Barriers to the Recognition of Geriatric Depression in Residential Care Facilities in Alberta

Anna Azulai, Barry L. Hall

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Anna Azulai[1], PhD & Barry L. Hall[2], PhD

Abstract

Objectives: This study explored the barriers that regulated nurse professionals encountered in recognizing and assessing geriatric depression in residential care facilities in the Canadian province of Alberta. **Methods:** The study used a convergent parallel mixed methods design, including a cross-sectional survey (N = 635) and qualitative interviews (N = 14) with regulated nurse professionals. **Results:** Findings revealed six major barriers to the recognition of geriatric depression in Alberta, including 1) limited clinical knowledge about geriatric depression; 2) misconceived beliefs about geriatric depression; 3) unclear depression assessment protocol and procedures; 4) inadequate resources; 5) the dominance of the medical care model as well as the person-centred care challenges; and 6) poor communication among all stakeholders. **Discussion:** Socio-cultural values and beliefs about geriatric depression played a key role in the complex interaction of the various structural and agential barriers to the effective recognition and assessment of depression in residential care facilities in Alberta.

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Introduction

The purpose of this article is to report findings from a mixed-methods exploratory study on how depression in older adults, termed geriatric depression, is recognized by regulated nurse professionals in residential care facilities in the Canadian province of Alberta. The article presents the answers to the following research questions: 1) what are barriers to the effective depression recognition and assessment in residential care facilities in Alberta? 2) what are the strategies for the successful identification of geriatric depression in these care settings?

The World Health Organization (2018) has recognized geriatric depression as a public health concern due to its negative consequences to the well-being of older adults. Geriatric depression remains particularly prevalent, costly, and an under-recognized mental health condition in residential care facilities, such as long-term care and assisted living settings (Author, 2015; McCabe et al., 2008; Bern-Klug, Kramer, & Sharr, 2010; Snowdon, 2010; Watson, Zimmerman, Cohen, & Dominik, 2009). Unrecognized and untreated geriatric depression leads to further health deterioration, increased medical care utilization, poor quality of life, and premature death (Boyle et al., 2004; Smalbrugge et al., 2006).

In Canada, the prevalence rate of geriatric depression in long-term care facilities is about 44% (Canadian Institute for Health Information, 2010). According to Maxwell et al. (2011), depression is common in about 34 to 44% older adults in residential care facilities in Alberta. Geriatric depression is also the fourth most common chronic health condition in these care settings in the province after dementia, heart disease, and hypertension (Maxwell et al., 2011).

As defined in the Diagnostic and Statistical Manual for Mental Disorders (DSM-V) (American Psychiatric Association [APA], 2013), clinically significant depression can be diagnosed if five to nine following symptoms are present during at least two weeks: 1) depressed mood; 2) loss of interest or pleasure in activities; 3) changes in weight or appetite; 4) changes in sleep patterns; 5) psychomotor agitation or retardation; 6) low energy; 7) feelings of worthlessness; 8) poor concentration; and 9) recurrent suicidal ideation or suicide attempt (APA, 2013). Either depressed mood or loss of interest and pleasure in activities, or both symptoms, must be present. Typically, presence of five to six symptoms indicates mild depression, manifested by mild impairment in functioning (Zuckerbrot et al., 2007). When all nine symptoms are noted, depression and the associated impairment may be severe (Zuckerbrot et al., 2007). Moderate depression falls between these two categories. Older adults may experience depressive symptoms that do not fulfill the DSM-V criteria for clinically significant depression, for instance dysthymic disorder, subthreshold depression disorder, and depression due to dementia (Dillon et al., 2014). According to Zuckerbrot et al. (2007), it is important to pay attention to the less severe forms of depression in older adults who may be at risk for developing clinical depression in addition to facing multiple comorbidities, high levels of stress, and social isolation without being diagnosed and treated (Hasche, Lee, Choi, Proctor, & Morrow-Howell, 2013).

Fortunately, geriatric depression is one of the most treatable chronic mental health conditions (Conn, Gibson, & McCabe, 2014). Scholars point to some effectiveness of pharmacotherapy, psychotherapy, exercise, and social support (Luck-Sikorski et al., 2017).

However, research in residential care settings in the United States and around the world emphasize limited availability of mental health specialists (Craig & Pham, 2006; McKay, 2009; Maxwell et al., 2011; Molinari, Hedgecock, Branch, Brown, & Hyer, 2009), limited knowledge

and training of staff in the assessment methods and symptoms of geriatric depression (CIHI, 2010; Davison et al., 2007; McCabe et al., 2008 Jansen & Murphy, 2009; Mitchel & Kakkadasam, 2011; Molinari et al., 2008), presence of misconceived beliefs about it (Choi, Wyllie, & Ranson, 2009), and ineffective and unsystematic depression assessment methods and protocols (Davison et al., 2007; Heiser, 2004; McCabe et al., 2008; Pachana et al., 2010; Soon & Levine, 2002; Teresi, Abrams, Holmes, Ramirez, & Eimicke, 2001; Wagenaar et al., 2003).

Limited available research in Canada emphasises the importance of early recognition and effective assessment of geriatric depression in long term care settings (Adams-Fryatt, 2010; CIHI, 2010; Conn et al., 2008; Maxwell et al., 2011). Interestingly, the Canadian clinical best-practice guidelines on the assessment of mood disorders in long-term care facilities do not endorse any specific discipline to be responsible for the depression assessment (CCSMH, 2006); nor does the Nursing Homes Act of Alberta (Province of Alberta, 2017) designate any discipline for this purpose. This has created a vacuum in the field of assessment of depression and mental health in residential care facilities in Alberta.

