policy agenda to address RMFs’ health needs on a broader scale than the current injury-centric approach. For example, understanding how fatigue, stress and other mental health issues affect RMFs’ work behaviours may lead LHINs to include community outreach programs on the health policy agenda to provide RMFs with more community social support.

Additionally, providing agricultural groups and RMFs with power over their healthcare would enable them to influence the policy stream, which is the process of analysis and debate over how to address a specific policy issue (Kingdon 2010). Involving RMFs in the policy stream may allow them an opportunity to ensure that their and other rural
healthcare needs are appropriately recognized and accounted for in rural health policy solutions. Due to their aforementioned involvement in rural community development projects, active and positive involvement of RMFs and agricultural groups could also influence the politics stream, which refers to the public mood on a specific policy issue (Kingdon 2010) and help improve public perception of rural healthcare organizations. Despite these possible positive policy steps, engaging RMFs in healthcare discussions may be a difficult task.

The limited sample of Ontario health policy and planning documents included for analysis may indicate that RMFs and their health needs have held a minute portion of the provincial health policy agenda (Buse et al. 2012). This portion has become smaller since 2013 as a single document (Caldwell et al. 2015) has been published that accounted for RMFs and their health needs since that time. Reduced inclusion of RMFs from rural health policy and planning documents may indicate that their health needs are not currently on the provincial health policy agenda (Buse et al. 2012), which may exacerbate existing health inequities such as disproportionately high all-cause, circulatory disease, respiratory disease, diabetes, and injury-related mortality rates (CIHI 2006; Ostry 2012). Publication of a single document accounting for RMFs and their health needs may also indicate that the provincial rural health policy agenda has shifted to prioritize broader population health issues. For example, initiatives designed to improve access to healthcare for entire rural communities has remained on the provincial agenda as evidenced by the launch of rural health hubs (Multi-Sector Rural Health Hub Advisory Committee 2015; Ontario Hospital Association 2017). Such initiatives could benefit RMFs as some of their health needs may be addressed by policies that target rural healthcare improvement in general. Furthermore, since rural health hubs’ guiding principles mandate community inclusion during healthcare planning (Multi-Sector Rural Health Hub Advisory Committee 2015), RMFs may have an opportunity to influence the policy stream (Kingdon 2010) by contributing to future debate regarding how to plan rural healthcare services to meet their and their communities’ needs.

3.3 Conclusion

This analysis of health policy documents has revealed how RMFs’ health needs were included in health policy documents and how they were included in recommendations for
future policy. Policy documents predominantly relied on RMFs as tokens to symbolize rural healthcare access issues for members of the policy audience who may be unfamiliar with the diverse range of rural health needs. In doing so, authors of policy documents leveraged RMFs’ agricultural injury-related needs to rationalize the need for and propose new models of rural healthcare service delivery. While this approach may improve healthcare service delivery to rural communities in general, it renders invisible other RMF health needs, such as mental health needs associated with long hours spent in isolation during farm season or chronic health needs associated with working in the agricultural industry. The authors of these policy documents also recognized the potential benefits of including RMFs and agricultural organizations in community engagement processes. Improving community engagement aligns with provincial goals established to improve rural healthcare delivery (MOHLTC 2010), and engagement with RMFs presents an ideal opportunity for impactful community participation due to their position as key stakeholders in rural communities. Therefore, sustained and meaningful consultation of RMFs by healthcare organizations may enable RMFs to ensure their healthcare needs are included on the policy agenda in the future. Sustained engagement with RMFs may also help healthcare organizations create programs and identify implementation strategies that align with the needs and preferences of RMFs, thus increasing their likelihood of accessing healthcare services.

This study is not without its limitations. Restricting the document search to include health policy and planning documents focused on rural healthcare in Ontario limited the scope of analysis to a single province within Canada and may have contributed to the small sample size. However, since each province and territory within Canada manages their own healthcare independently, restricting document analysis to a single province ensured that the findings were specific to a single healthcare context in Canada. An additional limitation is the inclusion of a single health policy document published by the Ontario MOHLTC. As previously mentioned, this limited inclusion of provincial health policy documents and small sample size may indicate that RMFs are absent from the health policy agenda in Ontario. Further research is needed to understand how RMFs and their health and healthcare needs are included in health policy and planning documents in other regions within Canada. Additionally, future research should investigate how to effectively reach out to RMFs to include them in discussions regarding the formulation of
rural health policy and planning documents, and how RMFs prefer to engage with public policy makers. Doing so may enable healthcare service providers to more effectively design community engagement strategies that are better tailored to the needs and preferences of RMFs, which may improve the likelihood of sustained interactions and better health outcomes.
3.4 References


Normalizing and Navigating: How Rural Male Farmers in Southwest Ontario Seek Health Information

Place is a noted independent determinant of health that contributes to higher all-cause mortality and morbidity rates in rural populations compared to urban populations (Brundisini et al., 2013; DesMeules et al., 2012). Specifically, rural men in Canada have a higher mortality rate due to injury and poisoning than do rural women, urban men, or urban women (Canadian Institute for Health Information, 2006), and this pattern may be closely associated with the morbidity and mortality rates associated with agricultural workplace injury (Canadian Agricultural Injury Reporting [CAIR], 2011, 2016). Male farmers account for 91% of agriculture-related deaths, with machine rollover, run-over, and being pinned or struck by machinery representing the top three causes of mortality (CAIR, 2016). Additionally, male farmers account for 83% of agriculture injury-related hospitalizations, with animal-related events, machine entanglement, and fall from heights as the top three causes (CAIR, 2011a). The most common reported farm injuries represent varying degrees of traumatic events and include sprains or strains (43.9% of reported injuries), broken bones or fractures (27%), and open wounds or amputations (23.4%) (Statistics Canada, 2014).

Health information seeking (HIS) can be understood as the processes used to clarify concerns or uncertainties about a health-related decision (Lambert & Loiselle, 2007). HIS behaviours can be broadly categorized as monitoring or blunting health information (HI) (Miller, 1995). When monitoring, individuals aim to seek any and as much HI as possible regarding their health concern. In contrast, individuals who blunt HI seek the least amount of useful HI possible to enable them to cope with their health concern (Miller, 1995; Williams-Piehota et al., 2009). Information source is an integral component of HIS as different sources will address various information needs and contexts a person may experience as they cope with potentially threatening information (McKenzie, 2003; Rees & Bath, 2001; Savolainen, 1995). In Canada, rural populations’ HIS is often facilitated through the availability and appropriateness of HI resources, respectful relationships between patients and healthcare providers, and limited by lack of Internet access, privacy concerns, and geographic isolation (Leipert, Matsui, Wagner, & Rieder, 2008; Harris,
Rural women tend to actively seek health information (HI) from a variety of sources, including physicians, pharmacists, nurses, veterinarians, family members, and friends (Harris & Wathen, 2007; Leipert & Reutter, 2005; Wathen & Harris, 2007), while rural men tend to be reluctant to search for HI and may intentionally limit their exposure to HI by avoiding encounters with healthcare professionals (Spleen, Lengerich, Camacho, & Vanderpool, 2014). Traditional rural masculinity norms and gender divisions often highly value rural men’s independence and outward displays of toughness (Connell, 2005; Courtenay, 2006), which may limit them from seeking HI in a timely manner since doing so is often considered outside the bounds of acceptable behaviour for men (Evans, Frank, Oliffe, & Gregory, 2011; Herbst, Griffith, & Slama, 2014). Little is known about how rural male farmers (RMFs) seek HI in the Canadian context, however some evidence suggests this process is influenced by their perception of stigma regarding seeking help for health issues (Roy, Tremblay, & Robertson, 2014).

Thus, this study sought to address the following questions: 1) what are processes that explain how RMFs seek HI? and 2) how are RMFs’ HIS processes influenced by social, cultural, and rural contextual factors? This manuscript will first describe how two qualitative methodologies (constructivist grounded theory and photovoice) were integrated and used to reveal how RMFs’ seek HI. Photographic and testimonial evidence will then be presented to describe the participants’ core process of ‘Normalizing Self as an RMF Throughout HIS’, and how this process was influenced by RMFs’ social, cultural, and rural contextual factors.

4.1 Methodology

This study integrated constructivist grounded theory (Charmaz, 2014) with photovoice methodology (Wang & Burris, 1997) to examine how RMFs seek HI and how these processes are influenced by social, cultural, and rural contextual factors.

4.1.1 Constructivist Grounded Theory

The purpose of constructivist grounded theory (CGT) is to uncover the social processes that affect participants’ lives (Charmaz, 2014), such as the process that explains RMFs’ HIS and how it is shaped by social, cultural, and rural contextual factors. In doing so, CGT harnesses participants’ subjectivity to allow a narrative to emerge about the
participants and the social processes that affect their lives (Charmaz, 2014). When conducting a CGT study, knowledge is co-constructed by the researcher and participants, and therefore the emergent theory is heavily contextualized by the given participants’ experiences. One of CGT’s greatest methodological strengths is its flexibility to be used by researchers of various epistemological and ontological positions (Charmaz, 2014), such as its ability to accommodate a research framework based in masculinity theory (O’Lynn, 2010). Masculinity theory (Connell, 2005) argues that an individual’s gender identity is influenced and constructed by interactions with dominant social and cultural masculine gender ideals, also known as hegemonic masculinity, that individuals attempt to embody. As such, masculinity theory provided an appropriate theoretical lens through which to examine how RMFs seek HI, and how this process may be influenced by rural gender norms that value independence and displays of toughness.

4.1.2 Photovoice Methodology

Photovoice (PV) is a critical feminist research methodology that aims to give voice to individuals in subjugated social positions and provides participants with an opportunity to enhance how they understand aspects of their community that may influence political change (Wang & Burris, 1997). In doing so, participants take and use their own photos to draw attention and give voice to health, social, or other inequities, and learn about strategies to evaluate and transform their own social situation as they question dominant social structures (Wang & Burris, 1997). Masculinity theory (Connell, 2005) shares this critical feminist lens as it aims to explore how social, political, or health inequities are created for those men who do and do not identify with hegemonic masculine identities. Oliffe and Bottorff (2007) demonstrated the utility of masculinity theory with PV when researching men’s health and masculine identity, and found that the photographs eased participants into discussing potentially difficult or sensitive health topics. This suggests that PV may be a useful means to engage RMFs in a dialogue regarding their own health since such topics may be considered outside of what is appropriate for RMFs embodying hegemonically masculinity to discuss (Courtenay, 2000).
4.1.3 Integrated Approach to Participant Sampling

CGT and PV utilize similar sampling protocols, resulting in a seamless integration into a unified sampling approach. CGT applies a three-stage sampling protocol—convenience, purposeful, and theoretical (Charmaz, 2014)—while PV methodology utilizes single-stage purposeful sampling (Wang & Burris, 1997). CGT sampling begins with convenience sampling as participants are selected based on availability and fit with the study’s initial inclusion criteria. Convenience sampling can inform early emergent themes and help the researcher plan how to best access additional participants (Charmaz, 2014). This is similar to PV purposeful sampling which aims to recruit participants who have experience with the specific social process being investigated (Wang & Burris, 1997). Stage two of CGT sampling also utilizes purposeful sampling, however the purpose at this stage is to seek participants who can help expand different areas of the emergent theory and provide guidance for theoretical sampling. Finally, during CGT theoretical sampling the researcher seeks to develop a deepened understanding of the issue under investigation (Charmaz, 2014). During theoretical sampling the researcher may select to interview new or existing participants with conceptually or theoretically relevant experiences to help saturate emerging categories established during initial and purposeful sampling until no new theoretical insights are generated (Charmaz, 2014).

4.2 Methods

This study was conducted in southwest Ontario, Canada. The Ontario Ministry of Health and Long-Term Care (MOHTLC) (2010) rural definition guided convenience sampling, and participants were recruited from communities, “with a population of less than 30,000 that [were] greater than 30 minutes away in travel time from a community with a population of more than 30,000.” (p. 8) Low participant response and initial participants’ indication that their rural social and cultural values may be more influential to their HIS processes than their geography indicated the MOHLTC definition may be ill-equipped to address this study’s research question. Thus, purposeful sampling adopted a relational rural definition, which considers an area to be rural based on its social and cultural characteristics, such as feelings of high social cohesion, as opposed to only its geographical features (Cummins, Curtis, Diez-Roux, & Macintyre, 2007), to recruit participants who viewed their communities as rural based on their social or cultural
norms. Additionally, due to responses from four interested RMFs who refused to participate because of the PV aspect of the study, purposeful sampling allowed participation without taking photographs.

### 4.2.1 Recruitment and Study Sample

#### 4.2.1.1 Inclusion and Exclusion Criteria

Interested RMFs were considered for inclusion in the study if they: 1) were a male rural resident of southwest Ontario based on either the MOHLTC or relational definitions of rural, 2) had at least two years’ experience in farming, 3) were at least 18 years old, and 4) spoke English fluently. Interested RMFs were excluded from the study if they: a) were not a male rural resident by either MOHLTC or relational definitions, b) had less than two years’ experience in farming, c) were younger than 18 years old, or d) did not speak fluent English. Participants were required to have worked on a farm for at least two years to ensure they would have experienced a breadth of HIS issues as an RMF.

#### 4.2.1.2 Recruitment

Participants were recruited by posting advertisements (see Appendix C for Print Advertisement) in rural locations across southwest Ontario where RMFs or their spouses may frequent, such as grocers, coffee shops, restaurants, medical offices, pharmacies, farm supply retailers, animal feed lots, auction houses, and seed and grain distributors and wholesalers. Details of the study were also published in rural magazines and community newspapers that RMFs were known to read. To overcome recruitment challenges associated with low response to printed advertisements, recruitment efforts included attendance at farm trade-shows and agricultural organization meetings to discuss the study and meet RMFs with interest in participating. Finally, the most effective recruitment method was word of mouth through shared social connections. Recruitment efforts lasted 14 months and ceased when theoretical saturation was reached and no new insights were generated from participants (Charmaz, 2014).

In total 16 RMFs were recruited, eight took photos for the PV component and eight requested to participate without taking photos. Participants reflected a wide range of ages (25 to 74 years old, mean = 52), farm experience (7 to 70 years, mean = 45), and acres of land farmed (51 to 3500 acres, mean = 1060). See Table 4.1 for more details. This study
received ethical approval from Western University, and prior to joining all participants provided written informed consent (see Appendix D for Letter of Information and Consent).

