

2015

The Impact of Caring for Seniors on the Caregiver's Stress Level

Georgina Ugochi Njoku
Walden University

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Walden University

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Georgina Njoku

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Walden University
2015

Abstract

The Impact of Caring for Seniors on the Caregiver's Stress Level

by

Georgina Ugochi Njoku

MSN, BScN, Hons.BA

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

February 2015

Abstract

The number of Canadian seniors with 2 or more chronic health conditions living into their late 90s or older has never been greater. As such, concerns have been raised that the Canadian healthcare system will be unable to meet the growing healthcare needs of the aging population. In this project, an Advanced Practice Nursing needs assessment was used to identify the impact that caring for a senior has on caregivers' stress levels, and what resources caregivers need to in order to cope with their role. Guided by Neuman's system model theory and Rogers' diffusion of innovation model, a convenience sampling technique was used to gather a sample of caregivers who provide services to seniors age 65 years and older. A total of 33 individuals were sampled; however, valid data were present for only 25 respondents in the quantitative investigation and 27 respondents in the qualitative investigation. Quantitative data were gathered on demographic variables, a caregiver's overall level of stress, and a caregiver's burden. Qualitative data were gathered on what resources would help a caregiver feel less stressed. Nonparametric statistics were used to analyze the quantitative data, and the qualitative data were subjected to a content analysis. Quantitative results revealed that as the respondents got older, their caregiver burden and stress increased; the data also revealed that more educated respondents had less caregiver burden and less stress. Analysis of the qualitative data found that the caregivers wanted more support, more information on how to be a better caregiver, more respite care, and more help from both the Community Care Access Centers and the government. It is expected that the findings of this project can be used as a basis for planning and allocating services for caregivers.

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Dedication

This project is dedicated to my handsome and loving husband Wayne, and our children: ChiChi, Ikenna, Jamike and Erica for believing in me, and their encouragement and unconditional love. I also dedicate this project to my parents: Adolphus and Angelina for loving me and for instilling the value of education and learning in me. Dad, thanks for reminding me of your motto that, " Knowledge is power!"

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Section 1: Introduction

Introduction

A large number of seniors who wind up in the hospital are often unable to return to their own homes following hospitalization (Walker, 2011). When senior patients are medically stable and suitable for discharge and an alternative level of care (ALC), they often cannot return to their original residential circumstances because they are unable to cope on their own: there are safety issues, insufficient care, cognitive deficits, chronic health conditions requiring care, and reduced mobility. Ideally, seniors who cannot care for themselves should be placed in a long-term care (LTC) facility (Walker, 2011). However, space limitations, lengthy wait times, and costs all conspire to keep seniors out of LTC facilities (Walker, 2011). With the baby boomer generation (which the Census Bureau (2010) defines as someone born between 1946 and 1964) now aging into senior status, there are more seniors seeking LTC than there are beds available (Sinha, 2012). In the province of Ontario, in 2011, there were 1.9 million Ontarians age 65 years or older, which is equivalent to 14.6% of the province's overall population (Sinha, 2012).

When a senior can no longer care for him or herself, and when that senior cannot gain access to an LTC facility, a caregiver must step up and provide support (Sinha, 2012). In society today, older adults and their caregivers often face situations that increase the caregiver's stress levels, such as the seniors' difficulty with mobility, safety problems, falls, cognitive deficits, fecal and urinary incontinence, chronic health conditions, and psychosocial and/or behavioral changes (Health Council of Canada

[HCC], 2012). Many caregivers have few if any medical and nursing skills; they often need financial assistance to provide proper care (HCC, 2012).

Any one of these factors alone would increase a caregiver's stress, but when taken together, it is reasonable to argue that a caregiver might become so stressed that he or she may experience "caregiver burnout" (HCC, 2012). Caregiver burnout occurs when a caregiver is stretched beyond his or her capacity to provide assistance. When caregivers report high levels of stress, depression, and difficulties in continuing to provide care (HCC, 2012), they are by definition burnt out.

The distress experienced by informal caregivers extended into their paid working hours. A recent caregiver survey showed that more than half of women (55%) and almost half of men (45%) who provided informal care reported that their caregiving had a deleterious impact on their employment (Canadian Institute for Health Information (CIHI), 2009).

In order to continue providing care, family caregivers need assistance and support so that their own physical and mental health needs are met (Judge et al., 2011). Yet to date, there are no clear solutions in place for dealing with caregiver stress (HCC, 2012). Thus, there is a distinct need to conduct a study that will identify potential solutions and resources for reducing caregiver stress. This project attempted to determine whether caring for seniors predicted a caregiver's stress level, as well as to ascertain what services would help to reduce caregiver stress for those persons who provide care to Canadian senior citizens.

A needs assessment is a systematic effort to gather evidence to determine the number of individuals in a community who require particular services (Monette, Sullivan & DeJong, 2002). In other words, a needs assessment helps a researcher to pinpoint the reasons why there are gaps in the performance of a currently available program, as well as to identify new and future performance needs (Sutton, Grimmer-Somers & Jeffries, 2008). Consequently, this project sought to identify the impact that caring for seniors has on the caregiver's stress level, and what support caregivers of senior citizens need to cope with their caregiving role. It was also hoped that the findings of this project could be used as a basis for planning and allocating services for caregivers of senior citizens.

Problem Statement

It stands to reason that a significant number of Canadian caregivers encounter a great deal of stress on a daily basis, given that caregivers are oftentimes themselves older adults who are also juggling the responsibilities of family, work, and their own personal circumstances. For example, in 2007, 2.7 million Canadian family caregivers helping seniors with long-term health conditions were over the age of 45. Nearly 60% of these family caregivers were women, and 57% were employed (HCC, 2012). Furthermore, caregivers are also more likely than not to be family members or friends who are serving in an unpaid capacity (Sinha, 2012). For instance, most informal care (about 80%) comes from unpaid family members, friends, and neighbors. When the time required to provide care increases, so too does the caregivers' stress (CIHI, 2011).

Caregiver support is one of the reasons why so many older Canadians are able to age in their places of choice for as long as possible (Sinha, 2012). Yet this has the

unfortunate outcome of placing increasing amounts of responsibility on the caregivers themselves (Sinha, 2012). Now more than ever, there is a compelling reason to examine the ways in which Canadian society serves seniors and their caregivers (Sinha, 2012). Although caregiving can be personally rewarding, it can be stressful, expensive, and can take an enormous toll on a caregiver's health and well-being (Sinha, 2012). What remains unknown at this point is just exactly how stressful it is for a person to be a caregiver for a senior citizen. It is also unknown what resources caregivers believe would help them better handle the stress they feel when caring for a senior citizen. Therefore, this project conducted a needs assessment in order to understand whether caring for seniors predicted the stress a caregiver experiences, as well as what services would help to reduce caregiver stress for those providing care to Canadian senior citizens.