On the other hand, nursing regulatory bodies in Alberta endorse mental health assessment as an integral part of nursing care (CARNA, 2019a; 2019b; CLPNA, 2019), which is congruent with other nursing regulatory bodies in Canada. Specifically, nurse professionals should screen clients for changes in behaviour and mood, based on their ongoing observations of the client and concerns expressed by the client, family and inter-professional team, including other specialty physicians (Registered Nursing Association of Ontario [RNAO], 2003). When signs of depression are detected, a referral for a medical diagnosis should be made to the specialized geriatric services, specialized geriatric psychiatry services, neurologists, and/or members of the multidisciplinary team, as indicated by screening findings (RNAO, 2003).

There is a dearth of Canadian and Alberta specific research on how nurse professionals in residential care facilities in Alberta recognize and assess geriatric depression. This article examines the under-studied phenomenon of geriatric depression in residential care in Alberta. The data will help to identify the current state of practice in these care settings, identify specific barriers as well as successful strategies for the timely identification of residents with depression.

The study was approved by the institutional research ethics board at the University of Calgary (REB13-0058).

Materials and Methods

Design and Participants

This exploratory study employed a convergent parallel mixed methods design (Creswell & Plano-Clark, 2011), in which qualitative and quantitative data were collected concurrently, analyzed separately, and then merged for corroboration (Figure 1). Study population included regulated nurse professional (i.e., registered nurses (RNs) and licensed practical nurses (LPNs)), employed in any capacity in residential care facilities in Alberta. In the study, residential care facilities included long-term care facilities (LTC), such as nursing homes and auxiliary hospitals, and designated supportive living (DSL) that is a growing type of assisted living facilities in Alberta. Participants provided informed written consent to the study. When written consent was not possible, verbal recorded consent was obtained.

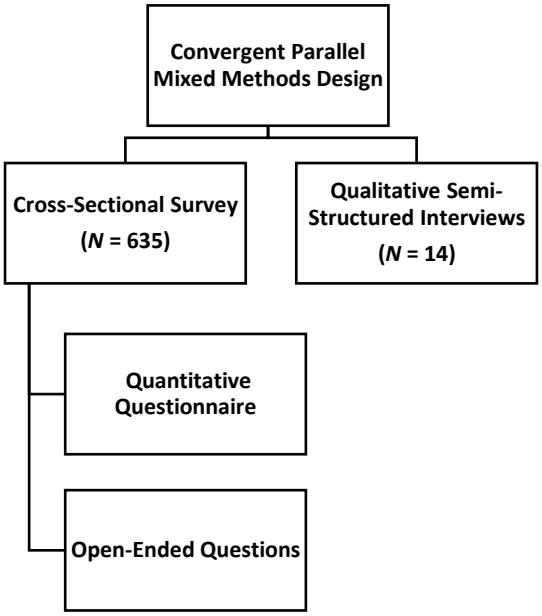

Figure 1. Study Design

Data Collection

The data collection time frame was from December 2013 to February 2015 and included a cross-sectional survey (N = 635) as well as individual qualitative semi-structured interviews (N = 14). Probability sampling was used for the quantitative survey. Mixed purposive sampling was used for qualitative interviews.

Quantitative survey. The self-report survey questionnaire asked study participants 91 questions, organized into six sections. Section 1 included questions about type, level of care and other characteristics of facility, assessed on either dichotomous (yes/no) or menu (check-all-that-apply) response formats. Section 2 addressed various methods and frequency of depression assessment in facility with either dichotomous (yes/no) or menu response. Section 3 focused on perceived successful practices versus barriers to depression assessment. Barriers were measured using a 12-item Barriers to Working with Depressed Older People scale developed by MacCabe, Davison, & Mellor (n.d.; Cronbach's α = .84). A 4-point Likert scale format (1 = strongly

disagree; 2 = somewhat disagree; 3 = somewhat agree; 4 = strongly agree) offered total scores, ranging from 12 to 48, with a higher score indicating stronger perceptions of barriers. The following open-ended item allowed for collecting additional information on barriers: "What additional barriers, not mentioned [in the Barriers scale], to effective identification of residents with depression have you observed?" Another open-ended question in this section addressed successful practices: *"*What facilitators or successful practices for identification and assessment of depression in residents can you share?"

Questions about clinical knowledge and beliefs about geriatric depression appeared in Section 4, assessed by two scales: 1) a 12-item Late-Life Depression Quiz (LLDQ), developed by Pratt, Wilson, Benthin, and Schmall (1992), offering a a trichotomous response format (e.g., "true," "false", or "don't know"), and a total score from 1 to 12, with higher scores indicating greater clinical knowledge of geriatric depression. LLDQ showed high internal consistency (α = .85), using the Kuder-Richarson formula (KR-20); 2) an 18-item Knowledge of Geriatric Depression Scale (KDGS), a 14-item modification of the Views about Depression in Older People by McCabe et al. (n.d.). The original scale measured three aspects of knowledge of depression, based on the DSM-IV-TR criteria for Major Depressive Disorder, specifically in residential care facilities: symptoms of depression, myths of depression, and responses to depression (Davison et al., 2009; McCabe et al., 2008). A 4-point Likert scale used for responses (1 = strongly agree, 2 = somewhat agree, 3 = somewhat disagree, and 4 = strongly disagree). As the internal reliability of the original scale was a low Cronbach's α = .40 (McCabe et al., n.d.), four knowledge items were added to the original scale to reflect the most recent evidence in the scholarly literature on geriatric depression, including: "Changes in appetite and weight might be symptoms of depression;" "Suicide attempts are not common in older people in residential care

facilities;" "Depression is common among older adults with dementia;" and "Psychotherapy combined with anti-depressant medication is effective in treating older people with depression." Total scores of the resultant 18-item Knowledge of Geriatric Depression Scale (KGDS) ranged from 18 to 72, with higher scores indicating better level of clinical knowledge.

