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

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Abstract

Beginning as early as 2009, recent shifts in Canadian health care delivery indicate that access to health information is essential to promote and maintain a healthy population. It is important to understand how and where various populations, such as underresourced rural populations, access health information so that public health agencies can develop and deliver appropriate information with, for, and in these contexts. There is a paucity of research that specifically examines how rural Canadian men seek health information; therefore, this review aimed to conceptualize this process based on three dynamic key constructs: health patterns of rural Canadians, health information–seeking behaviors, and rural gender identities. This conceptual theoretical literature review included 91 articles at the intersection of these three constructs. Discussion focuses on how residing in a rural region influences men's health and health care access. Health information–seeking behaviors are discussed in terms of social networks and framed with a rural context. Connell's theory of masculinity provides a useful approach to dissecting how rural men's gender identities influence their health attitudes, and how such attitudes are embedded in rural social and cultural norms. Each major construct—health in rural Canada, health information seeking, and rural gender identities—is discussed to highlight how specific embodiments of masculinity may promote and inhibit men's health information–seeking and positive health behaviors.

Recent shifts in Canadian health care, beginning as early as 2009, have focused on information dissemination as a means to promote population health and well-being (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 (HIS) 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 HIS. Therefore, this article will present the results of a conceptual theoretical literature review that explored how heterosexual nonaboriginal 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 HIS will be contextualized to highlight the challenge of defining rurality, gender differences in health outcomes and service utilization, and challenges and opportunities of health care delivery in a rural setting. Next, HIS 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

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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 HIS experiences are influenced by and reflected in rural cultural norms and social constructions of gender. Women's central role in HIS 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.

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 gray 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, HIS, 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 HIS. Ninety-one sources that addressed the intersection of health in rural Canada, rural men's health patterns, access to rural health care services, HIS, gendered experiences of HIS, 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 HIS: (a) Health in Rural Canada, (b) Health Information Seeking, and (c) Rural Gender Identities.

Health in Rural Canada

Prior to describing the health status and utilization patterns of rural men, and the challenges and opportunities characteristic of rural health care delivery, the challenges of defining rural must be noted.

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 labor 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 (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" (p. 8). This Ministry of Health and Long Term Care definition accounts for both community population and travel time to a larger center 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 with urban regions, rural regions in Canada typically have a higher population of seniors and a lower population of people aged 30 to 59 years (Canadian Institute for Health Information [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 with urban populations (CIHI, 2006; DesMeules et al., 2012); which, when combined with transportation and health care 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 centers (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 well-being of its members through sport and recreation (Leipert et al., 2011), utilize capital and promote healthy 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).

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 (CIHI, 2006; Kulig &

Williams, 2012; Standing Senate Committee on Agriculture and Forestry, 2006). For example, compared with 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 secondhand 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 (CIHI, 2006; DesMeules et al., 2012; Fogleman, Mueller, & Jenkins, 2015). Living in rural areas closest to urban centers 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 health care and other health sustaining resources such as dental services, speciality health care,

or recreation centers that are found in urban centers, 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 (CIHI, 2006; DesMeules et al., 2012). Rurality's effect on health must not be understood as the only influence on physical and mental health outcomes, as health is also affected by the delivery of formal and informal health care services in rural areas.

Rural Health Care Services

In addition to physician shortages, rural Canada is experiencing shortages in 24 of 27 health care 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 with 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 health care interactions in general (Spleen, Lengerich, Camacho, & Vanderpool, 2014). Compared with 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 health care when they believe it is needed (Spleen et al., 2014).

While access to physicians is an important factor in determining equitable health care 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-centered care (Kaasalainen et al., 2014; Leipert, 2010; Leipert, Regan, & Plunkett, 2015) 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 health care 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 health care 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 health care delivery, it is imperative to understand how informal networks generate and share health information.

Health Information Seeking

Although there is neither a formalized nor universally agreed on definition of 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 health care 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 (i.e., 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 nondirected 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 of 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 (CIHI, 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 behavior 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 health care 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.

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). HIS occurs in three main contexts: coping with a health threat, participation in health care decisions, and engagement in preventive health behavior or health behavior 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 health care 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 health care 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 health care services (where participation in decision making often occurs; Pong et al., 2011). The limited portion of men who seek health care 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 behavior 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 behavior (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 et al., 2006; Harris & Wathen, 2007; 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.

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 on; however, Connell's (2005) 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. (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 behaviors 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 labor 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 of 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 well-being. 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 integrated approach to understanding health, HIS, and gender identities in a rural context.

An Integrated Discussion of Rural Men's HIS

As demonstrated in this article, 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 HIS 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.

Rural Masculinity's Benefits and Challenges to Rural Men's HIS

As previously discussed, most help-seeking behaviors 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 HIS 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 health care entirely (Spleen et al., 2014) or 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 health care 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 behaviors 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 behaviors. 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, 2009; Oliffe & Bottorff, 2007); 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 health care interaction is another factor to consider when promoting men's health (Addis & Mahalik, 2003; Galdas et al., 2005) as the most successful health care 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 health care 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 behaviors. 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).

Dialogic Masculinity May Promote HIS

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 behaviors by appropriately valuing the gendered nature of work, thereby enabling men to seek and accept assistance in health care 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 his 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 (Oliffe 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 with 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 health care 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 as 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 health care (Witty et al., 2011). While the specific practices of rural men with respect to HIS remain unknown, the combination of men's health care 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 health care 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 and 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.

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. HIS 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 integrated 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 behaviors linked to injury mortality, delayed treatment and health care aversion, and thus negatively influences a man's well-being. 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 with monologic masculinity as it may actually promote positive health behaviors 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 the review to heterosexual nonaboriginal men limited the range of HIS processes that were discussed in this review. However, this was a necessary restriction to conceptualize the intersection of three broad topics—rural health, HIS, and rural gender identities. An additional limitation of this review is drawn from the 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 nonheterosexual 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 health care 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. Health care initiatives directed at increasing rural men's engagement with health care 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 behaviors 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.

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