Table 4.1. Participant demographic details for those who did and did not take photographs

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Participation type</th>
<th>Age</th>
<th>Farm type</th>
<th>Farm size</th>
<th>Highest education</th>
<th>Marital Status</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ron*</td>
<td>PV (3 photos)</td>
<td>47</td>
<td>Beef &amp; corn</td>
<td>Small</td>
<td>High school</td>
<td>Married</td>
<td>2</td>
</tr>
<tr>
<td>Ben*</td>
<td>PV (0 photos)</td>
<td>50</td>
<td>Poultry, bean, corn &amp; wheat</td>
<td>Small</td>
<td>College diploma</td>
<td>Married</td>
<td>3</td>
</tr>
<tr>
<td>Cliff</td>
<td>Interview only</td>
<td>56</td>
<td>Dairy</td>
<td>Small</td>
<td>High school</td>
<td>Married</td>
<td>2</td>
</tr>
<tr>
<td>Fred</td>
<td>PV (3 photos)</td>
<td>59</td>
<td>Livestock, corn &amp; wheat</td>
<td>Large</td>
<td>High school</td>
<td>Married</td>
<td>4</td>
</tr>
<tr>
<td>Paul</td>
<td>PV (14 photos)</td>
<td>26</td>
<td>Corn, wheat, beans &amp; tomatoes</td>
<td>Medium</td>
<td>Bachelor's degree</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Aaron</td>
<td>PV (3 photos)</td>
<td>25</td>
<td>Peppers, beans, &amp; corn</td>
<td>Large</td>
<td>High school</td>
<td>Married</td>
<td>0</td>
</tr>
<tr>
<td>Kurt</td>
<td>PV (9 photos)</td>
<td>60</td>
<td>Beef, pork, lentils &amp; beans</td>
<td>Large</td>
<td>College diploma</td>
<td>Married</td>
<td>2 &amp; 2 grandchildren</td>
</tr>
<tr>
<td>Sam</td>
<td>Interview only</td>
<td>67</td>
<td>Dairy</td>
<td>Medium</td>
<td>Some university</td>
<td>Married</td>
<td>4</td>
</tr>
<tr>
<td>Patrick</td>
<td>PV (3 photos)</td>
<td>62</td>
<td>Dairy &amp; goat</td>
<td>Small</td>
<td>College diploma</td>
<td>Married</td>
<td>4</td>
</tr>
<tr>
<td>Nick*</td>
<td>PV (3 photos)</td>
<td>29</td>
<td>Dairy</td>
<td>Small</td>
<td>High school</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Harold</td>
<td>Interview only</td>
<td>74</td>
<td>Beef, corn &amp; wheat</td>
<td>Small</td>
<td>High school</td>
<td>Married</td>
<td>4 &amp; 5 grandchildren</td>
</tr>
<tr>
<td>Scott*</td>
<td>Interview only</td>
<td>47</td>
<td>Dairy</td>
<td>Small</td>
<td>Bachelor's degree</td>
<td>Separated</td>
<td>1 girl</td>
</tr>
<tr>
<td>Chris</td>
<td>Interview only</td>
<td>55</td>
<td>Beef, pork, corn &amp; beans</td>
<td>Medium</td>
<td>College diploma</td>
<td>Married</td>
<td>3</td>
</tr>
<tr>
<td>George*</td>
<td>Interview only</td>
<td>70</td>
<td>Beef &amp; corn</td>
<td>Medium</td>
<td>Bachelor's degree</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Jerry*</td>
<td>Interview only</td>
<td>38</td>
<td>Beans, lentils &amp; corn</td>
<td>Large</td>
<td>Some college</td>
<td>Separated</td>
<td>3</td>
</tr>
<tr>
<td>Michael</td>
<td>Interview only</td>
<td>61</td>
<td>Organic Vegetables</td>
<td>Small</td>
<td>Master's degree</td>
<td>Married</td>
<td>2</td>
</tr>
</tbody>
</table>

Notes: * = participants who participated in an interview to validate theory. PV = photovoice. Farm size is defined as total farm area in acres, and simplifies the 15-tier classification system found in the Census of Agriculture (Statistics Canada, 2011) into three categories: small farm = 0-239 acres; medium farm = 240-1599 acres; and large farm = 1600 acres or more.
4.2.2 Data Collection

This study merged CGT and PV data collection methods into a single approach using participant-produced photographs and in-depth semi-structured interviews. In total, 38 photos were collected from eight participants (see Table 1), and 30 interviews (22 semi-structured interviews and eight introductory research meetings) were conducted with 16 participants.

4.2.2.1 Photographic Data Collection

Eight participants took part in photographic data collection, which began with a one-on-one introductory research meeting to discuss the study’s goals, processes involved in PV, and the ethics of taking photos (Hannes & Oksana, 2014) (see Appendix E for Introductory Meeting Schedule). At this meeting participants were provided: 1) letters of information and consent for photograph subjects (see Appendix F for Letter of Information and Consent for Photograph Subjects), 2) a logbook to record photo titles, thoughts about the nature of the photo content, and why the photos were taken, and 3) a disposable camera if they did not wish to use their own digital camera. Meetings concluded with a questionnaire to record participants’ demographic data, such as their age, and type of farm they worked on (see Appendix G for Demographic Questionnaire). The eight participants who did not take photos completed this questionnaire at the beginning of their semi-structured research interview. All meetings were audio recorded and transcribed verbatim, lasted approximately 30 minutes, and took place at a location of the participant’s choosing such as their home or a local restaurant.

Participants were given two weeks to take photos. To facilitate engagement in the study participants were called after one week to answer any questions that arose and to clarify and encourage picture-taking. After two weeks the disposable cameras/digital photos and logbooks were collected. Photos were transferred from the participant’s digital camera to the researcher’s encrypted portable hard-drive and were then uploaded to Western University’s secure servers. Digital copies of disposable camera photos were created and also stored on Western University’s secure servers. Two hard copies of the photos taken with digital and disposable cameras were printed, one for the researcher and one for the participant. The photos were then included as part of the in-depth semi-structured
interview. The researchers’ hard copies of all photos were securely stored at Western University.

4.2.2.2 Semi-Structured Research Interview

All 16 participants took part in a one-on-one in-depth semi-structured research interview. Each interview was audio recorded and transcribed verbatim, lasted between 60 and 150 minutes, and took place at a location of the participant’s choosing such as their home or a local restaurant. Participants who took photos were given time before the interview to review and title each of their photos. These participants then analyzed up to five of their own photos following the PV participant-based analytic technique, SHOWeD (Wang, 1999) (described in further detail below). Participants were then free to include any of their photos for the remainder of the interview to help them discuss how they seek HI, and often did so to help them give meaning to, rather than describe, their HIS process. For example, Kurt, a 60-year-old livestock and bean farmer, used his photo of his cattle to help explain why he felt embarrassed to seek HI for different types of farm injuries. After Kurt introduced this photo, the researcher probed him to further explore how feeling embarrassed influenced his HIS for other farm- and non-farm-related health concerns, and how he managed such feelings during HIS.

All 16 participants were asked open-ended questions to explore how they defined health, illness, and HI, and how these concepts were related to their social position as an RMF. Next, participants were asked to explain: why they would or would not seek HI; how different types of health concerns or social situations affected their HIS; from whom and from where would they seek HI; how they thought their HIS processes related to those of other RMFs, men, and women in their rural communities; how living in their rural community positively and negatively affected their HIS; and what they would change about their communities to make it easier to seek HI. Asking all participants how they would change their community extended the critical element of PV to the eight participants who did not engage in photographic data collection, and thus provided all study participants an opportunity to propose social or political changes that could improve their HIS (see Appendix H for Semi-Structured Interview Guide).
When a participant was reluctant to discuss a topic, such as mental HIS, the researcher would ask if that topic was captured in or represented by a photo the participant took. If the participant had a photo, they were asked how that photo represented the topic under discussion. If the participant did not have a photo or did not collect photographic data, the researcher would ask the reluctant participant what they thought of another participant’s idea for a photo on the issue. For example, when Harold, a 74-year-old beef farmer who did not take photos, was reluctant to discuss his HIS from sources beyond his family physician, he was asked how Nick’s (29-year-old dairy farmer) photo of Agricultural Magazines resonated with him; Nick indicated that the photo represented how trusted farm-specific information sources could also be good sources of HI. Harold agreed with Nick’s rationale for the photo and became more comfortable discussing HIS from non-medical sources such as his wife and brother.

Each participant was asked if he would like to review a copy of the transcript from his interview, however none expressed interest. Instead, 14 of 16 participants requested to review a copy of the final results. Six participants, three who collected photographic data and three who did not, were selected to provide feedback on and to validate the emergent theory and the associated process diagram. These validation follow-up interviews were conducted to determine how the emergent theory, diagram, and included photographs resonated with participants, and if it was a credible and accurate explanation of participants’ HIS process. The validation interviews occurred after all 16 participants completed their semi-structured interview.

4.2.2.3 Theoretical Sampling Rationale

Theoretical sampling (Charmaz, 2014) involved selecting six participants for a one-on-one semi-structured follow-up interview because of their potential to further elucidate a specific theoretical concept that emerged as a key factor in participants’ HIS processes (see Appendix I for Follow-up Semi-Structured Interview Guide). For example, age appeared to be a key theoretical concept that influenced participants’ HIS processes, therefore Nick (29 years-old) and George (70 years-old) were selected to speak about the emergent theory as one of the youngest and one of the oldest participants. Ron was selected because, unlike other participants, he actively discussed HI with others and promoted those in his community to do the same. Scott was selected because of his
unique ability to identify and articulate how different rural social norms, such as RMFs’
gen

gender expectations, influenced his HIS processes. Jerry was selected because of his
willingness to discuss mental health and mental HIS. Finally, Ben was selected because
he was the only participant who believed that he did not have any health issues or
concerns.

4.2.2.4 Fieldnotes

Researcher fieldnotes are an integral component of CGT (Charmaz, 2014) as they enable
the researcher to record insights gained during observations and interactions with
participants and other community members during data collection. Forty-seven researcher
fieldnotes were logged throughout data collection to record the following: locations
where print advertisements were posted; notes on recruitment efforts and challenges;
changes to the rural definition used in the inclusion/exclusion criteria; and immediate
thoughts following each participant interaction.

Fieldnotes helped the researcher reflect on past and prepare for future participant
interactions. For example, the fieldnote logged after Fred’s semi-structured research
interview described how the researcher reciprocated Fred’s straightforwardness to defuse
tension that arose from a line of questioning:

Fred got real angry with me at one point for probing the same issue (why he seeks
HI) so much… I told him why I kept asking similar questions and he relaxed…
[being straightforward] seemed to indicate that I did care and was listening to
what he said and was trying to learn more. (Fieldnote: December 15, 2016)

This encounter with Fred helped shape how the researcher interacted with future
participants and facilitated rapport development through reciprocated straightforwardness
from the researcher.

4.2.3 Data Analysis

Constant comparative data analysis is characteristic to both CGT and PV methodologies
(Charmaz, 2014; Wang & Burris, 1997) and occurred concurrently with data collection.
When applying this analytic approach, researchers inductively generate codes by
allowing codes to emerge naturally from participants’ important or oft mentioned ideas
Thus, inductive coding allows the researcher to develop an analytic framework that appropriately reflects participants’ experiences.

Constant comparative data analysis also required the researcher to simultaneously analyze new data individually and as part of a larger unified data set. That is, a new data source collected from a participant was analyzed alongside and compared to theirs and other participants’ interviews and photos (Charmaz, 2014; Wang & Burris, 1997). For example, initial codes were created to categorize common actions and factors related to participants’ HIS, such as the code relying on family physicians for HI. As data from new participants were analyzed new codes were created to reflect elements of their HIS that were unique from existing data. For example, while Paul (26 years-old, corn and wheat farmer) was the fifth participant recruited, he was the first to discuss and photograph how HIS was related to mental health. Thus, a new code, being mindful of your mental health, was created to categorize participants’ thought processes related to seeking HI for mental health concerns. As part of the constant comparative analytic approach, each code created from new participants, such as being mindful of your mental health, was compared to existing data to determine how it fit with previously collected data. Doing so ensured that the same analytic coding schema was applied to all data regardless of when it was collected, and helped ensure the final results appropriately fit the entire data set. All data, including fieldnotes, participant photographs, participant logbooks, and interview transcripts were managed and analysed as a single set using N*Vivo qualitative software (QSR International, 2016).

4.2.3.1 Photograph analysis.

The 38 photos, which captured rural healthcare services, farm equipment, livestock, and information sources such as equipment safety sheets, newspapers, and agricultural magazines, were analyzed in four phases consistent with PV methodology. First, the researcher previewed a participant’s photos alongside the narrative provided in his logbook prior to discussing them with the participant in his semi-structured research interview. This enabled the researcher to focus on and become immersed in the participant’s perspective before beginning the semi-structured research interview (Oliffe, Bottorff, Kelly, & Halpin, 2008). Logbooks were also previewed to identify any photos that participants noted they intended to take but did not, or to understand ideas associated
with photos that were clearly taken as well as those that were blurry or were not actually captured and exposed on the film.

Second, at the outset of the semi-structured research interview the researcher guided each participant through an analysis of up to five of his own photos following the SHOWeD analytic technique “What do you see here? What is really happening here? How does this relate to our lives? Why does this situation, concern, or strength exist? What can we do about it?” (Wang, 1999, p. 188). For this study, the SHOWeD questions were tailored to generate insight and maintain focus on how the participants’ photos specifically reflected their HIS process and how it was affected by social, cultural, and rural contextual factors. For example, “how does this relate to our lives?” was modified to “how does this relate to how you seek HI as an RMF?”

Third, following each interview the researcher reviewed the participant’s photos and logbooks alongside their descriptions provided during the interview to address inconsistencies between what was depicted and what was described during the interview (Oliffe et al., 2008). While reviewing Fred’s (59-year-old corn and beef farmer) photo of an auger safety sheet, titled “Auger Safety” (Figure 4.1), the researcher noted inconsistencies between how Fred described the photo and other HIS practices.
Fred described the safety sheets as HI “related to keeping us healthy, so we don’t get hurt” that the Ontario Ministry of Labour mandated he share with workers on his farm. This account of sharing HI with other RMFs was inconsistent with Fred’s later comments about not discussing HI with others because “their health is none of my business and my health is certainly none of their business”. This inconsistency in willingness to discuss HI led to further analysis of “Auger Safety” as a representation of how provincial government policies influence RMFs to seek and discuss HI for farm-specific issues.

The fourth stage of photo-analysis included a cross-photo comparison (Olliffe et al., 2008) which followed the steps outlined above with Paul’s photos and transcripts to determine how each participants’ photos related to one another, and to the transcripts of each participants’ interview(s). For example, the analytic insight generated from reviewing Fred’s “Auger Safety” photo was applied to Cliff’s (56 year-old dairy farmer) testimony and helped identify elements of Cliff’s HIS process, such as those related to his experience building a barn for his son as also being influenced by provincial government health and safety policies.
4.2.3.2 Transcript analysis.

Transcripts of introductory meetings and semi-structured interviews, as well as participants logbooks, were analysed using line-by-line and focused coding according to recommendations by Charmaz (2014). Line-by-line coding of each transcript allowed the researcher to interact with the data on a granular level to observe patterns that might otherwise have gone unnoticed (Charmaz, 2014). Like the preview stage of photo analysis, line-by-line coding enabled the researcher to become immersed in each participant’s perspective and focus on the intricacies involved in his HIS process. Codes were inductively created to depict actions, thought processes, and values related to how participants seek HI. For example, hiding illness was used to code a normative process used by participants to maintain their image as a healthy and strong RMF while seeking HI. Using gerunds, or action-oriented codes, to categorize participants’ HIS framed the emerging theory as processual (Charmaz, 2014). Action-oriented codes also helped to differentiate from descriptive line-by-line codes used to categorize the social, cultural, and rural contextual factors that influenced participants’ HIS process. For example, illness is weakness described the social values of participants’ rural communities that often influenced their process of hiding illness.

During the second stage of transcript analysis, focused coding, initial codes and data sources were compared to each other to categorize the most significant initial codes for the data set as a whole (Charmaz, 2014). This process exposed theoretical and abstract concepts that categorized how different participants spoke about the same process. For example, while some participants described hiding illness as a way to manage their health concerns, other participants described this as showing strength. Focused coding enabled these codes to be compared across each participants’ interviews and photographs to elevate it to the more abstract and theoretical code honing image of self as RMF to reflect how they demonstrate their ability to manage health concerns.

4.3 Results

This CGT-PV study revealed that RMFs’ HIS can be explained by an identity-based core process ‘Normalizing Self as an RMF Throughout HIS’. For participants, ‘Normalizing Self” was directly related to how they ‘Navigated Personal and Community Expectations
of Self as an RMF to Seek HI’, and was affected by their social, geographical, and political rural contexts. The relationship between ‘Normalizing’, ‘Navigating’ and the rural contexts is best depicted by situating ‘Normalizing Self’ at the center of a set of three concentric wheels (see Figure 4.2).

Figure 4.2. Dynamic Wheels. A depiction of constructivist grounded theory using photovoice which explains how rural male farmers seek health information.