Questions in Section 5 had a dichotomous (yes/no) response format and inquired about depression-specific education and training of participants (e.g., training type, length, and knowledge of the relevant best-practice clinical guidelines). Items were measured by either dichotomous (yes/no) or menu response scale. Finally, section 6, collected demographic information on participants and included an item inquring whether a respondent is interested to participate in an individual interview related to the survey topic.

Qualitative interviews. Qualitative interviews were collected through various venues (i.e., face-to-face meetings, Skype video-conferencing, and telephone communication) to accommodate for the large geographical distribution of the participants. The interview guide included 31 questions, corresponding to respective sections in the quantitative survey to allow for subsequent cross-comparison of the findings. For instance, questions like "What successful strategies in the process of identification and assessment of residents with depression in your facility would you share with other clinicians" and "What potential or actual barriers to the effective recognition and assessment of depression in residents would you identify in your facility" corresponded to section 3 of the survey on barriers and facilitators for depression assessment in facilities.

Data Analysis

In this study, the qualitative and quantitative data were collected and analyzed independently and then compared. Quantitative survey data were exported from the Survey

Monkey (2015) to the IBM SPSS 23 software for statistical procedures, using descriptive and inferential methods. Inferential statistics included independent samples *t*-test, one-way ANOVA and Chi-squire. Open-ended survey questions and qualitative semi-structured interviews were analysed using qualitative content analysis technique (Sandelowski, 2000)**.** Interviews were audiotaped and transcribed before the analysis. Member check procedure (Jick, 1979) was used to increase the trustworthiness of the qualitative findings by using participants' feedback to enhance the data credibility. Seven out of 14 participants responded, providing positive feedback.

Data comparison from all data sources was conducted using the integrative data analytic approach **(**Castro, Kellison, Boyd, & Kopak, 2010), including data transformation approach and data consolidation matrix (Jang, McDougall, Herbert, & Russell, 2008). Qualitative data from the open-ended survey on the barriers and facilitators in the depression assessment process were quantified to facilitate comparison of the major themes and subthemes against survey data on the barriers. Data consolidation matrix involved creating a blended database for the main study constructs (Bazeley, 2006) and combining the results from all data sources to integrate blending of the data for further analysis. Given that the findings were extensive, it was not feasible to include the consolidated matrix in this paper. Instead, the integration of the findings is presented as a narrative in the results section below.

Results

Recruitment

The data were collected between December 2013 and February 2015. Using a SurveyMonkey (2015) web-link, the survey was emailed to over 7,000 regulated nurse professionals in Alberta through the Alberta Continuing Care Association (ACCA), the Alberta

Geriatric Nursing Association (AGNA), the College and Assocation of Registered Nurses of Alberta (CARNA), the College of Licensed Practical Nurses of Alberta (CLPNA), and the Education Rresearch Centre (ERC). The response rate was 9%, constituting $N = 696$ total survey responses. After eliminating ineligible surveys (i.e., incomplete or not meeting the eligibility criteria), a total of $N = 635$ surveys were retained.

Participants

Out of 635 survey participants, over half of participants were from LTC, almost half employed in private facilities, and almost all participants (97%) worked in the urban sector. Almost two-thirds (60%) of the survey participants were LPNs. Majority had professional experience with older adults (66%) and in residential care settings (56%). Near half (41%) of participants assumed a role that combined supervisory and direct care duties. The majority (58%) worked day shifts only, and near half (46%) were full-time employees. Only about one-third of the participants had some post-secondary education degree. Most participants were between 18 to 45 years of age (55%). The majority were women (95%), Caucasian (63%), and born in Canada (60%).

In qualitative interviews, all participants (N=14) were women, eleven were Caucasian, one Black Canadian, one Filipina, and one Chinese. Two participants were mid-career professionals (6 to 8 years of nursing practice), another two were relatively new professionals (1 to 5 years of nursing experience), and the rest were mature nurse professionals (over 9 years of experience). All but one participant was from urban settings.

Reported Barriers to the Recognition of Geriatric Depression

Findings indicate that, despite the efforts of regulated nursing professionals, geriatric depression is not systematically recognized and assessed in residential care facilities in Alberta

due to a variety of barriers. The integrated analysis of qualitative and quantitative findings generated six most prominent and interconnected barriers in these care settings, summarized in Figure 2. The barriers include: 1) insufficient clinical knowledge of and training in geriatric depression among staff in these care settings; 2) misconceived beliefs about geriatric depression; 3) limited access to resources; 4) unclear depression assessment protocol and procedures in facilities; 5) characteristics of models of care and organizational culture in facilities; and 6) communication difficulties (Figure 2).