Purpose Statement

The purpose of this needs assessment project was to determine whether caring for senior citizens predicted a caregiver's stress level, as well as to highlight the resources caregivers would like to help them to cope with their stress. There are multiple potential sources of stress for caregivers. Some examples include financial limitations, seniors' complex medical health conditions and their increased care needs, inadequate access to health care information, and lengthy wait times prior to admission of seniors to LTC facilities. Consequently, one of the primary goals of this needs assessment project was to identify the factors that are most responsible for causing the caregivers of seniors to experience stress, as well as to identify the resources that caregivers need to avoid caregiver burnout.

A recent survey of caregivers found that the care needs of senior citizens have exceeded what caregivers can physically provide; hence, caregivers are stretched beyond their capacity (CIHI, 2011). According to the Family Caregiver Alliance (FGA; 2012), in Canada, today, there is a large number of family caregivers helping relatives with medical and nursing tasks, such as medication management, wound care, and monitoring equipment (e.g., ventilators, feeding tubes, home dialysis units). Caregivers rarely receive adequate training to ensure they are able to perform these medical and nursing tasks. As a result, caregivers are concerned they might be making a mistake or may harm their family member (FGA, 2012), which undoubtedly leads to increased caregiver stress. Consequently, even the well-intentioned efforts of caregivers can result in high levels of stress, sleepless nights, exhaustion, and depression, as well as both physical and mental health breakdowns (CIHI, 2011).

The goal of this project was to conduct a needs assessment to determine (a) the impact that caring for seniors has on the caregiver's stress level and (b) the resources that would help reduce caregivers' stress. It is anticipated that the findings of this project can be used as a basis for planning and allocating services and resources for caregivers of senior citizens in both Canada and abroad. It was assumed that the information gleaned from this study would help reduce their stress and thus allow them to continue assisting seniors (Sinha, 2012). The specific objectives of this needs assessment project were as follows:

1. To conduct a needs assessment that would determine what resources could help to reduce caregiver stress for those who provide care to Canadian senior

citizens;

2. To administer a Stress Scale Inventory Questionnaire assessment tool that would gather information about a caregiving situation so that the specific problems and needs of senior caregivers could be identified;
3. To review current sources of caregiver support services to help identify and describe the current state of caregiver services (if any);
4. To analyze the collected data, report the findings, and use the findings as a basis for planning and allocating services for caregivers of senior citizens.

Significance to Practice and Social Change

This project examined the stress levels that caregivers experience when assisting seniors and set out to identify what resources would help to reduce caregiver stress levels. By collecting and analyzing primary data, this project was able to highlight some of the challenges that caregivers experience. Ultimately this project was expected to contribute by providing information that is relevant to the practice of nursing as it relates to caregiving of senior citizens.

More specifically, the results of this needs assessment project provide insights into the types of support that caregivers wish to have as they care for senior citizens. Having information on this can be used to help prevent burnout. The findings of this project should also serve to initiate some thought-provoking conversations on the issue of caregiver stress and burnout among healthcare agencies, healthcare professionals, and individuals. The hope is that all would come to think differently about the impact that caregiver stress can have on the care provided to seniors.

Project Question

This project set about to address two questions that are linked in scope. First, this project sought to understand if caring for seniors predicts the level of stress a caregiver experiences. Second, this project sought to understand what resources would help caregivers who provide care to Canadian seniors cope with the stress they experience.

Evidence-Based Significance of the Project

Because of an improved health care system and strong economic times, seniors are living longer; however, they do struggle with more chronic health conditions. The number of seniors requiring care is increasing, and those seniors who receive home care from caregivers have grown over the past decades.

It is estimated that at least 46% of caregivers experience stress and 15% of caregivers report that the people they care for are verbally or physically abusive. Approximately 20% of caregivers are frail, disabled or are in need of health care themselves (HCC, 2012). To date there is no clear evidence that measures the amount of stress a caregiver experiences. Additionally, no clear solution for the problem of caregiver stress has yet been identified (HCC, 2012). For these reasons, this project aimed to bring focus to the issue of caregiver stress. Specifically, this project sought to use a needs assessment methodology to identify the amount of stress that caregivers experience when caring for seniors, and to identify the resources that caregivers would like to have to help them to reduce their stress.

There is an urgent need to find solutions, options, and alternatives for caregivers experiencing stress. According to Sinha (2012), the population of older Ontarians will

double over the next 20 years, while the number of individuals aged 85 and older will quadruple. The health care cost incurred by the 10% of seniors with the most complex health care challenges accounts for 65% of collective health care spending while the least complex health care cases, which consists of roughly 50% of seniors, accounts for 6% of Ontarians' collective health care spending (Sinha, 2012). Someone will have to care for these aging Canadians, which means that the number of caregivers in Canada must increase. It stands to reason that as the aging population increases, so too will the frustration and stress caregivers experience (CIHI, 2011). Today, most seniors (93%) in Canada live at home and want to stay there as long as possible (CIHI, 2011). This means that many family members will be tasked with caring for aging seniors who remain in their home. The Home Care Association (2008) defines successful aging as the ability to adapt well to the changes accompanying growing older. Although many seniors can do this without support, an increasing number of seniors need help from both family caregivers and non-family caregivers in order to stay in their homes.

An average of 5,200 hospital beds each day are occupied by patients who no longer require acute care, but who still require some level of care as these patients are not able to manage independently (HCC, 2012). The majority (85%) of these patients are seniors, and more than one-third (35%) are 85 years of age or older (HCC, 2012). Once discharged from the hospital, these seniors will need care, which means that a caregiver will have to attend to them. Caring for a senior citizen can be stressful on the caregiver. The question remains: How stressful is it to be a caregiver for a senior citizen, and more importantly, what resources do caregivers believe will be effective in decreasing the

amount of stress they experience as they provide care to older adults?

Implications for Social Change in Practice

In line with Walden University's mission, this DNP project sought to encourage positive social change by creating and applying ideas, strategies, and actions that promote the worth, dignity, and development of individuals, communities, organizations, institutions, cultures, and societies in order to improve the overall human and social conditions (Walden University, 2012). In addition, Walden supports positive social change through the development of principled, knowledgeable, and ethical scholar-practitioners who are and will become civic and professional role models by advancing the betterment of society (Walden University, 2012). To achieve these goals, this project first sought to promote the worth, dignity, and well-being of seniors and their caregivers. The results of this project could be used to advance the field of nursing practice by identifying the stress levels of caregivers who look after seniors. This project could also help by identifying the resources that caregivers wish to have to lower their stress levels.

Definition of Terms

Activities of Daily Living (ADL): Activities such as bathing, eating, and toileting.

Assisted Living: A type of residential living that provides supportive services, such as housekeeping, communal dining, and in some cases personal care assistance to seniors who require some help with daily living.