Legend: RMF = rural male farmer; HI = health information; HIS = health information seeking.
Participants revealed that they moved freely between processes when seeking HI, which is depicted by hashed lines and bidirectional arrows at the border of each wheel. The absence of separations between each component on a wheel indicates the free movement between each component of that process, as well as the flexibility to prioritize a single component during a specific HIS instance. Jerry, a 31-year-old cash-crop farmer, described the diagram as a set of dynamic wheels that was adaptable to different RMFs’ HIS situations, since one component on a wheel “could almost be a little piece of the pie and [another] could cover half of it for different situations and for different people.” The following sections will describe the nature of the core process, as well as each wheel and their components.

4.3.1 Normalizing Self as a Rural Male Farmer Throughout HIS

Participants from various rural and farming contexts constructed a sociocultural motif of the “normal” RMF characterized by toughness and healthcare avoidance, and revealed that ‘Normalizing Self’ to these social values formed the core of their HIS process. ‘Normalizing Self’ was perceived to be an effective method to ensure participants were accepted as an RMF by their farming and rural community. As George, a 70-year-old beef/cash crop farmer, described, “nobody wants to be different, and we want to do that good job of farming and looking after things, so you don’t want to be the one who gets talked about as the guy who doesn’t do things right.” Participants noted that the social values they attempted to align with while ‘Normalizing Self’ could change over time, and in doing so could change how they seek HI and viewed themselves as an RMF. Ron, a 47-year-old part-time beef farmer, used the popularity of specific tractors in his community as a metaphor for how RMFs can change their HIS behaviour to maintain their acceptance as a “normal” RMF in the community:

> When I was a kid everybody had a Super A Farmall International [tractor] and a 135 Massey [tractor]… because that’s what the neighbour had. The first guy that went out and got something different… the neighbours were goin’ ‘what’re you doing?’ So that’s the same with seeking medical information… we all want to be accepted.

Similar to George and Ron’s suggestions, other participants conformed to social norms attributed to an RMF in their area to be accepted by their community. Thus, ‘Normalizing Self as an RMF’ represents participants’ process of embodying a normalized RMF.
identity throughout their HIS process and was specifically related to two major components: living with rural gendered health norms and embodying an RMF work ethic.

4.3.1.1 Living with Rural Gendered Health Norms

Participants revealed that ‘living with rural gendered health norms’ that valued RMFs who were “very tough” and “will put black tape on something that should have stitches and keep goin’” (Ron, 47 years-old, part-time beef farmer) was integral to how they ‘Normalized Self as an RMF Throughout HIS’. Participants indicated that how they demonstrated their toughness and how they engaged in HIS was engrained into RMFs by family and friends. Kurt, a 60-year-old livestock and bean farmer, considered his toughness and HIS to be influenced by “how you were brought up… have a shot of whisky and pour some on the cut… it should fix everything. And it usually did.”

Participants mentioned that living with rural gendered health norms that value “normal” RMFs’ ability to “tough” through health issues and provide for their families was related to avoiding or not seeking HI. Ben, a 50-year-old poultry farmer, described these pressures as being “bred into us over the generations, that the guy’s always been there as the provider of the family… being the guy you just don’t wanna think you’re ever gonna be sick.” Therefore, participants’ processes of ‘Normalizing Self as an RMF Throughout HIS’ was facilitated by how they lived with rural gendered health norms that normalized RMFs’ toughness and wilfully not seeking HI when dealing with health concerns.

4.3.1.2 Embodying an RMF Work Ethic

Participants related a “normal” RMF work ethic to their belief that “normal” RMFs were considered healthy if they were able to work, and participants embodied this belief throughout their HIS process. As Jerry, a 38-year-old soy bean and corn farmer, described, participants viewed a “normal” RMFs’ health and ability to work as synonymous: “if you can work, you’re healthy… it’s as simple as that, and if you’ve got something that’s ailing you which prevents you from working, then there’s something wrong with you.” As such, participants like Scott, a 47-year-old dairy farmer, noted that equating their ability to embody an RMF work ethic with their health state promoted HIS: “If I was suddenly unable to do my job, then I would want to get to the bottom of it, kind of thing, so it’s only when some limit comes into play.” Thus, embodying an RMF work ethic enabled participants to ‘Normalize Self as an RMF’ by aligning themselves with
“normal” displays of RMF behaviours, and affected their interest in and commitment to seek HI. The following section will add further depth and clarity to participants’ core ‘Normalizing’ process and present how participants’ HIS was shaped as they ‘Navigated Personal and Community Expectations of Self as an RMF’.

4.3.2 Navigating Personal and Community Expectations of Self as an RMF to Seek HI

‘Navigating Personal and Community Expectations of Self as an RMF to Seek HI’ refers to the intra-personal processes participants used to seek HI while ‘Normalizing Self as an RMF’, and is depicted by the green wheel immediately surrounding the ‘Normalizing’ core (see Figure 4.2). While ‘Navigating’, participants experienced an ‘evolving personal health identity’ as a result of avoiding or being exposed to new HI, engaged in ‘cultivating trust to seek HI’ by establishing new and relying on existing trust-based relationships for HI, and engaged in ‘honing an image of self as an RMF’ by choosing what types HIS behaviours to engage in with others and when alone.

4.3.2.1 Evolving Personal Health Identity

‘Evolving personal health identity’ captures how participants’ HIS choices and life experiences affected their awareness and appraisal of health concerns. Participants often described how they became more aware of and learned how to live with their new health and illness concerns, and how they integrated these issues into their personal health identity as a result of HIS. For example, Paul, a 26-year-old corn and wheat farmer noted that while he was initially against medicinal marijuana because of “the negative stigma around it” in his community, his personal health identity evolved once he found HI about how it could benefit his health and help him manage his anxiety: “I don’t use [marijuana] as a party drug… it allows me to be more relaxed, be more calm, and do my work efficiently, and be healthy mentally and physically.” As such, Paul’s evolving personal health identity and acceptance of alternative anxiety treatments enabled him to continue working efficiently and thus, still embody a “normal RMF” work ethic.

Participants also described how life experiences such as having children or grandchildren had changed how they appraised health risks and concerns and shared HI with others. For Kurt, a 60-year-old livestock and bean farmer, having children and grandchildren caused...
his personal health identity to evolve as he rethought and changed his farming habits to share health promoting HI with his children and grandchildren:

You try to always be careful, but yeah, it does make you think a little bit… I don’t think I should be jumping across the beam like I’ve been doing ever since I was a kid… so you walk around cause you’re teachin’ your kid to walk around.

Like Kurt, other participants viewed changing their health behaviors for the betterment of their families to be a component of how a “normal” RMF would seek HI.

4.3.2.2 Cultivating Trust to Seek HI

‘Cultivating trust’ refers to participants’ process of forming new and relying on existing trust-based relationships to seek HI from their social network, healthcare professionals, and farm-related services that they may or may not be able to access on their own. Participants indicated that they felt supported by their social network, especially close female family members such as wives, daughters, or sisters, who assisted them by seeking and interpreting HI. Cliff, a 56-year-old dairy farmer, described how his wife acted as an intermediary for his HIS, stating, “when I go see the doctor and he says something, my wife will usually go on the Internet and look it up a wee bit or either talk to my daughter who’s in the healthcare system to see if it’s along the right line.” Participants also trusted HI from individuals in their social networks who experienced the same or similar health issues for which they were currently seeking HI. For example, the only health concern that Harold, a 74-year-old beef farmer, discussed with his brother was diabetes as Harold and his brother were both diabetic RMFs and could share what Harold judged to be trusted HI about new treatment plans: “[my brother] told me he was on a new medication that was working… and he actually gave me his slip from the pharmacy with the name of the [drug]… so I took that with me and I asked my doctor about it and she put me on it.”

Participants cultivated trust in rural healthcare and farming services and resources such as physicians, nurses, chiropractors, farm equipment and chemical suppliers, and farm-related magazines or newsletters due to their perceived expertise in health and farm-specific health issues. Participants’ most cited HI source was their healthcare providers, who they treated as an authoritative and “huge[ly] respected” (Sam, 67 years old, dairy/poultry farmer) HI source due to their extensive medical expertise. In a similar
manner, participants viewed farm-related resources as expert sources for farm-specific information and trusted that any HI these sources included applied to them as RMFs. Nick, a 29-year-old dairy farmer captured such HI sources in a photo he titled “Ag Magazines” (see Figure 4.3).

Figure 4.3. Ag Magazines (Nick, 29 years old, dairy farmer)

Using this photo Nick revealed that trusting and regularly consulting farm-related information sources was a part of how he was raised to be a “normal” RMF: “Most farmers get that magazine, right, and I guarantee ya all of them read it too… dad would sit at there at the kitchen table [and] read it, things just kinda passed down the line.” Therefore, ‘cultivating trust’ describes how participants relied on trusting relationships with their family members, others they knew with similar health concerns, healthcare professionals, and farm-specific services and resources to seek HI.

4.3.2.3 Honing Image of Self as RMF

Participants continuously weighed how engaging with or avoiding various HI sources could influence their public and self-image as a “normal” RMF. Participants viewed
limiting or avoiding HIS as an effective method to hone their public image as a hard-working RMF by demonstrating to themselves and others their ability to maintain their work behaviour despite illness or injury. However, Fred, a 59-year-old corn and beef farmer, noted that there was a limit to how long he could avoid seeking HI: “it’s not that I go [to the doctor] very often… I gotta be pretty sick before I’m gonna go and see ‘em. I’m not a real firm believer of goin to the doctor unless you’re in pretty tough shape.” For Fred and other participants, being “in pretty tough shape” was defined as being unable to work, and they sought HI to help them return to their farm work and maintain their image as an RMF who embodies the “normal” RMF work ethic. As such, when participants did seek HI, they noted that they usually did so to help them learn how to compensate for physical limitations caused by illness or injury and hone their public and self-image to align with that of a “normal” RMF based on work ethic.

Participants also revealed that their decision to avoid or actively seek HI was related to their self-image as an RMF who can support his family. For example, Cliff, a 59-year-old dairy farmer, noted that he avoided HIS since dealing with his health issues could threaten his ability to support his family, saying HIS would make him “feel more vulnerable. It would make you feel like you couldn’t provide for your family as efficiently”. Conversely, participants consistently noted that actively seeking HI for close family members, namely their wives or children, was a way to demonstrate their ability to support their families because “if you’re supposed to be lookin’ after people then that’s what you do, innit?” (Chris, 55 years old, beef and pork farmer) Therefore, in ‘honing their image of self as an RMF’ to seek HI, participants ‘Navigated Personal and Community Expectations’ of themselves, including being able to work through illness or injury, have a “normal” RMF work ethic, or be able to support their family.

In summary, while ‘Navigating Personal and Community Expectations of Self to Seek HI’ participants engaged in three sub-processes that influenced and were influenced by how they believed a “normal” RMF would seek HI: ‘evolving personal health identity’, ‘cultivating trust to seek HI’, and ‘honing image of self as an RMF’. The following section will outline how participants’ rural community and personal factors influenced their ‘Normalizing’ process by creating the social context in which their HIS occurred.
4.3.3 Rural Community and Personal Social Contextual Factors that Affect RMFs’ HIS

Participants revealed that ‘Normalizing Self as an RMF Throughout HIS’ was affected by their position in their rural communities. As such, ‘Rural Community and Personal Social Contextual Factors that Affect RMFs’ HIS’ form the social context within which ‘Navigating’ and ‘Normalizing’ occur (see yellow wheel in Figure 4.2). Participants revealed that their HIS process was affected by four rural social contextual factor categories: personal socioeconomic factors, their community’s view of men’s health and illness, the nature of the health concern, and how they viewed their own HIS abilities.

4.3.3.1 Personal Socioeconomic Factors

Age and education emerged as significant socioeconomic factors that influenced how participants seek HI. Older participants believed that younger RMFs were more willing to seek HI because they have been raised in a society in which HIS is promoted and accepted. Younger participants echoed this sentiment and noted that, when compared to older RMFs, they and peers their age were often more open to seeking and accepting HI in general, consulting alternative healthcare providers such as chiropractors and naturopaths for HI, and seeking HI to prevent future injury or illness. Aaron, a 25-year-old hired hand on a pepper farm took a photo he titled “Respirator” (see Figure 4.4) to depict the benefits of seeking HI.
Aaron noted that his photo of the respirator represented how he sought HI by consulting a naturopath and farm-safety supplier to learn how to “prevent health problems” related to dust exposure and inhalation while “cleaning out the [grain] bins”. For Aaron, seeking and acting on preventive HI from these sources was “normal” for RMFs his age in his community, and thus influenced how he Normalized Self as an RMF. In addition to age, participants with higher education and with non-farm-related post-secondary education expressed higher confidence in their ability to seek HI independently. Scott, a 47-year-old dairy farmer who completed a bachelor’s degree in a non-farm-related discipline, described his confidence as being related to his information searching skills: “I know how to access information, you know, having done an undergrad degree, and knowing how to do research and that sort of thing”. Therefore, participants’ age and education affected how they viewed rural social norms surrounding RMFs’ HIS and their abilities to independently seek HI.

4.3.3.2 Nature of Community Perception of RMFs’ Health and Illness

All participants, regardless of their age, community size, or distance from an urban area, indicated that their communities’ perceptions of RMFs both limited and promoted how readily they would seek HI. Specifically, participants believed that their communities would generally not expect RMFs to seek HI due to traditional rural social and gendered
health norms that value RMFs’ ability to perform physical labour. As Scott, a 47-year-old dairy farmer, described, such social norms limited how often he would seek HI since he was expected to fulfill “traditional male roles, like the male does the hard work and everybody kind of counts on him sort of thing… you’re reluctant to admit that you have any type of weakness, you just kind of push on through.” Participants also indicated that their community would likely facilitate their HIS for issues that were widely viewed as serious health concerns such as diabetes, cancer, strokes, or heart attacks. Ron, a 47-year-old part-time beef farmer, noticed how his community supported his HIS once they knew he was diagnosed with cancer and was not missing work for undisclosed, or what the community might perceive as frivolous, issues: “nobody was pressuring me [to return to work]… if I’m just missin’ work for whatever [health issue], they don’t know, but if I’m missin’ work because I have cancer treatment it’s totally looked upon differently.”

4.3.3.3 Nature of Health Concern and Diagnosis

Participants indicated they would seek HI for health concerns such as diabetes, cancer, strokes, heart attacks, and major traumatic injuries, since these concerns were perceived by their rural communities as life-threatening. Participants also viewed physically observable non-life-threatening health concerns, such as a broken leg in a cast, as acceptable to discuss and seek HI for since they were easily noticed by others and could be perceived as significant by their community. However, participants would not seek HI beyond initial consultations with healthcare professionals if such health concerns occurred due to carelessness on the farm as discussing them was embarrassing and threatening to their self-image as a “normal” RMF. Kurt, a 60-year-old livestock and bean farmer, captured these feelings in a photo he titled “Cattle and Calves Kicking” (see Figure 4.5) to represent how a momentary lapse of judgement led to him breaking bones in his hand:

It was embarrassing when I hit a cow and busted my hand. I think it’s kind of stupid… [my wife] told me ‘I gave you a nice cane, why didn’t you have the cane?’ I don’t know? Well I had the cane sittin’ there, and if I had the cane [in my hand] I woulda hit [the cow] with the cane instead of usin’ my hand… 60 years old and I didn’t have a cane and I hit it with my hand… I’m not 12 anymore.
Participants indicated they would not seek HI for non-life-threatening health concerns such as minor injuries, cuts, or colds, or mental health issues such as anxiety, depression, and mental fatigue, since they felt that such concerns had no effect on their ability to physically complete their work. George, a 70-year-old beef farmer, described how avoiding HI for such concerns was a means for participants to embody a “normal” RMF work ethic: “we want to be these macho guys who can do everything [and] if you admit you got a health problem then you’re no longer the macho male who can do everything.” As such, the nature of the participants’ health concern and diagnosis was related to how they viewed themselves as an RMF, how they could embody a “normal” RMF work ethic, and the process by which they did, or did not, seek HI.