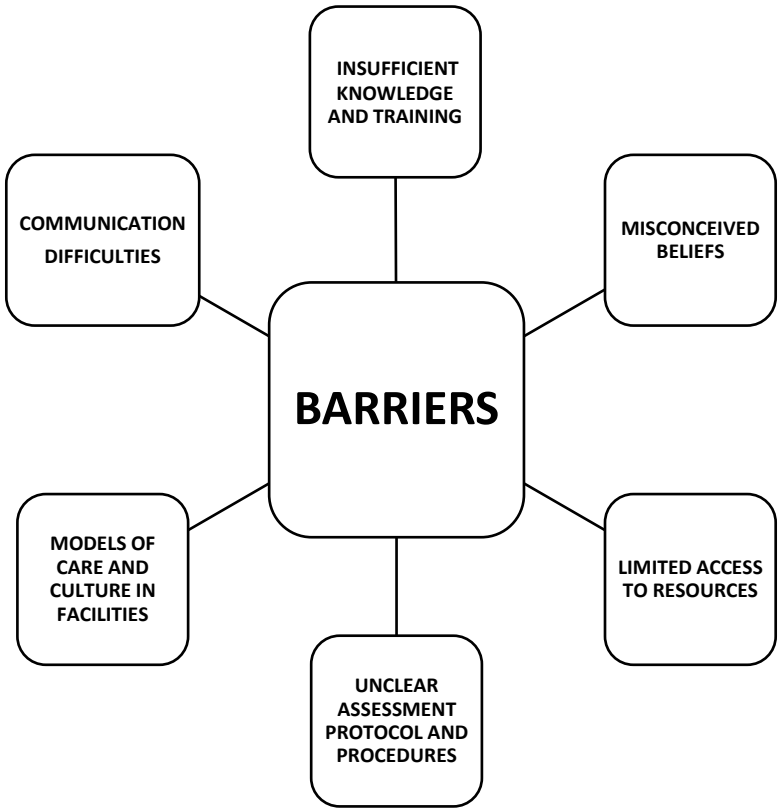

Figure 2. Barriers to the Recognition and Assessment of Geriatric Depression in Residential Care Facilities in Alberta

Insufficient clinical knowledge of and training in geriatric depression. Findings reveal 78% level of clinical knowledge of geriatric depression among the survey respondents.

Interview participants supported the notion that staff knowledge of depression in facilities is not optimal. Interview participants also reported limited education opportunities for staff pertinent to geriatric depression. In-services on this topic were not provided as a rule, and external education proved difficult to attend either due to the costs or the lack of staff replacement.

Misconceived beliefs about geriatric depression. Findings from the open ended survey items and from qualitative interviews suggest that staff in facilities may have various misconceived beliefs, such as the normalization of geriatric depression (i.e., thinking that depression is normal in old age, especially in long-term care settings), stigma of depression (e.g., attributing depression to personal weakness), and ageism (e.g., believing that depression in old age is of a lesser priority than if it would occur to a younger person). Interview participants believed that both normalization and stigma of geriatric depression may lead to the under-reporting of depression by residents, overlooking and under-reporting of the symptoms by staff, and negative views on depression treatability in old age (e.g., thinking why bother assessing symptoms of depression in a person with dementia or someone at the end of life?). Some participants reported that cultural beliefs about aging, mental health, and depression specifically of both nurse professionals and residents could hinder the efforts of recognizing geriatric depression. For example, the sense of personal comfort and responsibility to initiate and discuss mental health concerns could have been affected by staff members' and residents' respective cultural backgrounds.

Limited access to resources. Both qualitative and quantitative findings indicate insufficient availability of various resources, necessary for the recognition and assessment of depression in facilities. For example, **a**bout 75% of survey participants reported limited time available to talk to residents, and 58% noted high workload. Interview findings supported

staffing inconsistency as a problem. Participants believed they were required to accomplish more tasks in less time, which in the context of the growing complexity of residents' care needs was perceived as unfeasible. Only 84% of survey participants confirmed that residents in facilities have access to mental health professionals. Interview participants viewed the limited availability of mental health professionals as directly affecting poor recognition and assessment of depression in facilities. Also, interview participants reported that residents in LTCs and DSLs were often dependent on assistance to attend medical appointments in the community when such services were not available in facilities; however, transportation challenges were very common, limiting residents' opportunities for the timely mental health assessment. In all reports of inadequate resources, participants attributed the key role to funding as a critical resource. Participants viewed inadequate funding as responsible for low staffing levels and a high workload in facilities, limited availability of health and mental health professionals, and limited access to transportation for residents.

Unclear depression assessment protocol and procedures in facilities. Most participants believed that the current process of depression assessment in facilities was both unsystematic and challenging, referring to the unclear and questionable depression assessment protocol and procedures. These findings are reported in greater detail elsewhere (Author, 2019).

Characteristics of models of care and organizational culture in facilities. The findings from all data sources indicated that the presence of some elements of the medical model of care, including the acute-care focus, the task-oriented approach to care, strict professional hierarchy, and the priority of physical needs over emotional well-being were another prominent barrier to the successful recognition and assessment of geriatric depression in residential care facilities in Alberta. For instance, more than one-third of survey participants believed that

depression in their facilities did not receive enough attention because their employers expected the nurse professionals to carry out tasks related to residents' physical rather than emotional well-being. Some interview participants viewed the medical and the social care in the facilities as clashing, rather than integrated, especially in DSL, where social model of care and life enrichment are emphasized. However, all participants, regardless of facility types, viewed the implementation of person-centered care in residential care facilities as important factor for the successful and timely recognition and assessment of depression in residents.