Alternate Level of Care (ALC) patients: Individuals who no longer need acute care, but who cannot manage independently and still require a level of care. These patients must remain in the hospital while waiting for space to become available in

another facility (such as a rehabilitation hospital or LTCF), or for home care supports to be put in place.

Caregiver: Family members, friends, or others individual who provide unpaid care to a senior on a regular basis.

Caregiver Burnout: A situation which occurs when, after an extended period, caregiver experiences stress from caregiving as a result of household disruption, financial pressure, and the added caring workload. The stress results in exhaustion and lack of interest in things for the caregiver.

Care Planning Program: An individual's long-term health care plan that is developed with their family. This plan determines how much professional support an individual may need as they age.

Caregiver stress: An overwhelming feeling that engulfs a person as a result of caregiver duties, responsibilities, constant anxiety, and the loss of self.

Caregiver Stress Syndrome: the emotional, physiological, and psychological changes a caregiver experiences from chronic stress created by the continuous and seemingly endless caregiving activities he/she is confronted with on a regular basis.

CARP (Canadian Association of Retired Persons): A national, non-partisan, non-profit organization committed to a new vision of aging for Canadians. CARP promotes social change that will bring financial security equitable access to health care, rights, quality of life and freedom from discrimination for older Canadians.

Community Care Access Centre (CCAC): A government-funded agency that provides care to individuals in the home, hospital and communities.

Compassion Fatigue: An adverse consequence of caring for individuals who are in need.

Data analysis: The process of applying systematic methods or statistical techniques to compare, describe, explain, or summarize data.

Evaluation plan: Provides the framework for conducting the evaluation.

Evaluator: An individual trained and experienced in designing and conducting evaluations.

Goals: Measurable statements of the desired longer term, global impact of the program. Goals generally address change.

Instrumental Activities of Daily Living (IADL): Activities such as cleaning, cooking, grocery shopping, and home maintenance.

Home Care: Publicly funded and administered services received in the home.

Provider Agency: Any paid professional or worker that provides home care services.

Key partners: Organizations that are partners of your program through formal agreements or memorandums of understanding.

Needs assessment: The systematic efforts to gather information from various sources that will identify the needs of victims in a community and the resources that might be available to them. A needs assessment will help one to pinpoint reasons for gaps in a program's performance and identify new and future performance needs.

Objectives: Specific, measurable statements of the desired immediate or direct outcomes of the program that support the accomplishment of a goal.

Program evaluation: A systematic process of obtaining credible information to be used for program assessment and improvement.

Quantitative data: Numeric information that is open to statistical analyses. Quantitative data can be counted, measured, compared, or expressed in numerical terms.

Stakeholders: Persons or groups who have a vested interest in the clinical decision and the evidence that supports that decision.

Senior: A person aged 65 and older.

RAI-HC Assessment: An assessment used to determine care needs and eligibility for LTC placement for seniors.

Respite: A break or relief from caregiving duties.

Assumptions and Limitations

Caregivers require better support and information on how to relieve their own levels of stress. For example, caregivers could benefit from several kinds of support—emotional, spiritual, physical, psychological and social rejuvenation—as they engage in their caregiving roles (Meredith, 2006). Caregivers could also benefit from services that provide respite including day centers', short-term stay beds in long-term care facilities, night care, and full-day support in the home. All of these provide temporary full-time care to seniors so as to ensure that caregivers get a break from their caregiving responsibilities.

A limitation of this project is the availability of resources, particularly technological resources that would be available to all caregivers. This project is also unable to assess and provide measures that assess a caregiver's perception of their

relative's psychosocial needs.

Summary

The senior caregiver's role and responsibilities needs to be viewed as a critical part of an integrated health care system (HCC, 2012). Caregivers need social, financial, psychological, physical, and emotional support. Providing this support can reduce caregiver stress, reduce caregiver burnout, and reduce caregiver health breakdowns. This, in turn, should serve to reduce emergency department visits, hospitalizations, and reduce the number of hospital beds occupied by seniors deemed ALC but who are unable to go home due to caregiver burnout.

Section 2: Literature Review

Introduction

With the increasing number of Canadian seniors, the impact of providing care for seniors on their informal caregivers continues to grow. This project set out to determine what resources might help to support these caregivers. This project also set about to explore how stress affects caregivers of senior citizens. In order to gather as much information on the topic of caregiving for seniors as possible, a targeted literature search was conducted. Literature from governmental commissioned studies, articles, and books was targeted as part of the comprehensive review conducted for this project. Literature from various countries such as United States, Britain, Spain, Australia and some African countries was considered. Several search engines were used, including Summon (a new search engine adopted by the University of Calgary Canada) Google, MedlinePlus, PubMed, Online Journals Search Engine, Google Scholar, Google Books and WorldCat. Terms such as “senior caregiver stress,” “burnout” “compassion fatigue” and “coping strategies” were used alone or in combination to locate relevant literature. The relevant literature that was located is presented below.

Background

A number of government-commissioned studies have addressed the need for seniors and their caregivers to have better educational healthcare information. In a report titled *A Focus on Seniors and Aging*, the CIHI (2011) identified that the vast majority of seniors (93%) live in private households and that some of these seniors require formal and/or informal support to do so. In terms of informal care, about 80% comes from

unpaid family members, friends and neighbors. As the time caregivers spend providing care increases, so too does the distress they experience, primarily because of a lack of information on how to access available healthcare resources (HealthCare in Canada, 2011). Recent data shows that 32% of caregivers who provide more than 21 hours of care per week report distress in their role due to insufficient access to healthcare information (CIHI, 2011). Another provincial commissioned report, titled *Caring for Our Aging Population and Addressing Alternative Level of Care*, authored by the CIHI (2011), suggested that healthcare information is lacking among caregivers. This situation has created a large cohort of caregivers who are inadequately and inappropriately trained in how to care for seniors, which in turn induces their increased stress.

Inadequately and inappropriately trained caregivers are also at increased risk for “compassion fatigue,” an adverse consequence of caring for individuals who are in need (Day & Anderson 2011). Its symptoms include stress, anxiety, anger, depression, and apathy (Day & Anderson, 2011). People who provide care for senior family members may be at risk for developing compassion fatigue after prolonged exposure to the stresses brought about by caregiving. Stress may result because family members need care due to dementia and other chronic diseases such as diabetes, cancer, renal failure, congestive heart failure, and other forms of functional decline. In addition to stress, caregivers may also experience depression, anxiety, feelings of resentment, helplessness, and hopelessness (Day & Anderson, 2011). Caregivers may realize that their activities leave them with little free time for themselves to attend to their personal needs, which likewise can lead to compassion fatigue. Finally, people who provide care for senior family

members may choose to terminate their caregiving relationship or relinquish their caregiving role to another family member as a result of compassion fatigue (Schumacher, Beck, & Marren, 2006).