4.3.3.4 View of Self

Participants discussed how their intrinsic valuing of HI and their perceived abilities to seek HI characterized their HIS. Participants often indicated that they believed their limited interest in seeking HI was part of who they were as an individual: Michael, a 61-year-old organic vegetable farmer, described this disinterest as being “in my DNA, it’s
just who I am.” Participants also revealed that they avoided or delayed seeking HI until they were very ill to preserve their view of self as a healthy RMF and distance themselves from others who were sick. Participants’ confidence in their abilities to seek HI influenced how readily they would seek HI. Patrick, a 62-year-old dairy and goat farmer avoided HIS to avoid uncomfortable feelings he had about himself such as low self-esteem caused by previous HIS instances, “the L word comes up a lot. Loser.” Patrick viewed his need to seek HI for his tumour-induced seizures as ostracizing, and thus limited how much he would seek HI. Participants revealed that trusted social supports, such as spouses or close family members and friends, often sought and interpreted HI on their behalf when their own view of self or low self-confidence limited their desire or ability to seek HI. Participants who were confident in their abilities to seek HI often did so independently and covertly, and only consulted others when they could not find the HI they were looking for on their own. This self-reliance was described by Paul, a 26-year-old corn and wheat farmer: “The Internet would be my first go-to and then if it was a problem that persisted or that I couldn’t solve on my own, then it would be a healthcare professional.” Participants’ view of self affected their HIS process through both their intrinsic valuing of HI and how confident they were in their HIS abilities. In summary, the social context that affected participants’ HIS was created by a combination of participants’ view of self, the nature of the participants’ health issue, the community’s perception of RMFs’ health issues, and participants’ personal socioeconomic factors.

4.3.4 Rural Geographical and Political Contextual Factors that Affect RMFs’ HIS

‘Rural Geographical and Political Contextual Factors’ affected all elements of participants’ HIS process and represents how participants’ HIS was influenced by broader geographical and political environments (see blue wheel in Figure 2). Specifically, participants revealed that ‘Normalizing’ was affected by the nature of their farming work, the availability and appropriateness of rural healthcare services, rural community characteristics, and government public policies that shape their HIS context.

4.3.4.1 Nature of Farming Work

The nature of participants’ farm work affected their HIS processes and was primarily driven by the seasonality of farming and the organizational characteristics of the farm on
which participants worked. Participants noted that the heavy demands of farming throughout the spring, summer, and fall limited how likely they were to seek HI during those times and caused them to schedule treatment plans for other times of the year. For example, Cliff, a 56-year-old dairy farmer, engaged in HIS to plan treatments that could limit his physical functioning for the winter months when farming work was limited: “surgery was gonna be done during the winter. I did the time, the math, and it would mean that I’d be ready to go for spring seed.” Participants also revealed that the organizational characteristics of farms they worked on affected their HIS process. Participants who worked on small family farms alone or with a single family member often felt they could not seek HI since doing so would take them away from their work responsibilities. Conversely, participants who owned and operated a larger farm or worked for someone who did felt supported by their coworkers to take the time to both seek HI and act on the HI they received to improve their health. Aaron, a 25-year-old hired hand on a pepper farm, described how his co-workers supported him to continue working while simultaneously acting on his doctor’s order to periodically rest his back while he recovered from a back injury: “I’d let [my co-workers] drive and I’d lie in the back seat just to get more flat cause it was really sore. [The guys] I work with, they know I wouldn’t just fake it or whatever, they could tell that I was in a lot of pain.”

4.3.4.2 Availability and Appropriateness of Rural Healthcare Services

Participants described healthcare services in their communities as limited, and often indicated the need to travel (sometimes long distances) to access different forms of healthcare services, including specialist care, chiropractors, dentists, and naturopaths. Six participants took 19 photos of buildings and signs of healthcare services available in their community; however, these photos have been withheld from publication since they contain information that could identify participants, such as the name of their healthcare provider or community. Limited access to rural healthcare services inhibited HIS for participants who relied on their healthcare providers for HI and was especially problematic for seeking HI for mental health concerns. Participants revealed that they were able to compensate for limited availability or familiarity with healthcare services in their community by vicariously seeking HI through close family members or friends they had cultivated trust in, such as their wives, daughters, or sisters.
Participants often viewed rural healthcare resources in their communities as welcoming and supporting environments to seek HI, especially when healthcare providers were from or familiar with the rural farming context. Participants noted that having such familiarity was a way for their healthcare providers to demonstrate that they understood the health concerns and HIS opportunities faced by RMFs, and promoted cultivating trust in new and existing healthcare providers as sources of HI. Furthermore, Kurt, a 60-year-old livestock and bean farmer, explained that it was “normal” for him and his peers to trust HI placed in agricultural magazines because these resources were regarded as relevant information sources for RMFs, “It doesn’t have to be a farm person [that provides the HI]… but it’s in the farm paper, that’s one of the biggest ways… to get information out to [RMFs].”

4.3.4.3 Rural Community Characteristics

The characteristics of participants’ rural communities, including distance to urban areas, community size, and access to acceptable public services, affected participants’ HIS by influencing which HI resources were needed and available to them. For participants, distance and travel time to urban areas was often a barrier to HIS as their most trusted HI sources, healthcare providers such as physicians or specialists, were commonly located in larger cities. Additionally, small community sizes limited the number of HI sources, such as physicians, that were readily available for participants to consult. Participants revealed that to overcome these barriers they would consult trusted sources for HI in their rural community such as their wives, daughters, agricultural magazines, or alternative care providers such as naturopaths. Depending on the nature of the health concern some participants were reluctant to discuss HI with members of their community as doing so could negatively impact their position as a “normal” RMF. In such instances, participants revealed that they would seek HI independently, facilitated by access to public services such as the library or reliable Internet connection. Sam, a 67-year-old dairy/poultry farmer, noted that the introduction of reliable highspeed internet to his community is “gonna help make the average Joe more informed… if they’re havin’ a little problem or something like this, they’ll seek health information a little more.” Participants noted that the increasing reliability of rural Internet connections facilitated their covert HIS, which was often viewed as a means to preserve their image as an RMF by not disclosing
personal health details. Therefore, the characteristics of participants’ rural communities, such as remoteness, size, and reliable Internet connections contributed to the geographic rural context in which they sought HI.

4.3.4.4 Federal, Provincial, and Municipal Public Policies That Shape RMFs’ HIS Context

Participants’ HIS process was both facilitated and limited by federal, provincial, and municipal government public policies such as those that influence farm safety practices and healthcare resource allocation. Participants noted that while farm safety regulations were cumbersome and often disconnected from the realities of farming practices, such policies promoted HIS that might not otherwise occur. For example, Ben, a 50-year-old poultry farmer, flies a crop duster and, even though he is relatively healthy, he is required to receive a physical exam every two years to retain his pilot license. As a result of such policy-mandated HIS, Ben said “I found out my cholesterol was a bit high and I’m taking something for it now. I wouldn’t have found that out if I wasn’t a pilot, I don’t really go to my doctor otherwise.” Participants were also critical of provincial policy decisions, such as centralizing healthcare resources to urban centers, and believed such policies were often drafted with little or no input from themselves or their communities. Participants viewed such policies as irresponsible healthcare decision-making since they further limited the number of healthcare and HI outlets available to their communities without proffering an alternative to replace them. Finally, participants believed that municipal policies, such as those focused on water-protection and land-stewardship, slightly inhibited their HIS as they added more farm-related duties to their day and reduced the time available to seek HI.

In summary, participants’ HIS was influenced by rural geographical and political contextual factors such as the nature of participants’ farming work, the availability and appropriateness of rural healthcare services, characteristics of participants’ rural communities, and federal, provincial, and municipal policies. This broader rural context encompassed participants’ social contextual factors and how participants Navigated Personal and Community Expectations of Self as an RMF to Seek HI. Situated within Navigating lies participants’ core process, Normalizing Self as an RMF Throughout HIS,
which reflects how participants sought HI by aligning with rural gendered health norms and the “normal” RMF hard work ethic.

4.4 Discussion

This study has demonstrated that an identity-related process entitled ‘Normalizing Self as an RMF Throughout HIS’ explains how RMFs in this study seek HI. ‘Normalizing’ is influenced by a secondary process, ‘Navigating Personal and Community Expectations of Self as an RMF’, which explains how these RMFs’ HIS was influenced by social, cultural, political, and rural contextual factors. The following discussion will address how Normalizing opposing rural masculinity traits, such as toughness and caring for others, affected these RMFs’ HIS processes.

4.4.1 Normalizing Rural Hegemonic and Subordinate Masculinities

Hegemonic masculinity, a socially idealized gender identity based on masculine dominance that members of a society may attempt to embody (Connell, 2005), is known to affect rural men’s health behaviours (Coldwell, 2007; Courtenay, 2006). In this study RMFs’ HIS processes were shaped by how they normalized rural hegemonic masculinity traits based on physical and emotional expressions of toughness as well as an unwavering work ethic. Embodying these traits encouraged some participants to avoid HIS in public and covertly seek HI independently. Publicly avoiding HIS was a way for these RMFs to demonstrate to themselves and others their ability to embody rural hegemonic masculinity, as seeking HI was believed to indicate that they were not tough enough to deal with their own health concerns like a “normal” RMF. Several participants used covert and independent HIS to learn how to maintain their physical health and ability to embody a “normal” RMF work ethic. These HIS processes reflect how participants blunted their exposure to HI by seeking the minimum amount of useful HI needed to cope with stresses related to their own health concerns (Miller, 1995; Williams-Piehota et al., 2009) so as to avoid or prevent threats to their RMF identity or ability to maintain their “normal” RMF image.

In contrast to rural hegemonic masculinity’s toughness and stoicism, a subordinate masculine gender identity is characterized by traits commonly attributed to femininity,
such as caring for and being open with others (Connell, 2005). Participants revealed that despite chiefly normalizing their HIS around rural hegemonic masculinity values of toughness and work ethic, they also normalized select subordinate masculinity traits in certain HIS contexts. For these RMFs, embodying subordinate masculinity traits, such as openness and caring for others, promoted public and active HIS for their own and their loved ones’ health concerns, and reflected an active monitoring approach to HIS (Miller, 1995).

When monitoring, participants aimed to gather as much HI as possible regardless of whether it provided positive or negative details about the health concern (Miller, 1995). These RMFs monitored HI by actively seeking and actively monitoring their daily sphere of information (McKenzie, 2003). Active HIS for loved ones entailed engaging with trusted HI sources in their communities such as their healthcare providers or pharmacists, trusted social supports such as friends, or online HI resources. Participants’ active monitoring led them to consciously scan their environment for HI related to their loved ones’ health concerns. That participants monitored HI for loved ones offers a stark contrast to the blunting approach often taken for their own HI needs and may indicate how “normal” RMFs seek HI to support their families, even though they may be unlikely to seek HI for their own health needs. Normalizing subordinate masculinity also promoted these RMFs to be open with others and engage in conversations about their health and HI needs. These conversations resembled an active monitoring approach to HIS as participants consciously engaged in discussions related to their own HI needs if these conversations were initiated by someone else. When monitoring or blunting, participants often noted that their most trusted source of HI was their healthcare providers. As such, participants often conflated healthcare seeking with HIS since they viewed any form of engagement with healthcare professionals as the most direct approach to receiving trustworthy and high-quality HI.

RMFs in this study often sought HI through strong ties, or members of their social network with whom they had a close personal relationship (Borgatti & Cross, 2003; Granovetter, 1983), such as spouses, sisters, or daughters. Participants vicariously sought HI through female strong ties, also known as proxy searching (McKenzie, 2003), when the RMFs lacked confidence in their own HIS skills or wanted to avoid public HIS. When
proxy searching, participants’ female strong ties found and delivered relevant HI to the RMF they were supporting. Female proxy searchers often evolved into lay information mediaries (Abrahamson, Fisher, Turner, Durrance, & Turner, 2008) who, in addition to finding relevant HI, would interpret and translate HI into terms these RMFs would understand.

Using female strong ties as lay information mediaries was most common for older RMFs, those with less formal education, and those who expressed limited self-confidence in their ability to understand HI. Participants who expressed subordinate masculinity traits, such as being open about their health, often established a dialogue with their female strong ties and became more confident and open to HIS the more they discussed their health concerns. Such openness could enable these RMFs to interact with weak ties in their social networks, or loose social supports such as acquaintances or co-workers (Granovetter, 1983), who could expose them to new HI not available through their strong ties (or close female family members) (Borgatti & Cross, 2003). Conversely, RMFs who focused on embodying hegemonic masculine traits such as displaying their toughness and RMF work ethic often maintained reliance on their female strong ties as a proxy HI seeker or as a lay information mediary.

4.4.2 Promoting and Transforming RMFs’ HIS Through Policy and Practice

Future initiatives designed to facilitate RMFs’ HIS can work within existing rural hegemonic masculinity norms to place HI in locations that RMFs trust and can engage with independently and covertly. For example, since participants considered it “normal” for RMFs to read and to be seen reading agriculture-related magazines, including HI in such information resources could help RMFs engage with HI without their image being threatened. Enabling RMFs to maintain their “normal” image while seeking HI publicly could help mitigate HIS-related threats to their gender identity and promote HIS for those who blunt exposure to HI. This approach could also prompt RMFs’ to seek HI for issues for which they currently may not seek HI unprompted, such as how to identify and manage mental health concerns.
Policy makers can promote RMFs’ public HIS by expanding initiatives that integrate HIS into “normal” RMF behaviours, such as current federal and provincial government health and labour policies that mandate and normalize farm-related HIS. In contrast, these RMFs indicated that municipal policies, such as land and water stewardship guidelines, inhibited their ability to seek HI by adding more work duties to their day. Participants indicated that they felt excluded from the policy planning and decision-making process at all levels of government policy formation, and that such exclusion contributed to a disconnect between what policies mandated and what RMFs considered reasonable actions. Thus, future policy development could promote and expand RMFs’ HIS beyond farm-specific issues by including RMFs in the policy process to accurately account for and include their HI needs, a recommendation that has also been noted elsewhere (Hiebert, Regan, & Leipert, 2018; Multi-Sector Rural Health Hub Advisory Committee, 2015; The Ontario Rural Council, 2009).

Rural communities, public health officials, and agricultural interest groups can promote RMFs’ active public HIS by establishing public health and community-based initiatives that integrate RMFs’ HIS with “normal” farm-related issues. These initiatives could use “normal” RMF activities that focus on toughness and work ethic, such as fixing farm equipment, as a premise to bring RMFs together in a group where they could discuss HI. For example, rural public health organizations could partner with local farm equipment suppliers to create community-based events where RMFs could learn or further develop farm-related skills while also discussing RMF-relevant HI, such as how to recognize and manage depression during peak farming season. Such initiatives could provide RMFs utilizing different HIS approaches with more opportunities to encounter HI on a daily basis and could help integrate HIS-promoting subordinate masculinity traits, such as openness with others, into “normal” RMFs’ behaviours.

In cases where financial, time, or other organizational factors limit extensive RMF engagement, government policy makers, public health planners, and agricultural interest groups can launch gender-transformative initiatives (Fleming, Lee, & Dworkin, 2014) to promote RMFs’ HIS. Such initiatives problematize and challenge gender inequities, such as RMFs’ HIS avoidance, and empower groups to question and change their own behaviours. For example, thought-provoking HI such as “Why do rural male farmers
avoid health information?” could be posted in public locations RMFs are known to frequent, such as coffee shops or diners, to prompt RMFs to consider why they may or may not seek HI for specific issues. To be effective these health messages could represent risks and benefits of seeking HI in ways that would resonate with RMFs (Burkell, 2004), and could form the basis of peer-based health education campaigns (Matthews, Zok, Quenneville, & Dworatzek, 2014) where RMFs engage with each other in discussions to improve their HIS. This form of messaging could promote RMFs to consider and critique their HIS processes without reinforcing damaging gendered health stereotypes; such messaging has also been shown to lead to more equitable health-related social norms and men becoming more engaged with their own health-related decision making (Fleming et al., 2014).