Communication difficulties. About 32% of survey participants pointed to the challenge in developing inter-personal relationships between staff and residents due to limited face-to-face contact. Interview participants identified language barrier as another obstacle (e.g., English being a second language for a resident or a staff, and language challenges associated with medical conditions in residents). Interview participants reported that these challenges, inhibiting personal relationships between staff and residents, often resulted in staff's poor familiarity with residents, which in turn resulted in missing signs and symptoms of depression in residents. Also, limited personal relationship may preclude residents openly sharing their feelings or struggles with staff. Indeed, over 60% of survey participants indicated reluctance of residents to discuss their feelings with staff. Other communication challenges included inaccurate documentation and reporting by staff, which could have been responsible in part for the delays in referrals of residents to mental health professional assessments.

An interesting finding was a lack of inter-professional collaboration among staff in facilities during the depression assessment process. According to interview participants, most of the inter-professional meetings in the facilities were for the purpose of planning post-assessment interventions rather than collaborative assessment of depression itself. Moreover, not all

professionals were involved in these meetings. For example, the monthly mental health rounds in DSLs were composed of the external mental health consultants (often external psychiatrist, psychiatric nurses, and social workers) and site RNs. LPNs, health care aides (HCAs) as well as facility social workers and recreational therapists were not invited to these meetings. Also, annual case conferences in the facilities inconsistently included physicians and pharmacists, and never included the HCAs, although RNs often relied on HCAs for spotting initial signs and symptoms of depression owing to the HCAs' daily contact with residents.

Discussion

Findings of this study uncovered six major inter-connected barriers to recognizing geriatric depression in residential care facilities by regulated nurse professionals in Alberta. The barriers included less than optimal depression-specific clinical knowledge and training of nursing staff in facilities, various misconceived beliefs about geriatric depression, unclear depression assessment protocol and procedures, inadequate resources, challenges related to the model of care (e.g., dominance of the medical care model and challenges to integrate person-centred care), and poor staff-to-resident and staff-to-staff communication. These findings are discussed below in light of scholarly evidence.

Clinical Knowledge and Training

The barrier of the less then optimal clinical knowledge of and training in geriatric depression among nurse professionals in residential care facilities in Alberta is congruent with other studies in North America and beyond that reported limited knowledge and training of staff in the assessment methods and symptoms of geriatric depression (CIHI, 2010; Davison et al., 2007; McCabe et al., 2008; Jansen & Murphy, 2009; Mitchel & Kakkadasam, 2011; Molinari et al., 2008; Park et al., 2015; Park & Unutzer, 2011). Also, similarly to the findings in the current

study, Waterworth et al. (2015) noted that nurse professionals often believed that assessment of depression is not within their professional scope of practice.

A variety of scholars reported that inadequate education in geriatric depression presents an obstacle to the performance of nurse professionals in the assessment of depression (Davison et al., 2007; McCabe et al., 2009; Mellor, Ruso, et al., 2008; Mellor et al., 2010), whereas enhanced knowledge of geriatric depression was positively related to the accuracy with which nurse professionals distinguish sad mood from clinically significant depression (Almeida, 2012; Bendixen & Engedal; 2015; Goldberg, 2014; Verkaik et al., 2009).

However, there is a gap in the provision of depression-specific education in residential care facilities in Alberta. The Nursing Homes Act (Province of Alberta, 2017) require facility operators to provide LTC staff with education about gerontology, fire prevention and safety, disaster preparedness, and prevention and control of infections. However, mental health is not identified in this required list and, therefore, depression-specific education of staff is left to the discretion of facility operators and clinical managers with varied results. Given that over one-third of residents in LTC and DSL facilities suffer from clinical depression (CIHI, 2010; Maxwell et al., 2011), the continuous marginalization of depression-specific education requirements in these care settings is unjustified and requires urgent attention.

Misconceived Beliefs about Geriatric Depression

Research evidence show that enhanced depression-specific knowledge was positively associated with reducing misconceptions about geriatric depression (Haigh, Boqucki, Sigmon, & Blazer, 2017). Similarly to other research in the field (Choi et al, 2009), participants in the presented study reported various misconceptions, such as normalization and stigmatization of geriatric depression, leading to under-reporting of depression (Kennedy, 2015; Sarkisian, Hays,

& Mangione, 2002; Oliffe et al., 2016) and overlooking of signs and symptoms of depression by staff (Lantz, 2002; McCabe et al.,2009; Mellor, Ruso, et al., 2008; Mellor et al., 2010; Morrow-Howell et al., 2008; Snowden et al., 2003). Also, ageist attitudes inform negative views on treatability of geriatric depression and undermine the recognition and assessment efforts (Bern-Klug et al., 2010; Choi et al., 2009; Kane, Ouslander, & Abras, 2004; Ouchida, & Lachs, 2015). Altering these misconceived beliefs on geriatric depression among professional community and general public is, therefore, paramount.