In order for the professional health care community to support caregivers who provide care to senior family members in need, compassion fatigue must be more fully understood. For example, a loving emotional relationship between a senior care recipient and a caregiver is an important aspect of the caregiving relationship because it is premised on the notion of compassion. But when the senior moves into functional decline as a result of diabetes, cancer, osteoarthritis, or renal failure (just to name a few possibilities), the primary caregiver must “step up” and spend more time caring for this senior relative. Indeed, the amount of time spent in a caregiving role may cause the caregiver to adjust his or her lifestyle to the point where he or she develops anger or frustration toward the senior care recipient. These emotions lead to a decline in compassion on the part of the caregiver (Day & Anderson, 2011).

Research has shown that caregivers who have a positive emotional relationship with the person they are caring for experience less strain during caregiving and are able to express greater levels of compassion during their caregiving (Sabo, 2006). Compassion is consequently attributable to the quality of the relationship between the person providing care and the person receiving care. It therefore stands to reason that relationship quality is likely central to the reason why a caregiver will (or will not) experience compassion fatigue when providing for the needs of a senior relative.

A sense of satisfaction in caregiving also plays a role in compassion fatigue.

People without a sense of satisfaction in caregiving are at risk for compassion fatigue (Day & Anderson, 2011). Race has also been shown to be a factor in compassion fatigue. A large multisite study by Haley et al. (2007) compared White and Black American family caregivers to see which group suffered from compassion fatigue at greater rates. Their work found that White caregivers had lower perceived benefits from caregiving than Black American caregivers when controlling for socioeconomic status, gender, relationship, and age (Day & Anderson, 2011). White caregivers also demonstrated a decrease in life satisfaction over time, whereas Black American caregivers had a continued high level of life satisfaction (Day & Anderson, 2011). The results ultimately showed that race plays a factor in compassion fatigue, as Whites were more likely to suffer from compassion fatigue than African Americans.

The increase in the elderly population with chronic health problems has caused a concomitant increase in the number of family members who find themselves in a caregiving role. This not only leads to increases in compassion fatigue, but also to an increase in caregiver stress. Although compassion fatigue has an element of stress, one does not have to have compassion fatigue to feel the stress of caring for a senior relative. Providing care to a senior family member is a role that a caregiver often takes on without fully understanding the impact it will have with respect to the caregiver's stress levels. The length of wait time to get into an LTC facility in Canada typically ranges from 1 to 5 years. Until a senior can get into a LTC, the responsibility of caring for the senior must fall to someone. The person who cares for the senior in need is often a family member. Stress is created when a family member who is unqualified to care for a senior must

nevertheless do so (Grunfeld, Glossop, McDowell, & Danbrook, 2007). Grunfeld et al. (2007) also note that the stress felt by a caregiver increases with the deterioration of the person they care for and that the type of disease a senior is suffering from plays a part as well. For example, the stress of caring for a senior with dementia is typically worse than the stress of caring for a patient with cancer, diabetes or renal failure (Grunfeld et al., 2007). It therefore is reasonable to assert that caring for an elderly family member with dementia or a similar chronic health problem may create a situation of chronic stress for the caregiver, which may in turn adversely affect the caregiver's emotional and physical health (Morris, Morris & Britton, 2008). Indeed, most research suggests that caregiving leads to an increase of stress, anxiety, self-health neglect, clinical depression and anxiety among caregivers (Canadian Study of Health and Aging Working Group, 2005; Morris et al., 2008; Schulz, Visintainer, & Williamson, 2009) at a time when the healthcare system is already strained by financial concerns.

A recent provincial commissioned study completed by Sinha (2012) suggests that the province of Ontario is spending more on health, social, and community services than ever before. Yet older Ontarians, their families, and their caregivers still find it challenging to access the right care, in the right place, at the right time (Sinha, 2012). However, evidence suggests that when services are accessible, timely, and appropriate, positive health outcomes and better support for senior caregivers are a result (Jones, Winslow, Lee, Burns, & Zhang, 2011). Depending on cultural values (particularly filial values), the use of community resources will vary greatly. In some cultural groups, accepting assistance from a source outside of the family is seen as an insult to a

caregiver's parents and is something only to be done as a last resort (Jones et al., 2011). Therefore, it would be reasonable to argue that when planning caregivers services, there is a need to ensure that caregivers of seniors can access the services and supports they need in a timely and efficient manner (Sinha, 2012).

As the number of caregivers grows, the issues surrounding the caregiving role has gained national attention from a variety of sectors and is defined as an important public health issue (FGA, 2012). Since the senior citizen demographic is estimated to grow by 32 percent over the next 10 years, it is estimated that family caregivers will spend 444 million unpaid hours per year looking after someone 65 years and older. This represents \$11 billion in lost income and 227,760 lost full-time equivalent employees in the work force (Lamoureux, 2012). An additional aspect of this issue is the fact that people who care for senior citizens are themselves increasingly older. For example, three-quarters of caregivers in Canada are age 45 to 64 (HCC, 2012). Thus, the profile of a caregiver for a senior citizen is an older person who is effectively working two jobs, with one being for pay and one being caring for a senior citizen without pay.

Naturally, seniors and their caregivers will go to a hospital for care when the needs of the senior overwhelm the caregiver. Unfortunately, hospital units tend to be crowded, and patients requiring admission often languish in emergency rooms (Walker, 2011). Even though trips to the hospital are sometimes necessary, many seniors also elect to go to the hospital because of insufficient care at home, difficulty coping with their condition or because of caregiver burnout. This results in an increased number of seniors admitted to acute care hospitals with the medical diagnosis of "failure to cope at home"

(CIHI, 2011).

Seniors want to live in their homes for as long as possible and receive dependable and reliable care from a caregiver (Sinha, 2012). There are supports to meet the social, physical, emotional, nutritional and health needs of seniors. But before seniors and their caregivers can access these services, they first have to know where to access the care they need and services available to them. To meet these needs, the healthcare system in Canada must shift to address three transformational pillars of care by realigning, refocusing and targeting investments. Doing so will ultimately improve access to the right care through community investments and improved patient flow across the system (Walker, 2011). One of the most essential aspects of navigating the system for senior caregivers is finding home- and community-based services, and determining what private and public programs might be available to provide them with care (Reinhard, Given, Petlick, & Bemis, 2007).

CARP (Canadian Association of Retired Persons) is one such organization that may help with the situation just described. CAPR is a national, non-partisan, non-profit organization committed to a new vision of aging. CARP recently released a research report, called *Loud and clear: Seniors and caregivers speak out about navigating Ontario's healthcare system*. This report explored and identified major problems experienced by seniors and their caregivers as seniors navigate through the Canadian healthcare system. The report was based on direct consultations with seniors across Ontario who described their experiences of moving through various parts of the healthcare system (CARP, 2012). This report provides evidence of potential ageism in the

healthcare system, of seniors' lack of access to adequate care, of seniors' general lack of support and of seniors' lack of access to quality care. The findings of the report underscore the difficulties seniors face as they move through the province's complex health system (CARP, 2012). The report concludes that the health and social needs of seniors, particularly those with chronic health conditions, are complex and that the healthcare services and practices seniors receive are not adequate (CARP, 2012).