Rural communities, public health officials, policy makers, and healthcare service providers can capitalize on the normality of RMFs seeking HI through their spouses to improve RMFs’ access to HI. Since RMFs interviewed noted that they seek HI from sources similar to those used by rural women, such as pharmacists and physicians (Leipert et al., 2008; Wathen & Harris, 2007), placing RMF-specific HI in these locations could facilitate HIS for rural women who proxy search for HI, and for RMFs who are open to seeking HI. Rural communities could also use social events, such as curling or card games, to introduce gender-transformative health initiatives to RMFs and the women who support them. Including women in gender-transformative HIS-promoting initiatives could increase their scope and prompt rural communities to challenge how rural hegemonic masculinity influences HIS for RMFs and the female strong ties who seek HI on their behalf. Ultimately, including both RMFs and their female supports could promote dialogue regarding the additional health workload that rural women take on to support RMFs and may lead to more equitable distribution of HIS if RMFs take ownership of their behaviour.

4.4.3 Reflections on an Integrated CGT-PV Methodology

The eight participants who took part in photographic data collection interacted with and used their photos when asked to explain potentially sensitive topics, such as how their gender influenced their HIS process. Participants who did not capture their own photos were less willing to discuss these topics; however, they appeared to become open to
explaining sensitive topics when the researcher described a photo taken by another participant. While this was intended to be a member-checking activity to gauge how ideas and analysis generated from one participant resonated with another, it also helped non-photo-taking participants explore sensitive topics. These findings support and advance existing research that demonstrated how PV can help men engage men in discussions about their health and gender (Oliffe & Bottorff, 2007) by highlighting the usefulness of PV with RMFs and with study samples where not all participants produce their own photos.

The eight participants who did not take photos cited their ability to speak and answer questions directly as the primary explanation for this decision. These eight participants, and rural gatekeepers encountered during recruitment, such as feed suppliers, also indicated that animal rights groups often use research as a ruse to gain access to farms and disparage RMFs’ public image. Despite RMFs being able to control what photos are taken when participating in PV research, the threat that animal rights groups may pose to an RMF’s public image may make RMFs skeptical of anyone proposing they take photos on their farm and reluctant to participate in future PV studies.

4.4.4 Trustworthiness

Trustworthiness criteria followed those proposed by Charmaz (2014), which include credibility, originality, resonance, and usefulness, as well as appropriate representation of photos proposed by Wang and Redwood-Jones (2001). Participant-produced photos contributed to this CGT’s credibility as they provided an avenue, in addition to participant quotes, to demonstrate how these RMFs’ realities related to their HIS process. Producing a credible CGT necessitated appropriate photo representation as participants were given an opportunity to capture, review, and analyse their photos and how they fit with emerging insights during analysis. This study aimed to contribute original research to advance how RMFs’ HIS processes are understood by ensuring the CGT fit all data, including photos, transcripts, and fieldnotes, from all participants. This study included numerous quotations and photos when possible to improve the likelihood that it will resonate with audience members who recognize quotes or photos as a reflection of a rural context they are familiar with. Doing so could enable the understanding of RMFs’ HIS processes generated by this study to be transferred to other
rural or farming contexts. Finally, PV enhanced the usefulness of this CGT by enabling participants to reveal HIS situations that other RMFs could relate to in their daily lives. The ability for participants to apply the findings of this study to their daily lives, as indicated by participants such as Jerry who described the flexibility and applicability of the grounded theory to his and other RMFs’ HIS processes, indicates that it appropriately fits with this sample’s realities and that future policies and programs designed based on these findings may be well received by RMFs in similar rural contexts.

4.4.5 Strengths & Limitations

This study’s greatest strength was its ability to engage RMFs in southwest Ontario, a difficult to reach population (The Ontario Rural Council, 2008), in an in-depth consideration and analysis of their HIS. In doing so, this study demonstrated the utility of PV with RMFs and contributed important understandings of how PV can be used to enhance CGT data analysis for participants who do not take photos. This study also demonstrated that the CGT aim to explain social processes can enhance PV’s criticality by generating additional insight into how social situations exist.

This study was limited by its geographic focus in southwest Ontario, which excluded input from RMFs from other areas within the province and elsewhere who may have had similar or contrasting HIS processes. Additionally, that eight participants did not take photos limited photographic data collection to a few categories of the emergent theory. However, these participants provided the researchers an opportunity to better understand how CGT and PV influenced each other.

4.5 Conclusion

This integrated constructivist grounded theory-photovoice study has revealed that rural male farmers in this study ‘Normalize Self as Rural Male Farmers Throughout Health Information Seeking’ while living up to social norms regarding rural male farmers’ toughness and commitment to a work ethic. Rural male farmers interviewed revealed that they often blunted health information seeking when Normalizing Self to rural hegemonic masculine values of toughness and work ethic, and monitored health information while Normalizing Self to subordinate masculine values such as caring for their family. To promote rural male farmers’ health information seeking in the future, policy makers,
public health officials, rural communities, and agricultural interest groups can include rural male farmers in health information-related decisions and create gender-transformative health information policies and programs that challenge rural male farmers’ health information avoidance based in hegemonic masculinity. Such initiatives could encourage rural male farmers to engage in health information seeking and empower them to take control of their own health information seeking processes, thereby helping to decrease the health promotion workload placed on their strong female ties. Ultimately, such initiatives could lead rural male farmers to be more open about their health issues and contribute to a more equitable distribution of health information seeking-related work between rural men and women.

Future research could examine the utility and nature of an integrated constructivist grounded theory-photovoice methodology with other populations, and with other research aims with rural male farmers and other rural men. Further research could also expand the scope of this study by examining how rural male farmers from across Ontario seek health information in different contexts. Finally, future studies could engage rural male farmers in health information resource development to determine how socially relevant health information can be effectively communicated to rural male farmers, and what types of messaging encourage rural male farmers to consider their health information seeking processes. Understanding how rural male farmers seek health information can help inform policy and public health initiatives aimed at improving rural male farmers’ health and addressing health issues beyond farm-related injuries would ultimately help improve rural male farmers’ broader health outcomes in the future.
4.6 References


Publications.


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CHAPTER 5
Implications & Conclusion

This dissertation presents the first known research to examine processes that explain how rural male farmers (RMFs) seek health information (HI), and how these processes are affected by rural social, cultural, political, and geographical factors. Three manuscripts (presented in chapters two, three, and four) presenting the research conducted are included in this dissertation, each making a distinct contribution to how RMFs’ health information seeking (HIS) processes are understood. Chapter two, entitled *Rural Men’s Health, Health Information Seeking, and Gender Identities: A Conceptual Theoretical Review of the Literature* (Hiebert, Leipert, Regan, & Burkell, 2016), establishes the relationship between Canadian rural men’s health, HIS theory, and masculinity theory. In doing so, this chapter presented how socially idealized, or hegemonic (Connell, 2005), rural masculinity norms based on pride and stoicism create the sociocultural context within which RMFs’ HIS processes occur.

Chapter three, entitled *Tokenism and Mending Fences: How Rural Male Farmers and Their Health Needs are Discussed in Health Policy and Planning Documents* (Hiebert, Regan, & Leipert, 2018), establishes that RMFs’ were minimally included or acknowledged in Ontario health policy and planning documents, and that, when included, RMFs were characterized in two ways. First, RMFs were used as tokens of rural communities to symbolize rurality for those in the policy audience who may be unfamiliar with rural health needs. Second, RMFs were revealed as an ideal group for health service planners to engage with to mend fences – or strained relationships – between healthcare providers and rural communities caused by centralization of services to urban communities. Thus, the third chapter established the health policy context within which Ontario RMFs’ HIS processes occur.

Chapter four, entitled *Normalizing and Navigating: How Rural Male Farmers in Southwest Ontario Seek Health Information* (Hiebert, Leipert, Regan, Burkell, & Frank, forthcoming), presents the results of a single study that integrated constructivist grounded theory (Charmaz, 2014) and photovoice (Wang & Burris, 1997) to explain processes by which RMFs seek HI. The 16 participants in this study revealed that they sought HI by engaging in a core identity-related process ‘normalizing self as an RMF throughout HIS’.
Participants further revealed that their normalizing process was influenced by a secondary process ‘navigating personal and community expectations of self as an RMF to seek HI’, which occurred within influential rural social, cultural, political, and geographical contexts.

Thus, this dissertation presents unique insights that explain how RMFs’ HIS processes are influenced by contrasting rural gender norms in different HIS contexts, and how these processes are situated within broader provincial health policy and rural sociocultural contexts. This chapter will present HIS, policy, and rural community implications of the research presented in each manuscript and will conclude with recommendations for future research.

5.1 Health Information Seeking Implications

5.1.1 Masculinity & Health Information Seeking

The research presented in chapters two and four further contextualized existing rural HIS literature which suggests that rural men in general will avoid HI by avoiding health-related interactions (Spleen, Lengerich, Camacho, & Vanderpool, 2014). In chapter two rural men’s HIS was theorized to be influenced by how they attempted to embody socially idealized – or hegemonic (Connell, 2005)– rural masculine identities that are known to influence rural men’s health behaviours (Courtenay, 2006; Morgan, Graham, Folta, & Seguin, 2016). Chapter two proposed that rural men who embody or attempt to embody rural hegemonic masculinity would avoid seeking HI and prioritize behaviours that enable them to demonstrate their physical prowess, such as continuing to work in spite of physical pain or illness (Coldwell, 2007; Connell, 2005; Courtenay, 2000). In contrast, rural men who embody a subordinate rural masculine identity that is aligned with traits commonly attributed to femininity, like being open with and caring for others (Connell, 2005), were believed to be more apt to seek or discuss HI with others (Coldwell, 2007; Courtenay, 2000). The above theorization of the relationship between rural masculine identity and HIS was exemplified and expanded by the RMFs included in the constructivist grounded theory-photovoice (CGT-PV) study presented in chapter four.

Participants in chapter four revealed that their HIS processes were directed by their selective embodiment of both hegemonic and subordinate rural masculine identities.
When ‘normalizing self as an RMF throughout HIS’ participants described how they would predominantly embody “normal” RMF traits of toughness and commitment to a work ethic when managing HIS for their own health needs. That is, participants often engaged in HIS for their own health issues to align with a socially idealized rural hegemonic masculine identity. For example, participants avoided HIS for their own health concerns if such seeking might threaten their “tough” self- and/or public image as an RMF, and would seek HI when they believed it could enable them to embody a “normal” RMF work ethic. In contrast to toughness, when participants embodied “normal” RMF traits such as caring for others when seeking HI for a loved one, they embodied a subordinate masculine identity (Connell, 2005). Participants revealed that their fluid embodiment of elements from both rural hegemonic and subordinate masculinities in different contexts ultimately influenced how, when, and from whom they would seek HI.

In explaining their own HIS processes RMFs in chapter four expanded on the theorized relationship between HIS and rural masculinity presented in chapter two, and revealed that their fluid gender performances corresponded with blunting and monitoring exposure to HI. In doing so, participants revealed that their embodiment of rural hegemonic masculinity often corresponded with a blunting approach to HIS in which participants accessed the bare minimum amount of useful HI needed for them to cope with a perceived stressor (Miller, 1995; Williams-Piehota et al., 2009). That is, participants often adopted a blunting approach to HIS when normalizing hegemonic masculinity as they sought the least amount of HI that could be used to help them demonstrate their physical toughness and embody a “normal” RMF’s work ethic.

In contrast, participants revealed that embodying and normalizing subordinate masculinity often corresponded with a monitoring approach to HIS. While monitoring participants aimed to continually seek any HI regardless of positive or negative implications presented by the HI they found or the sources they sought (Miller, 1995). Participants revealed that they were most apt to adopt subordinate masculinity and monitor HI as a way to support their loved ones and their loved ones’ health needs, rather than their own health. These findings demonstrate how masculine fluidity (Connell, 2005; Frank, Kehler, Lovell, & Davison, 2003) is reflected in RMFs’ HIS processes, and
add an HIS lens to existing research that examined how farming and masculinity influenced male farmers’ willingness to discuss personal issues with others (Coldwell, 2007). Importantly, these findings also demonstrate that monitoring or blunting HI may exist on a fluid spectrum and an individual may embody different HIS behaviours based on their context. This proposed monitoring-blunting spectrum is a stark contrast to current beliefs that monitoring and blunting are binary HIS behaviours characterized by an individual’s psychology (Miller, 1995; Williams-Piehota et al., 2009).

The findings discussed above have immediate implications for those designing health communications and health messaging for RMFs, such as rural health promoters, rural healthcare practitioners, and agricultural interest groups. While HI monitors such as RMFs supporting their loved ones are often more willing to engage with more non-traditional forms of HI such as informal support groups, HI bluters may be most receptive to HI that is more traditional and private (Burkell, 2004; Miller, 1995; Williams-Piehota et al., 2009; Williams-Piehota, McCormack, Treiman, & Bann, 2008) such as HI from healthcare providers that specifically addresses how RMFs can return to work after experiencing different health concerns. Such HI that aims to fit with more traditional RMF values could be constructed and placed in information resources that “normal” RMFs are known to engage with, such as agricultural magazines or farm supply outlets. Designing high quality HI resources for RMFs that are tailored to their HI needs and preferences could enable RMFs to seek HI more frequently as they may become less skeptical of HI that is not received directly from a healthcare professional. Doing so could enable RMF-specific health messaging to be encountered and accepted by more RMFs, including those who may tend to limit exposure to HI.

5.1.2 Rural Women’s Role in Rural Male Farmers’ Health Information Seeking

Chapters two and four also further contextualize the role that rural women play in rural men’s and RMFs’ HIS. In chapter two, three approaches for seeking HI through a separate HI searcher were presented, with each requiring the searcher to become more involved in information retrieval and knowledge translation. First, proxy searching (McKenzie, 2003) was outlined to represent how an individual seeks and delivers HI to someone else. In the case of the RMFs included in the research described in chapter four,
proxy searching could resemble an RMF receiving a pamphlet on lung health from his daughter.

Second, an individual can rely on a close (often female) social connection as a lay information mediary (Abrahamson, Fisher, Turner, Durrance, & Turner, 2008), to look for HI on a specific health issue and convey that information in a way that will resonate with the person for whom they are seeking HI. Participants in chapter four revealed that rural women such as their spouses, daughters, or sisters, were important trusted sources of HI and were relied on as lay information mediaries (Abrahamson et al., 2008) to seek, interpret, and deliver HI to participants, in addition to seeking HI for their own needs. This finding adds further nuance to existing literature describing rural women’s HIS practices (Harris, Wathen, & Fear, 2006; Harris & Wathen, 2007; Leipert, Matsui, Wagner, & Rieder, 2008) as these RMFs revealed that rural women’s HIS accounted for both their own and rural male participants’ HI needs. Thus, in addition to HI resources that more traditional RMFs engage with such as agricultural magazines, rural health promoters, rural healthcare practitioners, and agricultural interest groups could also place RMF-specific HI in locations where rural women seek HI from such as in pharmacies or veterinary clinics. Locating RMF-targeted HI in locations where rural women seek HI could facilitate their role as lay information mediaries by requiring less effort to find HI for the RMFs they support. While such an approach may place an undue burden on rural women’s HIS skills, inclinations, and time, it would work within existing rural social and cultural norms. As such strategies may operate at the expense of rural women, other initiatives like transformative health messaging campaigns that aim to problematize and challenge gender inequities (Fleming, Lee, & Dworkin, 2014) could help rural communities challenge and empower RMFs to seek HI on their own by promoting a critical view of gendered health norms.