One way to correct misconceived beliefs is by providing necessary depression-specific education to nurse professionals. Early education of health professionals may also help to correct a variety of erroneous beliefs and misconceptions about geriatric depression, mentioned earlier. It can be done by infusing depression-specific content into the formal professional nursing education curriculum in Alberta. Also, it could be helpful if the nursing professional regulatory bodies in the province (e.g., CARNA and CLPNA) would revise the standards of continuing nursing education for nurse professionals to include geriatric depression. It is also necessary to revise the Nursing Homes Act of Alberta (Province of Alberta, 2017) to include mental health education in the list of required education topics provided to staff by operators of LTC. If depression-specific education of professional staff in facilities is required by law, chances are that it would be included in the provincial health regulations and monitored by the regional health authority such as Alberta Health Services. Also, leading a wider educational campaign for the general public could help alter erroneous beliefs about this mental health condition and, perhaps, reduce related stigma in society.

Care Models in Facilities

Care models in residential care facilities are instrumental in the recognition and assessment of geriatric depression. The findings of this study indicate that the dominance of the medical or acute-care model in residential care facilities was not conducive to the timely recognition of geriatric depression. Indeed, Gawande (2014) stated that LTC function as total institutions, based on the traditional medical model of care. The institutionalized routines are disempowering and prevent people with disabilities from exercising control over their lives and pursuing life goals (Corrigan, 2016).

Meyers (2006) suggested that the growing burden of the complex physical health needs of older adults in residential care facilities has stimulated and justified the long adopted medical or acute-care model with "traditional organizational structures, staffing levels, and resources constrain[ing] the ability of staff to provide individualized, person-focused care to this complex population" (Zimmerman, Shier et al., 2014, p. S2). This explains to some extent the marginalization, limited accessibility, and effectiveness of mental health care in residential care facilities (Berkman & Hartootyan, 2003; McCabe et al., 2009; Mellor, Ruso, et al., 2008; Meyers, 2006). It is possible that stigma of mental health and ageism that normalizes depression in old age are another powerful driving force behind the marginalization of mental health care in geriatric facilities, in spite of the evidence of profound growth of unaddressed mental health needs (Conn et al., 2008).

There has been increasing push-back against the medical model of care for older adults with chronic health conditions, specifically the LTC culture change movement, underpinned by person-centered care (aka patient-centered or client-centered) (McGinn, 2016; Miller et al., 2010). Consistent with the biopsychosocial model of care (Engel, 1978), the person-centered

care approach offers a more holistic provision of care than the medical model because it emphasizes the multi-dimensionality of human life that goes beyond physical needs (Bergeson & Dean, 2006; Clark, 1995). The major focus of the person-centered care is prevention, the continuity of care, the integration of health and psychosocial care, the focus on inter-personal relationships, and resident's choice (Ghaemi, 2009).

Person-centered care has been promoted by the Canadian clinical best-practice guidelines on the assessment of geriatric depression in residential care facilities (Conn et al., 2014). Some assisted living settings and DSL have adopted an alternative model of care, termed social model or life enrichment, to the traditional medical model, elevating the priorities of psycho-social needs of residents, their rights to self-determination and participation in own care, and deinstitutionalization of physical and social environments in facilities (e.g. lacking nursing stations in the hallways). However, the implementation of the patient-centred care in residential care facilities remains a challenge, reported in the presented study and in other research (Miller et al., 2010; Zimmerman, Shier, et al., 2014). Miller et al. (2010) asserted that the organizational structure, availability of resources, and funding schemes have been preserving the medical model elements in these care settings. More effort to support person-centred care is required to ensure the timely attention to depression and other mental health needs of residents in facilities.

Inadequate Resources

Research evidence in North America support findings of the this study on the critical lack of resources in geriatric residential care facilities, including staffing and time to provide quality care to older adults (Baernholdt et al., 2010; Banerjee, 2010; Cline et al., 2011; McCabe et al., 2009; Mellor, Ruso, et al., 2008; Mellor et al., 2010), limited access to mental health professionals (Adamek, 2003; Craig & Pham, 2006; McKay, 2009; Molinari et al., 2009;

Morrow-Howell et al., 2008; Maxwell et al., 2011; Wagenaar et al., 2003), inadequate transportation that precludes timely access to mental health services for older adults (City of Calgary, 2015) with mobility challenges and funding (Kennedy, 2015).

Some scholars suggested that the fiscal organization of geriatric care has been primarily oriented to address older adults' physical and acute care needs rather than depression (Liebel & Powers, 2013). According to Alexopolous (2005), public insurances in North America do not cover depression care management services.

In Canada, the funding approach is based on the definition of continuing care as extended but not medically necessary service (Hermus et al., 2015), which may no longer reflect the growing complexity of medical and mental health needs of older adults, living in residential care facilities. It is, therefore, necessary to revise the Canadian Health Act (Minister of Justice, 2016) to include mental health services as necessary services in geriatric facilities. Financial coverage is necessary to ensure the provision of quality mental health services to this vulnerable population with complex health and mental health care needs.

Alberta legislation has not caught up with a changing landscape of the residential care population. For instance, the Nursing Homes Act (Province of Alberta, 2017) requires a facility operator to provide an average of at least 1.90 paid hours of combined nursing and personal services per resident per day in LTCs. This contact time allocation has not been changed since 1985, while the recommended minimum contact time has been increased to 4.1 hours to avoid jeopardizing the health and safety of LTC residents (Jansen & Murphy, 2009). This recommended allocation included 0.95 to 1.55 hours of the professional nursing care and 2.4 to 3.1 hours of personal care (Jansen & Murphy, 2009). Moreover, the Nursing Homes Act (Province of Alberta, 2017) has not provided any standards for the mental health availability,

qualifications of mental health professionals in LTC or included mental health professionals within the required on-site staff. Given that the majority of the population in geriatric residential care suffer from some type of mental health condition (Conn et al., 2008; Maxwell et al., 2011), this lack of attention to the availability of mental health professionals in long-term care facilities may present a social justice concern. Therefore, revising the Nursing Homes Act of Alberta (Province of Alberta, 2017) is necessary to include mental health in the list of required services and mental health specialists in the list of necessary care providers as well as to increase staff-to-resident contact hours per day.