According to the Family Caregivers Alliance (2012), caregiving exacts a tremendous toll on caregivers' health and well-being, and that caregiving accounts for significant costs to families and society as a whole. For example, family caregiving has been associated with increased levels of depression and anxiety, a higher use of antianxiety and antidepressant medications, poorer self-reported physical health, compromised immune function and increased mortality (FGA, 2012). Knickman and Snell (2010) note how there is an average wait of one to three years to be admitted into LTC homes, and that while seniors are waiting for admission to LTC facilities, caregivers must step up and provide assistance. Yet many caregivers are unable to cope with the care needs of the seniors, primarily because more than half (56%) of caregivers reported that it is emotionally demanding to provide care. Fully four out of every five caregivers (80%) noted that because they provide the care, they do not have enough time for themselves or their family. Fully 70% of caregivers for seniors reported that they are fatigued (CARP, 2012). This situation causes the caregiver to experience high levels of stress, breakdowns in health and other physical and psychological ailments (Walker, 2011). A recent study (Reinhard et al., 2007) of caregivers of people with Alzheimer's

disease found that 75% of the caregivers had unmet needs, that only 9% had used respite services and that only 11% had participated in support groups (Reinhard et al., 2007).

When taken together, these findings suggest that caregivers of seniors may have numerous levels of unmet needs, primarily because of the stress they feel as they provide care for seniors.

The CIHI (2011) shows that the proportion of seniors in Canada, particularly those aged 85 years of age and older, is growing. In addition, a large percentage (41%) of Canadian seniors are dealing with two or more chronic conditions, such as diabetes, respiratory issues, heart disease, and depression while also experiencing a decline in physical and/or cognitive functioning (Walker, 2011). Assisted living facilities typically provide accommodation in a residential-style setting for seniors in need, and these centers can include services such as housekeeping, communal dining, recreational programs, and a 24-hour emergency response system. Assisted living in some cases even offers personal care assistance to seniors who are relatively independent but who still require some help with daily living activities (CPPI, 2012). Even so, there are not enough of these facilities available, which is why family caregivers are crucial. Home care is intended to complement each of these options, but many caregivers do not know where to access these services and resources (HCC, 2012).

The CIHI (2011) released a report entitled *Health care in Canada: A focus on seniors and aging research*. This report shows that while Canada's seniors (age 65 and older) are living longer and are healthier than ever, they are frequent use the health system more than any other segment of the population (CIHI, 2011). Representing just

14% of the population, seniors use 40% of hospital services in Ontario and account for about 45% of all provincial and territorial government health spending (CIHI, 2011). The number of Ontarians age 65 and older is expected to increase to 25% of the population by 2036 (CIHI, 2011). Understandings where gaps exist and where efforts can be concentrated will help ensure that the health care system remains strong and efficient for Ontarians of all ages. The CIHI (2011) report also identifies opportunities for the health system to meet these changing needs, including improved integration across the health care continuum, an increased focus on prevention and more efficient adoption and use of new technologies (Drummond & Burleton, 2010). Even though care is available for seniors from the health care system, it is often the caregiver who is the ‘first responder’ that helps seniors gain access to the health care system.

Canada’s seniors often require care from different providers across various settings, including a family doctor’s office, a specialty clinic, a home care services, a pharmacy, a hospital and/or a long-term care facility (CIHI, 2011). One of the services caregivers provide is to assist with a senior’s transport to and from each facility. However, the health system can no longer afford to operate in isolated silos. Ensuring continuity of care across the continuum will lead to a more efficient use of resources. It can also potentially lead to better care and in turn better quality of life for seniors and their caregivers (Drummond & Burleton, 2010; Sinha, 2012). The CIHI (2011) study also highlights the fact that improved integration can help promote safe and appropriate drug use in seniors. To inform accessibility of information to available resources require increased effective communication to seniors and their caregivers.

General Literature

Covinsky et al. (2008) suggested that the lengthy hospitalization of seniors leads to a loss of independence in daily living activities of those older adults who are hospitalized, a vulnerability that increases with age. Covinsky et al. also asserted that this increased vulnerability adds to caregiver stress. Research documents that caregivers have difficulty obtaining information from health care professionals, particularly physicians and nurses (Reinhard et al., 2007).

The HCC (2012) compared the cost-effectiveness of home care to hospital care and LTC facilities, noting that public spending on long-term care facilities in Canada is much higher than spending on home and community care. Furthermore, the HCC (2012) also shows how other countries that spend proportionally more on home care have implemented strategies to ensure that seniors can remain in their homes for a longer period of time and experience a better quality of life. The Canadian Home Care Association (2008) defines home care as an array of services that individuals of all age receive in their home or community, which encompass health promotion and which teaches curative intervention, end-of-life care, rehabilitation, support and maintenance, social adaptation and integration, and support for the informal (family) caregiver. Sinha (2012) calls for additional support for the caregivers across the province of Ontario by noting that caregivers are the largest contribution factor for why so many older Ontarians have been and will remain able to age in their places of choice for as long as possible. When home care is appropriately managed and properly integrated into the health care system, it can improve the health and well-being of many seniors and reduce the costs of

care in hospitals and long-term care facilities (Hollander, Miller, MacAdam, Chappell, & Pedlar, 2009). The perceived benefits may include satisfaction from helping a family member, development of new skills and competencies, and improved family relationships (FGA, 2012).

Many ALC patients in hospitals waiting for LTC facility placement could be cared for at home if they had access to appropriate supports, such as those provided by a caregiver and other community health agencies (HCC, 2012). When home care is appropriately managed, adequate information is provided; when said information is properly integrated into the health care system, health and well-being of many seniors, their caregivers and their families is improved. The health care system's sustainability may also rely in part on informal support networks to delay institutionalization for as long as possible. From a health policy perspective, it has been recommended that adequate support should be available not only for care receivers but also for caregivers so that better health outcome can be enjoyed by both (CIHI, 2011). For instance, research by Jones et al. (2011) noted that interventions targeted toward providing the family caregiver with access to information will result in reduced caregiver stress and lead to more positive outcomes for caregivers and their family members. Furthermore, the report entitled *Health care in Canada: A focus on seniors and aging* (CIHI, 2011) describes seniors' specific needs and the particular ways in which this population uses the health care system. This report notes that resources are factors that help support positive appraisal of caregiving demands and facilitate effective coping and management of care. In addition, evidence from the CIHI (2011) report suggests that caregivers provide vital

help with ADLs and IADLs, such as personal hygiene, toileting, eating and moving about inside the home, meal preparation, housework, medication management, shopping and transportation. In addition, there is a reduction in the costs of care when caregivers have appropriate access to information (HCC, 2012). What this means is that professionals should be more responsive to patients' and family members' information needs. It is important to provide information in a clear, understandable way through verbal, written, or electronic methods, especially if caregivers want concrete and correct information about medications, tests, treatments, and resources available for seniors in their care (Reinhard et al., 2007).