Using a close social connection as a health info(r)mediator (Wyatt, Harris, & Wathen, 2008) represents the third and most involved form of HIS on another’s behalf. Like a lay information mediary, a health info(r)mediator will find and translate HI into terms the person for whom they are searching for HI will understand. However, a health info(r)mediator will do so with the goal of improving the other’s health behaviour and will deliver the HI in a way that is sensitive to the other’s sociocultural context (Wyatt et
al., 2008). Applied to participants in chapter four, a health info(r)mediator could be a participant’s spouse, daughter, or sister who understands and appreciates the RMF’s sociocultural contexts and gender expectations, and whose goal is to improve the RMF’s health behaviours. Based on the data collected as part of the CGT-PV study presented in chapter four, women’s role as a health info(r)mediator for these RMFs could not be ascertained. Their role as a lay information mediary could be understood based on participants’ accounts of how rural women found HI on their behalf and indicated what it meant for participants’ current health situation. However, determining if the rural women in RMF participants’ lives were acting as health info(r)mediators would require the rural women to explain their motivations for seeking HI for the RMFs in their lives, and how they understood the sociocultural contexts faced by the RMFs in their lives. As such, future research could examine how rural women seek HI for others to determine if and to what extent rural women act as health info(r)mediators. Understanding rural women’s approach to seeking, interpreting, and delivering HI for others may enable rural health promoters and healthcare practitioners to support rural women by providing HI in terms that may resonate with RMFs in their lives.

Rural women, as individuals for whom RMFs particularly cared, were also a chief motivator for RMF participants to adopt a monitoring approach to HIS and actively engage in HIS. In doing so, participants continually sought HI for rural women in their lives as a way to support the women through their own health concerns. This has implications for future transformative health initiatives (Fleming et al., 2014) designed to empower RMFs to take ownership of their HIS. Such transformative initiatives could use RMFs’ desire to support their families through HIS as a way to encourage RMFs to rethink their aversion of HI for their own needs. For example, transformative messaging could resemble the following: “RMFs can support their families by learning how to keep themselves healthy.” Such messaging pairs RMFs’ family support values with HIS for their own health concerns to draw a parallel between these currently contrasting HIS processes. Additionally, transformative messaging such as “Why do RMFs avoid HI for their own health issues but seek HI for spouses or partners’ health issues?” could facilitate RMFs to rethink and take ownership of their HIS.
5.2 Policy Implications

Chapters three and four presented the health policy contexts within which RMFs seek HI in Ontario and how those contexts affected HIS processes for the RMFs who participated in the CGT-PV study. Participants included in the CGT-PV study in chapter four indicated that they believed provincial healthcare policies such as those responsible for rural hospital closures limited their HIS by removing trusted HI sources from their communities. Participants believed such policies neglected their own and other rural health needs, as they removed services without a plan to replace them. Participants believed these health policy decisions were made with limited consultation of RMFs or other rural community members, which would contradict recommendations put forth by the Ontario Ministry of Health and Long-Term Care (MOHLTC) (2010) that state rural communities should be consulted during the healthcare system planning process.

Participants’ feelings of neglect by health policy makers and healthcare planners were supported by the findings presented in chapter three, which indicated that RMFs’ health and health needs were included in 13 health policy and planning documents published since 2006 in Ontario. Inclusion of RMFs’ health and health needs in 13 health policy and planning documents since 2006 could indicate that RMFs, their health, and their health needs hold a small portion of the provincial health policy agenda. Alternatively, specific inclusion of RMFs’ health and health needs in 13 policy documents could indicate that RMFs’ health, health needs, and HIS are being accounted for as part of broader health initiatives. Such initiatives include Rural Health Hubs (Multi-Sector Rural Health Hub Advisory Committee, 2015), which aim to address the health needs of rural communities as a whole by developing rural healthcare services after extensive and meaningful consultation with members of the communities a specific Rural Health Hub will serve. Meaningful sustained consultation and engagement with rural communities could help improve fractured relationships that exist between provincial governments, municipal governments, healthcare service providers and rural communities they serve (Caldwell, Kraehling, Kaptur, & Huff, 2015; Kenny, Farmer, Dickson-Swift, & Hyett, 2015).

Authors of health policy documents included for analysis in chapter three recognized that RMFs’ social capital and influential position within their rural communities could help
mend strained relationships between healthcare service planners and rural communities and facilitate the successful development and implementation of new health policies (The Ontario Rural Council, 2008, 2009; Waterloo Wellington Local Health Integration Network, 2010). Provincial policy makers aiming to improve HIS and access to HI resources for RMFs specifically or rural communities broadly, such as those developing and planning Rural Health Hubs, could establish meaningful relationships with RMFs and then leverage those relationships to engage with other rural residents, such as women, youth, or elderly. The RMFs who participated in the CGT-PV study presented in chapter four expressed their desire to participate in and contribute to meaningful dialogue with health and other policy makers. Thus, the development of respectful dialogic relationships between RMFs and rural policy makers could represent an opportunity to develop and implement new policy that includes the health and HIS needs of RMFs in broader health policy and planning initiatives designed to improve rural health overall.

While not discussed in chapter three, policies have emerged in Ontario that will impact the nature of healthcare service and HI availability and delivery in rural communities. For example, *Patients First: Action Plan for Healthcare* (MOHLTC, 2012) promotes investments into new communication technology-based services, such as Telemedicine, to improve healthcare access in rural communities through access to high-quality health information. Such policies supplement in situ services in rural communities, an element of rural healthcare services that participants in the CGT-PV study noted promoted HIS from healthcare providers, with technology-enabled healthcare consultations (Dal Bello-Haas, O’Connell, & Morgan, 2014; O’Gorman, Hogenbirk, & Warry, 2016). As such, health policies designed to improve rural healthcare access through the implementation of technology-based services may limit RMFs’ willingness to consult healthcare professionals for HI due to the removal of in-person interactions with their healthcare providers.

Participants in the CGT-PV study presented in chapter four indicated that certain policies from provincial and federal governments promoted their HIS. Such policies encompassed workplace safety, training, and machinery licensure, and were primarily implemented by sectors of government beyond those directly responsible for healthcare management, such as the Ontario Ministry of Labour. As such, non-healthcare government bodies are
able to integrate HIS into “normal” RMF behaviours by mandating HI discussions with peers and seeking HI from healthcare providers. For example, Ontario Ministry of Labour policies mandate HI discussions among co-workers regarding farm safety procedures, such as safe and proper use of ladders. Similarly, participants viewed the physical examinations required by Transport Canada to renew commercial pilot licenses needed to fly aerial pesticide and herbicide spreaders – commonly known as crop dusters – as policies that promoted their HIS.

Therefore, provincial and municipal policy makers, practitioners, and agricultural interest groups wishing to deliver HI to RMFs or influence RMFs’ HIS processes could strengthen their efforts by working within established HIS-mandating policies implemented by the Ontario Ministry of Labour. For example, the Ontario Ministry of Labour could include rural non-farm-specific HI alongside the farm-specific and safety-related HI to encourage discussions about rural non-farm-related health issues. Doing so could promote and facilitate RMFs’ discussion of HI with others, and could incorporate active HIS into “normal” RMF behaviour. Policy initiatives such as these could engage RMFs in discussions with other RMFs, other rural men, women, and children, and rural healthcare providers about why they do or do not seek HI in different contexts. Such initiatives could contribute to gender transformative health initiatives (Fleming et al., 2014) by encouraging RMFs to critically consider their approach to HIS and empower them to take ownership of the behaviour. For example, since participants indicated that they monitored HI for their loved ones and that this was “normal” for RMFs, gender transformative initiatives could engage RMFs in conversations with their children, spouses/partners, or siblings about why they seek HI in some contexts and not in others. Doing so could involve more members of rural communities than RMFs alone in transformative health initiatives that seek to promote RMFs’ HIS.

Participants in the CGT-PV study also noted that some municipal and provincial government policies limited their abilities to seek HI. Municipal policies which regulated land stewardship and water protection measures were often viewed as nuisances that added more duties to participants’ workdays and took time away from possible HIS activities. Municipal policy makers could address this view by engaging with RMFs during all stages of land and water protection policy development to ensure RMFs’ needs
are represented in the policy agenda, the drafted policy documents, the implementation of new policies, and the evaluation of new policies. Doing so could enable the development of municipal policy that simultaneously meets regional environmental protection mandates and that considers values, processes, abilities and constraints of RMFs.

### 5.3 Rural Community Implications

The research presented in chapters two, three, and four has several implications for how rural communities are understood. First, participants in the CGT-PV study presented in chapter four indicated that agriculture-specific information resources, such as farming magazines, equipment retailers, or seed and feed distributors, were identified as important and trusted sources of information for RMFs. While these resources may not be expert HI sources, participants indicated that they trusted these magazines as expert farming information sources and, thus, any HI they contained was likely to be appraised by participants as being accurate and relevant to their health concerns as RMFs. Additionally, HI encountered outside of farm magazines, such as in local newspapers, had a greater chance of being accepted if participants believed the author had a rural or farming background. These findings have implications for rural newspaper and agriculture magazine editors and publishers who include HI-related stories in their publications. Such HI articles may resonate more with RMFs if written by someone with in-depth understanding of both the health concerns faced by RMFs and the rural context within which the health concerns occur. For example, while an HI-related story may not be written by an RMF it may resonate with RMFs if the author was raised in a rural community and/or had an agricultural background.

Similarly, participants in the CGT-PV study presented in chapter four had more favourable opinions of and greater trust in healthcare providers who demonstrated that they understood the issues that were important to RMFs. For example, participants indicated that physicians asking about their crops or livestock at the beginning of an appointment helped establish rapport and signified the physician’s awareness of the significance and context of RMFs’ concerns. While participants indicated that positive rapport with a healthcare provider promoted their future engagement with that particular healthcare provider for HI, participants did not indicate how positive rapport with one healthcare provider influenced their willingness to engage with or trust other healthcare
providers or those responsible for planning healthcare services. Additionally, participants conflated healthcare seeking with HIS as they viewed any form of interaction with their healthcare providers as high-quality HIS. Thus, future research into how positive rapport with a single healthcare provider influences RMFs’ willingness to engage with and trust other healthcare providers could help inform future health policy and planning strategies that aim to improve RMFs’ access to HI by further contextualizing how RMFs are motivated to engage in discussion about their health. Such research could also explore the nature of RMFs’ engagement with healthcare providers for HIS purposes compared to seeking healthcare services, which could help inform how healthcare providers approach RMF interactions in different situations.

The literature review research presented in chapter two also expands existing knowledge regarding how rural social gender norms and attitudes regarding men’s behaviors, such as independence and stoicism (Coldwell, 2007; Courtenay, 2000), affect rural men’s health. While existing literature related rural men’s masculine identity to physical displays of toughness and engaging in risky health behaviours (Courtenay, 2000; De Visser, Smith, & McDonnell, 2009; Little, 2006), the CGT-PV study presented in chapter four is the first known study to demonstrate how those values may translate to and shape rural men’s HIS processes. Understanding that the RMFs in the CGT-PV study seek HI by normalizing themselves to specific social expectations of RMFs in their community makes an important contribution to understanding how rural social and cultural values may influence rural men’s health-related behaviours. In doing so, the findings of the CGT-PV study indicate that sociocultural values may be more influential to RMFs’ HIS processes than other factors such as geographic distances to healthcare services. As such, this CGT-PV study supports the use of a relational rural definition based on social norms in future research into rural men’s HIS (Cummins, Curtis, Diez-Roux, & Macintyre, 2007) over geographic-based rural definitions, such as the Ontario-specific definition based on travel time to urban centres (MOHLTC, 2010).

While this research was designed to understand how RMFs’ seek HI, the findings presented in the CGT-PV study also have implications for rural women’s HIS. Namely, this research demonstrates that, in addition to actively seeking HI (McKenzie, 2003) for their own health concerns, rural women often also actively seek HI for RMFs they
support. In doing so, rural women become proxy HI searchers and find HI (McKenzie, 2003), or, more frequently, become lay information mediaries (Abrahamson et al., 2008) as they seek, interpret, and deliver HI to RMFs they support in terms they will understand. Like rural men’s HIS, rural women’s HIS practices may be imbued with rural social norms that value rural men’s independence and stoicism. When seeking HI on an RMFs’ behalf, rural women enable that RMF to craft a public image of themselves as a physically strong RMF who does not need HI. As such, future research into rural women’s HIS that uses a relational approach to characterize an area as rural by its social norms may be able to further interrogate rural gender norms.

5.4 Directions for Future Research

5.4.1 Policy Research

It is recommended that future research be conducted to determine how the results from this dissertation can be usefully transferred to other rural regions within Canada. Participants in the CGT-PV study indicated that their rural geography broadly shaped the availability of HI resources and their ability and willingness to travel to access HI in larger urban centres. Future research that examines how rural geography influences how RMFs in other rural regions in Canada, such as New Brunswick, Manitoba, and Saskatchewan, seek HI could further explicate the impact of rurality on RMFs’ HIS processes. Additionally, participants in the CGT-PV study revealed that the nature of their farming context, such as size of their farm and presence or absence of co-workers, influenced their HIS. Specifically, participants revealed that working on larger farms with other co-workers may have promoted HIS by mandating farm-specific HI discussions through safety training and by providing greater access to social supports (that is, co-workers) to facilitate seeking HI. Future research could examine if and how different farming contexts, such as relatively smaller farms in New Brunswick or larger farms in Alberta or Saskatchewan, influence RMFs’ HIS processes in different regions across Canada. Greater understanding of how rurality and farming influence HIS could enable health policy makers and healthcare service planners to introduce HI dissemination initiatives that match the HIS context for RMFs and other members of their rural communities, such as their spouses or partners.
The retrospective analysis of Ontario health policy and planning documents presented in chapter three should be expanded and compared to other provinces to determine if and how provinces align in terms of addressing RMFs’ health needs. Research that examines how RMFs’ health needs are included in health policy from across Canada could support national agricultural interest groups, such as the Canadian Federation of Agriculture or the Canadian Agricultural Safety Association, in lobbying provincial and federal governments to develop better health supports for RMFs.

As participants in the CGT-PV study presented in chapter four highlighted, RMFs’ HIS can also be influenced by municipal, provincial, and federal policies from sectors beyond those responsible for healthcare management. Therefore, it is recommended that future research examine policies beyond health and healthcare management policies, such as environmental protection and workplace safety policies, to determine if and how RMFs’ health and HIS needs are included in policy outside of the healthcare sector. Understanding how RMFs’ health and health needs are included in policies beyond the healthcare sector could further contextualize how a broader provincial policy agenda accounts – and could account – for RMFs’ needs.

Future policy research could also go beyond the document analysis presented in chapter three and include the perspectives of policy decision-makers, such as rural and urban members of parliament responsible for setting the provincial health policy agenda that, based on the results presented in this dissertation, appears to tokenize or ignore RMF perspectives. Such future research could seek to understand policy-makers’ perceptions of RMFs and their rationale for including or not including RMFs in policy documents.

5.4.2 Rural Health Information Seeking Research

Themes presented in the CGT-PV study in chapter four, such as trusting healthcare providers, the nature of participants’ farming work, rural communities’ perceptions of RMFs, and the importance of rural women for participants’ HIS could be pursued further to determine how these RMFs’ HIS processes fit with RMFs from other regions in Ontario and Canada. Future research could examine how rural healthcare providers, such as physicians, nurses, chiropractors, and naturopaths, perceive and address RMFs’ HI needs. Understanding how RMFs are viewed by their most trusted healthcare providers
could facilitate RMFs’ HIS through the development of new and strengthening of existing trust-based relationships. Such research could utilize a participatory approach, such as that of face-to-face interviews and photovoice, to engage RMFs and their healthcare providers in a dialogue that challenges existing barriers to RMFs’ HIS such as hegemonic rural masculine ideals.

Future HIS research could be conducted with rural male non-farmers to determine if the contextual factors explained by participants in this study, such as honing their image, the nature of community perceptions of men, the nature of their employment, or embodying “normal” rural male behaviours throughout HIS, resonate with and affect the HIS processes of other rural men. It is recommended that such research adopt a relational approach to characterizing rural to determine if and how rural social norms affect how non-farmer rural males seek HI. Expanding rural HIS research to rural non-farmers could help rural health promoters understand how to best design and implement health messaging campaigns that target rural communities as a whole.