The regulatory requirements for DSL staffing are even more diffuse than for LTC because of the shorter history of DSL in Alberta (Government of Alberta, 2010). Maxwell et al. (2015) asserted that lower staffing rates and service availability in Canadian assisted living facilities raised concerns that residents may be at increased risk for adverse health outcomes. For example, Hogan et al. (2014) reported that DSL residents in Alberta were hospitalized about three times more often that residents in LTC. Yet, increased professional nursing staffing in DSLs was positively related to decreased hospitalizations and improved health and mental health outcomes in residents (Hogan et al., 2014; Maxwell et al., 2015; Maxwell et al., 2011). Given that the depression rates and residents' characteristics are similar in DSL and LTC in Alberta, it is important to adjust the DSL standards of care to match those of LTC in the province and close the gap in mental health service provision between LTC and DSL.

Unclear Assessment Protocol and Procedures

Similarly to the findings of the current study, other scholars in the United States and beyond documented ineffective and unsystematic depression assessment methods and protocols (Davison et al., 2007; Heiser, 2004; McCabe, Davison, Mellor, & George, 2008; Pachana et al.,

2010; Soon & Levine, 2002; Teresi et al, 2001; Wagenaar et al., 2003). These findings and important recommendations to improve depression assessment procedures in residential care facilities in Alberta have been discussed elsewhere in more detail (Author, 2019).

Communication Difficulties

Various communication difficulties in the process of depression recognition, reported in this study, have not been unique to Alberta. For instance, Waterworth et al. (2015) documented a lack of face-to-face interaction between nurse professionals and residents in geriatric residential care facilities in New Zealand, which impacted the ability of nursing staff to recognize signs of depression in residents. Also, the different scholars noted the importance of effective documentation, often lacking, for the quality of mental health care in the facilities were documented in a number of different studies (Baernholdt et al, 2010; Cline et al., 2014; McCabe et pal.,2009; Mellor et al., 2010).

Further, there is research evidence on the pivotal role of inter-professional collaboration to enhance effective treatment of depression in residential care settings (Almeida, 2012; Cody & Drysdale, 2013; Unutzer et al., 2002). However, research showed that inter-professional collaboration has been a challenge in residential care facilities (Austin et al., 2008; Young et al., 2011).

There is a need for the enhanced communication among all stakeholders in the process of depression recognition and assessment in LTC. To support the implementation of this goal, creating a designated coordinating role of depression care managers is recommended (Azulai & Walsh, 2019). Also, it is important to include LPNs and HCAs in inter-professional conferences and care plan meetings because they have more daily contact with residents and are often the first to observe any unusual changes in resident behaviors.

Impact Progression Model

Based on the interpretation of the study findings, the authors of this article suggest that socio-cultural values and norms about depression in old age (e.g., normalization, stigmatization, and ageism) may fuel misconceived beliefs about this mental health condition, presenting one of the earlier mentioned barriers to the effective recognition and assessment of depression in residential care facilities in Alberta. The authors suggest a conceptual Impact Progression model to summarize the complex interplay of the structural and agential barriers to the assessment of geriatric depression in residential care facilities in Alberta.

The Impact Progression Model (Figure 3) consists of seven layers and is predicated on the notion that the identification of depression depends on the assessment practices, framed within a model of care, which functions within the boundaries of available resources. The resources, in turn, are allocated based on the relevant laws, regulations, and protocols, which reflect the exchange of personal and mainstream socio-cultural beliefs about geriatric depression.

The Impact Progression model is helpful to understand the dynamics of depression recognition and assessment in residential care facilities in Alberta, particularly the key impact of the socio-cultural beliefs onto the inter-connected dynamics of structural and agential factors in the complex process of facility depression care.