Forty-one percent of Canadian seniors are dealing with two or more select chronic conditions, and many are experiencing a decline in physical and/or cognitive functioning as a result (HCC, 2012). According to Sinha (2012), in Ontario, there is little being done to provide older adults and caregiver with the information they need to navigate the healthcare system. Sinha further noted that people do not talk to each other well within and between sectors and professions (Sinha, 2012). Nurses can play an important role in helping seniors and caregivers to become more confident and competent providers as they engage in the healthcare information system navigation process. Caregivers especially need adequate resources to assure minimization of risk to the senior for whom they care (Reinhard et al., 2007). Research over the past several decades has yielded a wealth of information on interventions to support caregivers and improve their health and well-being. A number of excellent reviews in the literature describe these intervention programs and their effectiveness (Ducharme, Levesque, Giroux, & Lachance, 2005;

FGA, 2012; Roberts, Brown, & Gafni, 2007).

Some of the strategies through which caregivers can help seniors include periodic support for the home caregiver community through various home care support provided by the Ministry of Health and Long-Term Care (MOHLTC), Community Care Access Centers (CCAC), and adult day programs (SWCCAC, 2012). Additionally, there are other home support programs, such as Home First (HF), Safe at Home (SAH), Intensive Hospital to Home (IH2H) and Age at Home (AAH) programs in which the seniors are discharged to their home with caregiver support for a period of 30 days. During this time the senior is placed on a crisis waitlist with the expectation that the senior will either be placed into a LTC facility within that time, will get well enough to manage on their own, or will be able to function with a more limited form of home care. One of the most essential aspects of navigating the system is finding home- and community-based services, and determining what private and public programs might be available (Reinhard et al., 2007).

The success of the programs listed above has not had enough impact because there is still poor access information concerning available community resources that will help caregivers with their levels of stress. Seniors usually end up being re-admitted to the hospital due to caregiver stress. Context is a key factor in studies of health services, organizations, care delivery, and the health service interventions that help to determine an effective solution (DiCensor, Guyatt, & Ciliska, 2005). Importantly, there are more than 2 million informal caregivers, age 45 and older, in Canada. Approximately 97% of all home care recipients have an informal caregiver. Nearly one-third are spouses, and

almost half are children or children-in-law (Statistics Canada, 2009). Informal caregiver support is key to enabling many seniors to remain in their communities safely and independently as they age. In addition to emotional support, informal caregivers also provide help with instrumental ADLs, including meal preparation, housework, medication management, shopping and transportation (CHSRF, 2011).

The Linkages Between Stress and Caregiving

A systematic literature review was performed using the following databases: Medline, PsychINFO, Ovid Nursing Database, Cinahl, Embase, Cochrane Central Register of Controlled Trials, and British Nursing Index. Government-commissioned studies were also reviewed. The period spanned March, 2013 to February 2015.

The topic was the impact of stress on caregivers of seniors and the resources available to support them. The result confirmed that adopting a caregiving role predicts high levels of stress. For example, research by Spillman and Long (2007) found that the physical strain and financial hardship endured by caregivers are significant predictors of high levels of caregiver stress. Along these same lines, work by Reinhard, Given, Petlick, and Bemis (2008) discovered that caregivers are sometimes referred to as ‘secondary patients’ who often require their own assistance due to the impact that stress has on their health. Indeed, their work found that the demands placed on caregivers of seniors increases the risk for injury and adverse health effects on the part of the caregiver (Reinhard et al., 2008). Work by Hargrave (2006) suggests that providing care for the elderly often produces conflicts and challenges in the caregiver’s personal life, social interactions, and work life, all of which can contribute to the overall caregiver burden and

stress. Hargrave also found that the physical and emotional demands of caregiving can lead to lower self-ratings of health, poor immune functioning, and greater engagement in unhealthy behaviors on the part of the caregiver. The body of work suggests that depression, stress and burnout are only some of the more common effects experienced on the part of the person who provides care for a senior citizen. Associations have also been found between caregiving and different types of psychological distress (e.g., depression, anxiety, perceived stress, and poor mental health) by various researchers (Ampalam, Gunturu, & Padma, 2012; García-Alberca, Lara, & Berthier, 2011; Lee, & Singh, 2010; Takaiemail et al., 2009; Takaiemail et al., 2011).

This literature highlights the impact that caring for seniors will have on a caregiver's stress level. What is lacking in this body of work is an identification of the best practices that can be used to help a caregiver to cope with their increased stress. Therefore this DNP project conducted a need assessment to provide evidence of the resources needed to help a caregiver cope with their increased stress.

Conceptual Models and Theoretical Frameworks

Conceptual models and theoretical frameworks can provide information about how effective nursing systematically organized general knowledge in order to understand an individual client's situation and determine which of many available strategies would work best to restore health and prevent ill health. This project will rely on two theoretical models to guide its investigations. The first is Neuman's System Model Theory (1995). This theory proposes that a person is a physiological, psychological, sociocultural, developmental and spiritual being (Potter & Perry, 2009). Furthermore, in this theory a

person is seen as a system in a healthcare setting that should be treated in a holistic manner (Potter & Perry, 2009). Neuman (1995) considers the client system to have innate factors that are consistent with being human, as well as unique factors that characterize each individual person. Additionally, Neuman (1995) believes that because people are vulnerable to environmental stressors, the role of the caregiver ought to focus on actual and potential stressors and ways to cope with those stresses (Potter & Perry, 2009). Neuman's (1995) system model provides a comprehensive, flexible, holistic and system based perspective for nursing.

According to Neuman (1995), many known, unknown, and universal stressors exist. Each differs in its potential for disturbing a caregiver's usual stability level or normal Line of Defense (LOD). Neuman's model focuses on the response of the client system to actual or potential environmental stressors while also emphasizing the use of primary, secondary and tertiary nursing prevention intervention for retention, attainment, and maintenance of optimal client system wellness (Porter & Perry, 2009). For example, the particular inter-relationships of caregiver variables at any point in time can affect the degree to which a caregiver is protected by the flexible LOD against possible reaction to stressors, such as those encountered in the senior caregiving role (Porter & Perry, 2009).