Finally, additional HIS research could be conducted to further explain rural women’s position in rural communities as health information seekers and lay information mediaries. This research could provide further detail to the existing body of knowledge regarding rural women’s HIS practices by explaining how they are influenced by rural hegemonic and subordinate masculinities. Understanding how rural women’s HIS is affected by rural masculinity could help rural healthcare providers, policy makers, and rural communities develop HI initiatives that work alongside gender-transformative HI initiatives that challenge RMFs to take ownership of their HIS practices.

5.4.3 Integrated Constructivist Grounded Theory-Photovoice

As existing research has demonstrated (Oliffe, Bottorff, Kelly, & Halpin, 2008), integrating participant-based photographic data collection analysis with other qualitative research approaches can facilitate men’s discussion of potentially sensitive topics, such as their gender identities. Additionally, providing participants with an opportunity to analyze their photographs can introduce unique analytic insight that may not have been offered without a photograph for participants to focus on. In the CGT-PV study presented in chapter four, participant-produced photos appeared to facilitate participants’
willingness to disclose information about sensitive topics such as mental health, RMF HIS processes, gendered behaviours and beliefs, and the importance of rural women in their lives. Such disclosures enabled the researcher to engage participants in discussions about how these three areas were related to each other, and enabled the researcher to determine that participants’ HIS could be explained by a core process related to embodying “normal” RMF behaviours throughout all facets of HIS. Thus, future research should seek to advance the integrated CGT-PV approach as it has demonstrated its ability to facilitate enriched the discussion and analysis of sensitive health-related topics among a population (RMFs) known to avoid discussions of their own health (Courtenay, 2000; Spleen et al., 2014).

Future CGT-PV research could include a group meeting component to bring all participants together for a discussion of their photos and social processes. This study omitted the group meeting due to literature that suggested RMFs may be unwilling to discuss their health, illness, and HIS with other men (Coldwell, 2007; Peter, Bell, Jarnagin, & Bauer, 2006); this belief was substantiated by participants’ indication that they would not discuss their health or HI with other men because it was not what “normal” RMFs would do. Engaging rural men in group meetings could enrich the explanation of the emerging grounded theory by providing more opportunities for participants to analyze their photos and to suggest and work through methods of improving their social situations together. To promote RMFs to effectively work within a group and discuss their health issues, concerns, and solutions with other RMFs, future CGT-PV research could include a workshop-style atmosphere as a pretext for group discussions. The Men’s Shed initiative (Ballinger, Talbot, & Verrinder, 2009) has demonstrated the effectiveness of utilizing such a workshop environment where men can attend a group session and complete small woodworking projects, such as bird houses, while discussing their health concerns. When applied to RMFs, a workshop-style session could include fixing farm equipment in need of repair as a pretext to discussing and critically analysing their health issues. Such initiatives based on peer education and discussions may improve participants’ self-confidence (Matthews, Zok, Quenneville, & Dworatzek, 2014) in their HIS skills and support long-term changes to their HIS behaviours.
5.5 Conclusion

Rural male farmers in southwest Ontario seek HI by embodying ‘normal’ behaviours for rural male farmers in their communities. This normalizing process is influenced by rural social, cultural, and contextual factors based in rural hegemonic masculinity and rural men’s physical displays of toughness. Additionally, research for this dissertation has revealed that RMFs are included in Ontario health policy and planning documents as both a token symbol of rurality and as a pillar of rural communities that rural healthcare service providers could and should partner with more meaningfully when developing new services.

Future health information initiatives can promote a more equitable distribution of health information seeking work among men and women in rural communities by empowering rural male farmers’ to critically consider and take ownership of their health information seeking practices. Developers of future policy initiatives should more meaningfully consult rural male farmers when designing and implementing rural health and health information initiatives to ensure their needs are included as part of broader rural community health improvement strategies. Rural communities can support rural male farmers to seek health information by being more open to and accepting of men’s health issues and by adopting progressive gender expectations that do not prioritize men’s physical displays of toughness. Finally, future research can contribute to how rural male farmers’ health information seeking processes are understood in Canada by examining these processes and the social, cultural, political, geographical, and other factors that affect them in different rural regions across the country.
5.6 References


APPENDICES

Appendix A: Permission to Include Manuscript, *American Journal of Men’s Health*

Dear Brad Hiebert,

Thank you for your request. You may use the published version of your article (version 3) in the printed version of your dissertation. However, if you wish to post your dissertation online, we ask that you use the version of your article that was accepted by the journal (version 2). Please note that this permission does not cover any 3rd party material that may be found within the work. You must properly credit the original source, *American Journal of Men’s Health*. Please let us know if you have further questions.

Best regards,

Craig Myles
Rights Coordinator
SAGE Publishing

[www.sagepublishing.com](http://www.sagepublishing.com)

Los Angeles | London | New Delhi
Singapore | Washington DC

From: Bradley Christopher Hiebert
Sent: Tuesday, May 1, 2018 9:43 AM
To: permissions (US)
Subject: Permission to Use Copyright Material in a Doctoral Dissertation

Date: 1 May 2018

Re: Permission to Use Copyright Material in a Doctoral Dissertation

To whom it may concern:

I am a University of Western Ontario graduate student completing my Doctoral dissertation. My dissertation will be available in full-text on the internet for reference, study and/or copy. Except in situations where a thesis is under embargo or restriction, the electronic version will be accessible through the Western Libraries web pages, the Library’s web catalogue, and also through web search engines. I will also be granting Library and Archives Canada and ProQuest/UMI a non-exclusive license to reproduce, loan, distribute, or sell single copies of my thesis by any means and in any form or format. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you.
I would like permission to allow inclusion of the following material in my thesis:

**Manuscript Title:** Rural Men’s Health, Health Information Seeking, and Gender Identities: A Conceptual Theoretical Review of the Literature

**Length:** all manuscript pages (14 pages)

**Authors:** Hiebert, Leipert, Regan, & Burkell

**Journal:** American Journal of Men’s Health

**Manuscript DOI:** https://doi.org/10.1177/1557988316649177

**Publisher:** SAGE Journals

**First Published:** 11 May 2016

The material will be attributed through a citation before it is featured in my dissertation.

Based on SAGE Journals Author Re-use policies it seems like Version 2 of my manuscript is able to be included (upload my article to a repository NOT affiliated with my institution, 12 months after publication), but I would like to be sure before I compile my thesis.

Please confirm in writing or by email that these arrangements meet with your approval.

Sincerely

Brad Hiebert
Appendix B: Permission to Include Manuscript, *Healthcare Policy*

Hi Brad,

I think that will work just fine. Good luck with everything.

Rebecca

---

From: Bradley Christopher Hiebert  
Sent: May-02-18 8:24 AM  
To: Rebecca Hart  
Subject: Re: Healthcare Policy Article

Hi Rebecca

Thank you for this information. It sounds like you’re saying that I will be able to have the full-text of my article freely available in my dissertation 1 year after the article is published? If so, does this mean that I can include the full-text in my dissertation for my examiners and my defence (the article will not be publicly available - only those examining my defence would have immediate access to it in my dissertation), HOWEVER when I submit my final dissertation post-defence I do so under an embargo for the appropriate length of time that would cover what is left of the year before the publication is made open access? So, in this scenario only the examiners would be able to read the text of the article in my dissertation for my examination purposes only, the final dissertation would be then published by Western University under an embargo prohibiting anyone else from freely accessing its content until it becomes open access on longwoods.com. Does this seem like a permissible option to you?

If no, is there any other way forward to include the entirety of article in my dissertation for my examination purposes? Unfortunately I cannot afford $850 to get open access and there is no funding available that I can access to help with this either.

I hope we can work something out with this.

Thanks

Brad
On May 1, 2018, at 12:14 PM, Rebecca Hart wrote:

Good Afternoon Brad,

Thank you for your enquiry regarding the dissemination of your upcoming paper - Tokenism and mending fences: How rural male farmers and their health needs are discussed in health policy and planning documents – in Healthcare Policy. I am the publisher of the journal and Ania asked me to get in touch with you on this matter.

You have chosen to have your article published in the standard format which means the article won’t be available for open access until the date of 1 year from publication. At that point it goes up on PubMed Central, becomes open access on longwoods.com and can be made available in full text online. If you would like to change your mind and have your article open access from the day of publication as a student from our long time subscriber, Western University, we can offer you a reduced rate of $850. If you would prefer to keep it as is we suggest in you include the title and abstract in your dissertation with a direct link to the full text article on longwoods.com.

Please let me know if you have any questions,
Rebecca

--------
Rebecca Hart
Publisher & COO
Longwoods.com
Appendix C: Print Recruitment Advertisement

DO YOU OR SOMEONE YOU KNOW HAVE OPINIONS ON RURAL HEALTH AND HEALTHCARE?

Your help is needed to understand how male farmers AND farm workers look for information about any health issue including an injury, the flu, or farm safety, or something more long-term like back issues or cancer.

Who is needed? Men 18 years or older in rural southwest Ontario who are or have been a farmer OR farm worker for at least 2 years

What would you do? 1. You will have a short meeting to talk about the study 2. You will be asked to take pictures of your area, and I provide the camera for you to use 3. You will meet for a 1 to 2 hour interview to talk about the pictures you took

How long will this take? The first meeting will last around 20 minutes and the interview will last between 1 and 2 hours

Where? I will meet you wherever you feel most comfortable talking about these important issues

EVERYTHING YOU TELL ME WILL BE KEPT CONFIDENTIAL

ARE YOU INTERESTED? DO YOU KNOW SOMEONE WHO MIGHT BE?

FOR MORE INFORMATION CONTACT BRAD HIEBERT at
Appendix D: Letter of Information and Consent Form for Study Participants

LETTER OF INFORMATION AND CONSENT

Study Title: How male farmers in rural southwest Ontario seek health information: A photovoice constructivist grounded theory study

Study Investigators:
Dr. Beverly Leipert, RN, PhD
Professor, School of Nursing
Phone: [REDACTED]
E-mail: [REDACTED]

Dr. Sandra Regan, RN, PhD
Associate Professor, School of Nursing
Phone: [REDACTED]
E-mail: [REDACTED]

Brad Hiebert, PhD candidate
Department of Health Information Sciences
Phone: [REDACTED]
E-mail: [REDACTED]

You are being invited to take part in a study on rural male farmers’ health being conducted by Brad Hiebert, Dr. Leipert and Dr. Regan, researchers from the University of Western Ontario. The goal is to understand how rural male farmers look for information about their health, and how this is influenced by social expectations on men in rural areas. We also wish to see how useful a research method called photovoice is with rural men, and how it can be improved if it is combined with another research method called constructivist grounded theory.

For the photovoice part of this study you will take pictures of things in your neighborhood, town, or farm that make it easier or harder for you to find information about your health. You will then talk about the pictures and why they are important with Brad Hiebert. For the constructivist grounded theory part of this study you will meet with Brad Hiebert to talk about how being a man in your rural area influences how you find information about your health.

What will I have to do if I choose to take part?
You will initially meet with Brad for a meeting where you will receive a disposable camera and instructions about its use in the research. You will then be asked to take pictures in your neighborhood, town, or farm. These pictures will be of needs and resources that influence how you look for health information. Images of needs might include isolated roads, icy or broken sidewalks, and storms. Pictures of resources might include friends, family, and health care providers, churches, hobbies or crafts. Before you take a photograph of another person, you will need to provide him or her with written information about the study and ask for their consent to allow their picture to be taken. Brad will provide you with the information and consent form for the people whose pictures you take. You will also be given a notebook to keep a log of what you take pictures of, and what you decide not to take pictures of. Two weeks later the log and camera

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Initial _____
will be collected from you. Films will be developed and printed photographs will be produced. Duplicate prints will be made for you, if you request this. If you would like to use your own smartphone or digital camera instead of the disposable camera to take pictures, Brad Hiebert will pick up the digital photos with the logbook after two weeks. The pictures will then be printed and hard copies will be given to you, if you request it.

A one-on-one interview will then be scheduled in a location of your choice. The researchers will keep this location confidential. This meeting will last one to two hours and the audio will be recorded. During this meeting you will be asked to title and describe each picture you took. These pictures will form the basis of our one-on-one interview. In this interview Brad will ask you about what is happening in your picture, how it relates to how your health, why you took this picture, and what strengths or limitations it represents. Brad will also ask questions about your role in your rural community and how that influences how you look for information about your health. At the end of the interview you will be asked to complete a short questionnaire about your health status, age, and marital status.

**Are there any risks of participating?**
There are no known risks to participating in this research.

**What are the benefits of taking part?**
You may not have a direct benefit from participating, but your first hand experience of rural life and how it affects how rural male farmers look for information about their health is very important knowledge that only you have. Brad will present information you share to others through journals, publications, and presentations at conferences and meetings. Your views on rural health may help influence services, programs, and policies that are put in place for rural men. You may also help change how people in rural settings think about rural men’s health.

**Compensation**
There is no compensation for participating in this study.

**What happens to the information that I tell you?**
The first meeting and one-on-one interview with Brad Hiebert will be recorded. Brad will use the tape to type out what you say word for word. The only people who will listen to the tapes will be the researchers listed on this Letter of Information and Consent. To protect your identity, only numbers will be used to identify your pictures, tapes, and transcripts of the tapes. The consent form, pictures, tapes, and transcripts will be locked in a secure place at the University and kept for future consultation by the researchers. The researchers will keep your interview transcripts for 10 years, and will keep a copy of your photographs indefinitely to help us better understand rural male farmers’ health needs and resources. If you reveal information about abuse of someone who is younger than 18 years old, the researcher will discuss this with you. This information cannot be kept confidential – by law it must be reported to the local child protection agency. Representatives of the Western University Health Sciences Research Ethics Board may contact you or require access to your study-related records to monitor the conduct of the research. If the results of the study are published, your name will not be used and nothing that will identify you will be released or published without your permission.
Other Information about this Study:
Up to 40 male farmers from rural southwest Ontario will be included in this study. You do not have to be in this study if you do not wish to be. If you decide to be in the study, you may drop out at any time by telling Brad Hiebert. If you decide to drop out, anything that you have already told any of the researchers may still be used in the research findings. You do not have to answer any questions if you do not want to. You do not have to talk about anything in the first meeting if you do not want to. Being in this study or dropping out will not change your care in a hospital, or in the community.

You will also be given the opportunity to have your name and contact information included in a list of contacts for future rural research. This list will help the researcher include more rural people in future research. If you wish to do this, the researcher will ask you to complete a Contact Form. The Contact Form will be kept in the locked office of the researcher. Even if you complete the contact form, you will not be obligated to participate in future research projects.

If you have any questions or require additional information, please contact: Brad Hiebert at [hidden] or his supervisors Dr. Beverly Leipert at [hidden] or Dr. Sandra Regan at [hidden]. If you have any questions about the conduct of this study or your rights as a research subject you may contact the Director of the Office of Research Ethics, University of Western Ontario at [hidden] or by email at: [hidden]. This letter is for you to keep.
Informed Consent Form for Participation in Study

How male farmers in rural southwest Ontario seek health information: A photovoice constructivist grounded theory study

PRINCIPAL INVESTIGATOR: Beverly Leipert, RN, PhD
Co-Investigators: Sandra Regan, RN, PhD
Brad Hiebert, PhD Candidate

I have read the Letter of Information, all my questions have been answered, and I agree to participate in this study. I also agree that any pictures of me and my environment and property may be identified and used for the following purposes:

1) In articles: _____ Yes _____ No

2) In print and slide form: _____ Yes _____ No

I agree to be digitally recorded during this study: _____ Yes _____ No

Please check the appropriate box below and initial:
_____ I agree to be contacted for future research studies
_____ I do NOT agree to be contacted for future research studies

Please check the type of camera you will use:
_____ My own digital camera or smartphone
_____ A disposable camera provided by Brad Hiebert

As a participant in this study you do not waive any legal rights by signing this Consent Form.