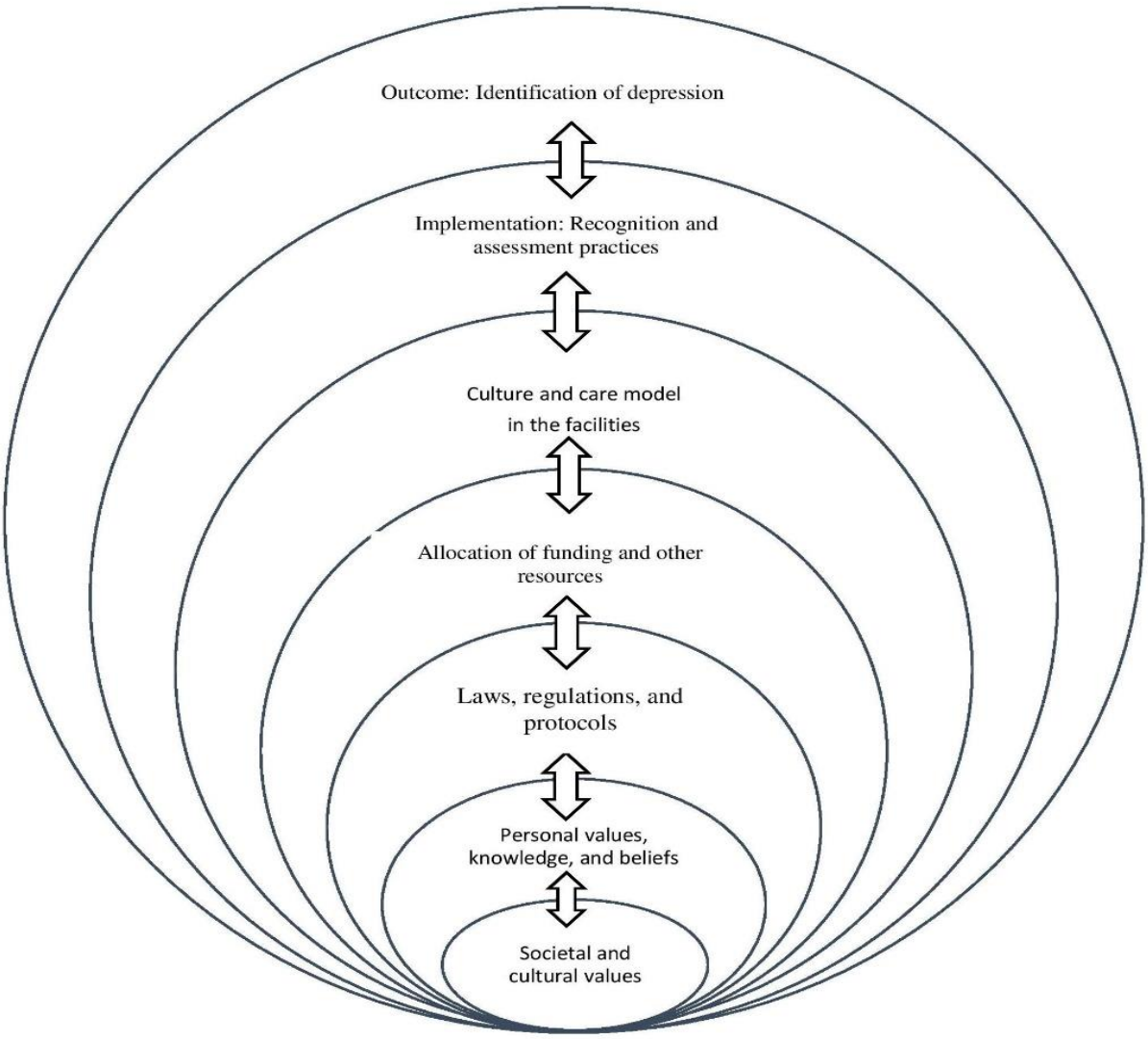

Figure 3. Impact Progression Model.

We suggest that, based on the Impact Progression model, the barriers to the depression recognition and assessment in facilities are complex, interconnected and must not be viewed in isolation. Special attention should be placed on the socio-cultural beliefs that are located at the core of the model for their suggested encompassing role as key constraining or enabling conditions for the inclusion of residents with depression in the assessment process.

Study Limitations and Conclusion

This exploratory mixed methods study has limitations. First, the self-report nature of the quantitative survey could have introduced sampling bias (Polit & Beck, 2008) as male nurse professionals, participants from auxiliary hospitals and rural settings in Alberta were underrepresented in this study. Second, the low response rate of 9% from an estimated 7,000 nurse professionals to whom the recruitment invitations were sent, present certain limitations. However, the retained number of survey responses (N = 635) met and exceeded the estimated minimum sample of N = 365 for this popultion (Raosoft Inc., 2004; SurveyMonkey Inc., 2015).

Due to the small sample, making an inference from the study findings to all nurse professionals in residential care facilities in Alberta and the rest of Canada may be limited. Yet, as depression care challenges are common in residential care settings in North America, some findings may be still relevant to other Canadian provinces and the United States.

It is important to validate the findings of this study in a larger sample. Furthermore, research is warranted to verify whether and to what extent the social exclusion of residents with depression from mental assessment impacts their access to the professional mental health assistance in addressing and treating geriatric depression. Also, conducting similar studies of the perspectives, clinical knowledge, and practices of other health and mental health providers in the province is necessary to understand the role of additional disciplines in the inter-professional facility care of residents with depression. Finally, further research is needed to study the rural facilities in Alberta. Even though some participants mentioned that rural facilities experienced significant difficulties in the recognition and assessment of depression and were more resource-deprived than urban settings, the rural subsample in this study was too small to draw conclusions

about the rural sector. Yet, based on the prior research, it would be plausible to suggest that rural facilities may not be optimized to deliver quality geriatric care (Cline et al., 2014; Pullen, 2004).

Despite the limitations, this exploratory study is significant because it provided previously unavailable information on the barriers to the recognition and assessment of geriatric depression in residential care facilities in the specific context of the Canadian province of Alberta. Also, it offers the first account of RNs and LPNs' perspectives on depression detection in these care settings in Canada. Further, the study offers specific practice-based recommendations to inform policy, clinical practice, and research. Finally, the study suggests that the socio-cultural erroneous beliefs about geriatric depression play a key role in its recognition in residential care facilities by serving as inhibiting conditions, contributing to the social exclusion of residents with depression from mental health services. On the other hand, raising public awareness and addressing these socio-cultural erroneous beliefs may serve as enabling factors to the timely and affective recognition of geriatric depression in the residential care facilities.

Declaration of Interest Statement

The Authors declare that there is no conflict of interest.

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