Neuman's (1995) system model has been applied in several research studies pertaining to individual responses to stress, health and the environment. For instance, by using the Neuman Systems Model for Best Practices, DeWan and Ume-Nwagbo (2006) identified how each caregiver has evolved a normal range of responses to the environment and role of caregiving. However, when a caregiver's ability to sustain such

constant demands of caregiving role starts to wane, his or her health deviates from its normal equilibrium. Wellness is a continuum of available energy that helps to ensure the caregiver will maintain an optimal state of system stability (DeWan & Ume-Nwagbo, 2006). Implicit within each caregiver system is internal resistance factors, known as Level of Resistance (LOR), which function to stabilize and realign the caregiver to the usual wellness state (DeWan & Ume-Nwagbo, 2006). As such, Neuman's system model provides a comprehensive flexible holistic and system based perspective for nursing. Neuman's model focuses on the response of the caregiver system to actual or potential environmental stressors and the use of primary, secondary and tertiary nursing prevention intervention for retention, attainment, and maintenance of optimal client system wellness (Porter & Perry, 2009). It therefore stands to reason that stability is a state of balance requiring energy exchanges as the client adequately copes with stressors to retain, attain, or maintain an optimal level of health thus preserving system integrity (Neuman, 1995). DeWan and Ume-Nwagbo (2006) determined that certain environmental factors, such as stressors associated with the caregiving role, job pressures, finance pressures, and emotional entanglements all have potential for disrupting the caregiver system stability. Another similar line of research by Vandemark (2006) illustrated that wellness and illness are two sides of the same coin and that there is a thin line between them. Wellness is the condition in which all system parts and subparts are in harmony with the whole system of the client, and illness is a state of insufficiency with disrupting needs unsatisfied (Vandemark, 2006). Prevention becomes the primary intervention; therefore, the focus should be on keeping stressors and the stress response from having a detrimental effect

on the body (Neuman, 1995).

According to Vandemark, (2006), the Neuman Systems Model is a comprehensive guide for nursing practice, research, education, and administration that is open to creative implementation. This model has the potential for unifying various health-related theories, clarifying the relationships of variables in nursing care and role definitions at various levels of nursing practice. In this sense, Neuman defined a person as a human who is a layered multidimensional being. Each layer consists of six person variables or subsystems: physiological; psychological; socio-cultural; spiritual; developmental, and; the environment. These combine into the totality of the internal and external forces (intrapersonal, interpersonal, and extra-personal stressors) that surround a caregiver with which he/she interacts at any given time (Vandemark, 2006). Therefore, health is equated with wellness and it is the condition in which all parts and subparts are in harmony with the whole of the client (Neuman, 1995).

According to Neuman (1985), nursing is a unique profession that is concerned with all of the variables that influence the response a caregiver might have to a stressor. Neuman defines nursing as an action that assists caregivers, families and groups to maintain a maximum level of wellness, and that the primary aim is stability of the caregiver/client system through nursing interventions to reduce stressors (DeWan & Ume-Nwagbo, 2006). A caregiver is seen therefore seen as a whole person, and it is the task of nursing to address the needs of the whole person. The role of the nurse is thus seen in terms of support of the caregiver at any level or degree of reaction to stressors, and the use of primary, secondary and tertiary interventions to reduce that stress and

connect caregivers with available healthcare resources.

Neuman's (1995) system model provides a comprehensive flexible holistic and system based perspective for nursing and for healthcare intervention. Neuman's system model has been used extensively in past research as a theoretical framework to support healthcare intervention. Therefore, this project will apply Neuman's model to focus on the response of the caregiver system to actual or potential environmental stressors by investigating the use of primary, secondary and tertiary nursing prevention intervention for retention, attainment, and maintenance of optimal caregiver system wellness (Neuman, 1995). This project will also present an up-to-date application of the Neuman Systems Model in nursing education and practice, with emphasis on social change, current trends, and future nursing intervention to the caregiver as it pertains to caregiver's holistic care needs. Neuman features a systems approach that provides a detailed assessment guide for use of the model at various administrative levels, as well as a collection of research application and findings (Neuman, 1995).

Another model selected to support this project is the Diffusion of Innovation model (DOI) developed by Rogers in 1962. This model originated to explain how over time an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The result of this diffusion is that caregivers, as part of a social system, adopt a new idea or behavior that offers a support to seeking help in the healthcare system. Researchers have found that caregivers who adopt an innovation early have a different outcome than people who adopt an innovation later (Hodges & Videto, 2011). When promoting an innovation to a target population, it is important to understand

the characteristics of the target population, as this will help or hinder adoption of the innovation. This theory has been used successfully in many fields including communication, geriatric care, public health and social work (Hodddges & Videto, 2011). The most successful adoption of a public health program results from understanding the target population and the factors influencing their rate of adoption of new information and ideas (Hodddges & Videto, 2011).

The general concept of this model is based on the idea that people and organizations move through five stages of innovation passage when making a decision to adopt a program or innovation. These stages are as follows: knowledge, in which the caregiver becomes exposed to the idea that they are stressed and learns how to understand its symptoms; persuasion, in which the caregiver forms a favorable attitude towards the idea that the care burden might be causing additional stress; decision, in which the caregiver commits to getting some support and a diagnosis; implementation, by putting the plan into place and using the available resource for support; and finally, confirmation in which the caregiver accepts the decision recognizes that they cannot care for a senior alone but will be able to manage the process with additional support (Hodddges & Videto, 2011).

This theory was selected as the most appropriate because of its use in previous research studies. Furthermore, as Duthie et al. (2008) and Yurko-Mauro McCarthy et al. (2010) note, there is an ever-ageing population. By 2030, 20% of individuals over the age of 65 will have serious health conditions, such as dementia, diabetes, or Alzheimer's disease. Unfortunately, many individuals wrongly assume that failing memory, rapid

weight gain, rapid weight loss and/or increased psychological symptoms such as anxiety, depression and irritability are an inevitable part of the ageing process (Duthie et al., 2008). Consequently, caregivers either fail to recognize these early symptoms or try to rationalize these behaviors because they do not want to have the stigma associated with a parent who has a need for greater care.