________________________________________  ______________
Signature of Participant Date

________________________________________
Printed Name of Participant

________________________________________  ______________
Signature of Person Obtaining Consent Date

________________________________________
Printed Name of Person Obtaining Consent

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Appendix E: Introductory Meeting Schedule

Introductory Meeting Schedule

Topics that will be discussed at this Orientation Session are based on recommendations of the creator of the photovoice method and include (Wang, 1999):

1. Introduction to the photovoice concept and method
2. Discussion of the responsibility and authority conferred on the photographer wielding the camera
3. Ways to minimize any potential risks
4. Presentation of an ethic of giving photographs back to community as a way to express appreciation, respect, and camaraderie.
5. Discussion questions will include the following:
   a. What is an acceptable way to approach someone to take his or her picture?
   b. Should someone take pictures of other people without their knowledge?
   c. To whom might you wish to give photographs, and what might be the implications?
   d. When would you not want to have your picture taken?
Appendix F: Letter of Information and Consent Form for Photograph Subjects

LETTER OF INFORMATION AND CONSENT FOR PERSON BEING PHOTOGRAPHED

Study Title: How male farmers in rural southwest Ontario seek health information: A photovoice constructivist grounded theory study

Study Investigators:
Dr. Beverly Leipert, RN, PhD  Dr. Sandra Regan, RN, PhD
Professor, School of Nursing  Associate Professor, School of Nursing
Phone:  Phone:
E-mail:  E-mail:

Brad Hiebert, PhD Candidate
Faculty of Information and Media Studies
Phone:
Email:

You are being invited to take part in a study on rural male farmers’ health being conducted by Brad Hiebert, Dr. Leipert and Dr. Regan, researchers from the University of Western Ontario. The goal is to understand how rural male farmers look for information about their health, and how this is influenced by social expectations on men in rural areas. We also wish to see how useful of a research method called photovoice is with rural men, and how it can be improved if it is combined with another research method called constructivist grounded theory.

The person who will take your pictures has been asked to take pictures about things in his neighborhood, town, or farm that make it easier or harder for him to look for information about his health. He will then talk about the pictures with the researcher Brad Hiebert, who will ask him why these pictures are important. He will also have a one-on-one interview with the researcher Brad Hiebert to talk about how being a man in his rural area influences how he looks for information about his health.

What will I have to do if I choose to take part?
You are being asked to have your picture taken as part of a research study. The man taking your picture should have given you this written information before your picture was taken. After reading this you must also sign a Consent Form giving permission for your picture to be taken. All of the pictures that your photographer takes will be collected and developed by the researcher.

Your photographer will then have a one-on-one interview with the researcher. In this meeting, the photographer will title and describe each picture to the researcher. They will also talk about

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the importance of the pictures and their meanings to the photographers. Your photographer will be asked how the pictures relate to how he looks for information about his health.

**Are there any risks of participating?**
There are no known risks to participating in this research.

**What are the benefits of taking part?**
You may not have a direct benefit from participating, but by allowing your picture to be taken, you are assisting others to better understand how rural male farmers’ look for information about their health. Including your picture in this research may help people in rural areas think about rural farmers’ health and make changes.

**What happens to the information that I tell you?**
To protect your identity, only numbers will be used to identify pictures, and the pictures will be locked in a secure place at the university. Any identifying information about you, such as your name or location, will be kept in a secure separate location from your picture. Your picture will be kept indefinitely to help us better understand rural male farmers’ health needs and resources in this and future research. If the results of the study are published, your name will not be used and no information that discloses your identity will be released or published without your permission.

**Other Information about this Study:**
Up to 40 male farmers from southwest Ontario will be included in this study. You do not have to be permit your picture to be taken if you do not wish this. Being in this study or dropping out will not affect your care in a hospital, or in the community.

If you have any questions or require additional information, please contact: Brad Hiebert at [email] for his supervisors Dr. Beverly Leipert at [email] or Dr. Sandra Regan at [email].

If you have any questions about the conduct of this study or your rights as a research subject you may contact the Director of the Office of Research Ethics, University of Western Ontario at [email], or by email at: Researchers at the Western University Health Sciences Research Ethics Board may contact you or require access to your study-related records to monitor the conduct of the research.

This letter is for you to keep.
Informed Consent Form for Participation in Study

How male farmers in rural southwest Ontario seek health information: A photovoice constructivist grounded theory study

PRINCIPAL INVESTIGATOR: Beverly Leipert, RN, PhD
Co-Investigators: Sandra Regan, RN, PhD
Brad Hiebert, PhD Candidate

I have read the Letter of Information, all my questions have been answered, and I agree to participate in this study. I also agree that any pictures of me and my environment and property may be identified and used for the following purposes:

1) In articles: ______ Yes ______ No

2) In print and slide form: ______ Yes ______ No

I agree to be digitally recorded during this study: ______ Yes ______ No

Please check the appropriate box below and initial:
___ I agree to be contacted for future research studies
___ I do NOT agree to be contacted for future research studies

As a participant in this study you do not waive any legal rights by signing this Consent Form.

________________________________________
Signature of Participant

Date

_______________________________
Printed Name of Participant

________________________________________
Signature of Person Obtaining Consent

Date

_______________________________
Printed Name of Person Obtaining Consent

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Appendix G: Demographic Questionnaire

Sociodemographic Questionnaire

Combining Photovoice and Constructivist Grounded Theory to Discover the Processes
Male Farmers in Rural Southwest Ontario Use to Seek Health Information

1) What is your age?? _______________________

2) Where do you live? (Town, County) _______________________

3) How many years have you lived there? _______________________

4) What is your town’s population? _______________________

5) Did/do you live on a farm? Y / N (circle one)
   If YES:
      a) How many years have you lived on a farm? _______________________
      b) What type of farm did/do you live on? _______________________
      c) What was/is the size of your farm? _______________________
      d) How many people worked/work on your farm? _______________________
   If NO:
      a) How many years have you worked on a farm? _______________________
      b) What type of farm did/do you work on? _______________________
      c) What was/is the size of the farm? _______________________
      d) How many people worked/work on the farm? _______________________

6) What is your highest level of education?
   a) Elementary School (Grades 1-6)  e) College diploma
   b) Middle School (Grades 7-8)    f) Bachelor’s degree
   c) High School (Grades 9-12)   g) Master’s degree
   d) Some university/college    h) Doctorate

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7) How would you describe your financial situation over the past year?
   a) I have barely enough to make ends meet
   b) I have enough to get by
   c) I have a little left over after all my obligations have been met
   d) I am quite comfortable
   e) I have all I need and more

8) What is your current occupation/work/job title ______________________

9) Is farming the main way of earning an income? Y / N (circle one)
   If NO:
   a) What is the main way you earn money? ______________________

10) In addition to farming, is there anything else you do off-farm to generate income?

11) How would you describe your current marital status?
    a) Single
    b) Living Common Law
    c) Married
    d) Separated
    e) Divorced
    f) Widowed

12) If B,C,D,E, or F:
    a) How many years has this been your marital status? ________

13) Do you have any children? Y / N (circle one)
    If YES:
    a) How many children do you have and what are their sexes?

    b) Do you they still live at home? If no, how often do you see them?
Appendix H: Semi-Structured Interview Guide

Semi-Structured Interview Guide

1. Tell me a little bit about yourself?
   a. Tell me about your family and friends, and how your relationship with them influences how you look for health information.

2. How would you describe a rural area?
   a. What makes this different from an urban area?

3. How do you define health?
   a. What would you consider to be illness?
   b. How does mental health fit in?
   c. How does this compare to how urban people would define it?
   d. How do you think other rural men would define health?
   e. How do you think rural women define health?

4. Now I am going to ask you some questions about your photographs and the entries you made for them in your logbook. What title would you give your picture?
   a. What do you see here?
   b. What is really happening here?
   c. How does this relate to how you seek health information?
   d. Why does this issue exist?
   e. What can we do about it?
   [Note: this sequence of questioning will be repeated for five of the participant’s photographs]

5. What is health information in your opinion?
   a. When do you usually seek health information?
   b. Why would you seek health information?
   c. Where do you go to find health information?
   d. Who do you seek health information from?
   e. How do you discuss health information with others?
   f. How do you think other men in this rural area would seek health information?
      i. Why?
   g. How do you think women in this rural area would seek health information?
      i. Why?

6. How does this rural area affect how you seek health information?
   a. What positively affects how you access health information?
   b. What negatively affects how you access health information?
c. What would you change about this rural area to make it easier for you to access health information?

7. How comfortable would you feel discussing your health issues with others?
   a. Who are you most likely to talk to about your health?
   b. How would you describe a serious or threatening health issue?
   c. How would your willingness to discuss your health change if you thought the issue was serious?
   d. How would you describe a health issue that is not serious?
   e. Are there any health issues that you consider normal for men in rural areas?
   f. How would other men in your rural area discuss their health issues? With who?

8. Tell me about what it is like being a man in a rural area.
   a. What influences you to behave in a certain way?
   b. What do you think influences your decisions about your health?
   c. How does living here influence your health? How you seek health information?
   d. How does your community view men’s health?
   e. Does your community have the same view about women’s health?

9. What suggestions do you have that could help improve men’s health in rural areas?

10. How do you think men’s access to health information can be improved in rural areas?

11. Is there anything else you would like to me that I didn’t ask you about?
Appendix I: Follow-up Semi-Structured Interview Guide

Semi-Structured Interview Guide

1. Do you have anything else you want to discuss since our previous interview about how you seek health information?

2. How would you describe a “normal male farmer”?
   a. How does a “normal male farmer” act?
   b. How would a “normal male farmer” view health?
   c. What would make a “normal male farmer” seek health information?
   d. How would “normal male farmer” seek health information?

3. It seemed like the thing that was most important for how all of the participants seek health information was doing it in a way they thought was the “normal” thing for male farmers to do. How does this sound to you?
   a. Why do you think this is so important to be like a “normal” farmer when seeking health information?

At this point turn to the process diagram and start asking them about how things are depicted.

***Describe the diagram and what the layout means***

After talking with all the participants, there seemed to be 3 different things that helped to make them feel like they were acting like a normal male farmer, so I’d like to ask you about those.

4. Participants described how they would “Leverage Trust” when seeking health information. What does leveraging trust mean to you?
   a. How do you think leveraging trust relates to acting like a normal male farmer?
   b. How does leveraging trust affect how you seek health information?

5. Participants also described how their perspectives on health information seeking can evolve to fit their current life situation. What does evolving perspectives on health information seeking mean for you?
   a. How do you think evolving perspectives on health information seeking relates to acting like a normal male farmer?
   b. How have your perspectives on health information seeking evolved with changing life situations?
6. Participants also described situations where they were aware of how their public image in the community could be influenced by seeking health information. For you, what does honing your public image mean?
   a. How do you think honing your public image relates to acting like a normal male farmer?
   How does honing your public image relate to how you seek health information?

7. How do you think these three parts of the first ring here [point to the three-part ring] relate to each other?
   a. Would you change how this is represented? Is anything misrepresented?
   b. Is there anything missing?
   c. Do you think this is clear?
   d. How can we make it more clear?

   I am going to repeat this process for each element of the sociocultural & personal factor ring, and the geographical and political factor ring.

8. What does [INSERT PROCESS NAME WHEN LOOKING AT DIAGRAM] mean for you?

9. How does [PROCESS] relate to how a normal male farmer would seek health information?

10. Now that we’ve gone through the diagram fully and talked more in-depth about some of the major ideas that have come out, is there anything else you’d like to add about the diagram or about how farmers seek health information?
EDUCATION

In Progress  
**PhD, Health Information Sciences**  
The University of Western Ontario  
Dissertation Topic: Rural Health Information Seeking  
Supervisors: Beverly Leipert, RN, PhD & Sandra Regan, RN, PhD  
Title: *Normalizing masculinity and tokenism: Explaining processes, factors, and contexts that influence how rural male farmers seek health information in southwest Ontario*  

February 2014  
**MSc, Health Promotion**  
Queen’s University  
Thesis Topic: Media Coverage of Inuit Food Insecurity  
Supervisor: Elaine Power, PhD  
Title: *“Heroes for the helpless”: How national print media reinforce settler dominance through their portrayal of food insecurity in the Canadian arctic*  

2011  
**BHSc, Honours Health Science with Biology Specialization**  
The University of Western Ontario

HONOURS AND AWARDS

2017–2019  
**SSHRC Doctoral Fellowship**  
Social Sciences and Humanities Research Council  
Award held at The University of Western Ontario  
$20,000 awarded each year for 2 years

December 2017  
**Faculty of Health Sciences Graduate Conference Travel Award**  
The University of Western Ontario  
Awarded $225 for travel

July 2017  
**Faculty of Information and Media Studies Travel Award**  
The University of Western Ontario  
Awarded $500 for travel

2017 – 2018  
**Ontario Graduate Scholarship**  
Province of Ontario  
$15,000 awarded for 1 year  
*Declined*: Cannot concurrently hold Ontario Graduate Scholarship and SSHRC Doctoral Fellowship awards

April 2017  
**Institute Community Support Travel Award**  
Institute of Health Services and Policy Research, CIHR  
Awarded $1,125 for travel  
*Declined*: Did not present at conference award was designated for

September 2016  
**Faculty of Health Sciences Graduate Conference Travel Award**  
The University of Western Ontario  
Awarded $225 for travel

September 2016  
**Faculty of Information and Media Studies Travel Award**  
The University of Western Ontario
Awarded $500 for travel

2016 – 2017 **Ontario Graduate Scholarship**
Province of Ontario
Award held at The University of Western Ontario
$15,000 awarded for 1 year

April 2016 **Institute Community Support Travel Award**
Institute of Health Services and Policy Research, CIHR
Awarded $1,500 for travel
Award held at The University of Western Ontario

April 2016 **Faculty of Health Sciences Graduate Conference Travel Award**
The University of Western Ontario
Awarded $225 for travel

April 2016 **Faculty of Information and Media Studies Travel Award**
The University of Western Ontario, London, ON
Awarded $500 for travel

**PUBLICATIONS**

**BOOK CHAPTERS**

**PEER-REVIEWED PUBLICATIONS**


**OTHER PUBLICATIONS**


CONFERENCE PROCEEDINGS

INTERNATIONAL CONFERENCES

Hiebert, B., Regan, S., Leipert, B. (2017, July). More than just farmers: A policy discourse analysis of how rural male farmers and their health needs are discussed in health policy and planning documents. Paper presentation at the 80th Annual Meeting of the Rural Sociological Society, Columbus, OH.


NATIONAL CONFERENCES


INVITED PRESENTATIONS


Hiebert, B. (2017, June). Health policy in rural Ontario: Analyzing how rural male farmers and their health needs are discussed in health policy and planning documents. Presentation to graduate course “Canadian Health Policy” in the School of Nursing at The University of Western Ontario.

Hiebert, B. (2017, February). Health policy in rural Ontario: Analyzing how rural male farmers and their health needs are discussed in health policy and planning documents. Presentation to senior undergraduate course “Advanced Health Policy” in the School of Health Studies at The University of Western Ontario.

Leipert, B., Hiebert, B. (2017, January). Photovoice research: Purposes, philosophies, and practicalities. Invited workshop by The University of Western Ontario School of Nursing Research Committee. Sixteen faculty, graduate students, post-doc students, research assistants, and community professionals attended. The universal ranking by attendees was Excellent, the highest ranking available for the workshop.

Hiebert, B. (2015, November) Gender and rural men’s health: Examining the relationship between rural masculinity and rural men’s access to health and health information. Presentation to senior undergraduate course “Health Promotion and Caring in Rural Contexts”, in the School of Nursing at The University of Western Ontario.