In the following diagram, the client/caregiver is a holistic being surrounded by his/her environment. The caregiver's environment includes responsibilities of care to the seniors, job, and financial and social responsibilities and stresses that may affect health. Health for the caregiver is composed of six different factors, which include the following:

Physiological - the physiochemical structure and function of the body

Psychological - mental processes and emotions

Sociocultural - relationships and social/cultural expectations and activities

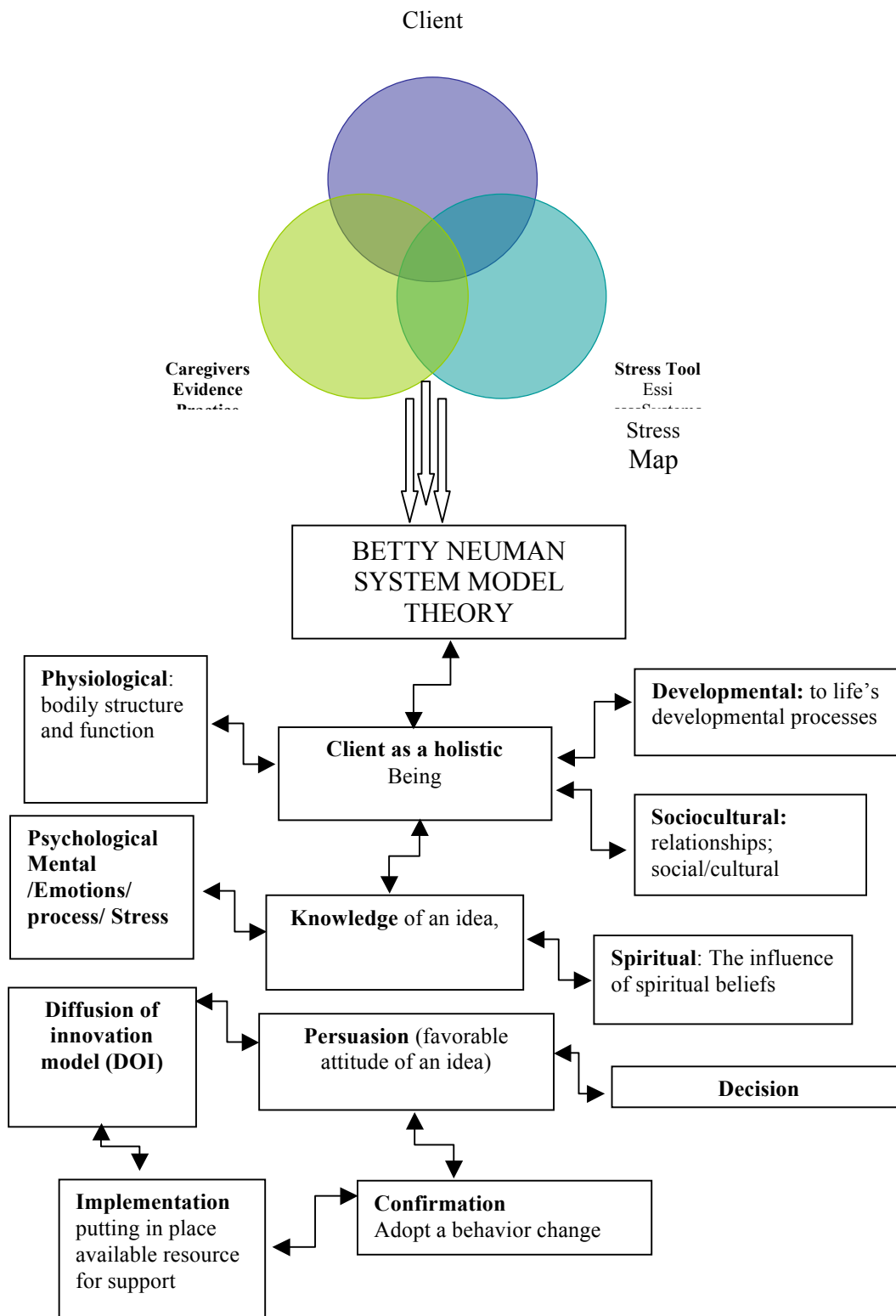
Spiritual - the influence of spiritual beliefs

Developmental - those processes related to the development over the lifespan;

Environment – the totality of the internal and external forces (intrapersonal, interpersonal, and extra-personal stressors) that surround a caregiver and with which he/she interacts at any given time (Vandemark, 2006).

The diffusion of innovation (DOI) model explains the link in the intervention to be provided to the caregivers. The DOI model explains how the caregiver adopts a new idea by using increased access to healthcare information resources, and how this can result in reduced stress. The process of obtaining new information includes persuasion (favorable attitude of an idea), implementation (putting in place available resources for

Figure 1. G. Njoku, 2013 EBP Evidence Based Model



support by the care healthcare providers) and confirmation (adopting of a behavior change) (Hoddges & Videto, 2011).

Section 3: Methodology

Design and Method

This project used a needs assessment methodological design. A needs assessment is best described as the process by which information as part of an assessment to determine how many people in a community need a particular service (Monette et al., 2002; Myers, 1988). A needs assessment is often accomplished through the use of a quantitative needs assessment survey (Monette et al., 2002; Singleton & Straits, 2010). A quantitative survey is a formal, objective, and systematic process in which numerical data is used to provide information about a population from which a sample is drawn (Burns & Grove, 2009). A quantitative survey allows a researcher to describe the nature of the variables under investigation, as well as closely examine the potential relationships among variables (Burns & Grove, 2009). Quantitative research is used extensively in needs assessments (Monette et al., 2002; Singleton & Straits, 2010) and notably, it is the predominant method used in nursing (Burns & Grove, 2009)

Quantitative researchers believe that all human behavior is objective, purposeful, and measurable (Burns & Grove, 2009). Consequently, the selection of this method was predicated on the fact that it is concise, reductionist and involves breaking the whole into parts so that the parts can be examined (Burns & Grove, 2009). Quantitative research is also useful in describing and promoting understanding of human experience—such as pain, stress, caring, and comfort (Burns & Grove, 2009)—topics that are a central focus of the current DNP needs assessment project. Quantitative research also allows for the collection and analysis of a relatively large sample, which in turns provides for a

statistically accurate picture of the population under investigation (Polit & Beck, 2008). Thus, quantitative research is said to be conclusive in that the results obtained from a survey can be inferred to the rest of the population from which the sample was drawn (Burns & Grove, 2009).

Project Question

This project sought to understand if caring for Canadian senior citizens predicted a increased level among caregivers. This project also sought to understand what resources would help a caregiver to cope with the stress they experience when providing care.

This project also sought to discover the best evidenced-based practice resources that would help these caregivers of senior citizens cope with their stress. To achieve this, a needs assessment research design that used a quantitative survey to collect data was the optimal method to investigate this project's question: The question can best be answered with a structured questionnaire that generates numerical data. Marshall and Rossman (2006), Byrne and Keefe (2007), and Burns and Grove (2009) all noted how a survey allowed for the gathering of statistical information that can be analyzed to determine if significant relationships and differences exist within the data. Thus, the use of a quantitative survey, as part of this needs assessment, provided a clear way to collect data that identified the impact on the caregiver's stress level of caring for seniors, and the support needed by caregivers of senior citizens to cope with their caregiving role. In other words, using a quantitative survey tool (Novak & Guest, 1989) as part of a needs assessment allowed for the quantification and tabulation of caregiver stress. Furthermore, the use of a quantitative survey made it possible to identify similarities among

individuals, or groups of individuals, who are experiencing caregiver stress. Once identified, the patterns in the data were categorized and aggregated so that strategies and solutions to caregiver stress could be adopted by the appropriate service delivery model (Kettner et al., 2013).

Stakeholders

As part of a needs assessment, it is important to identify the stakeholders who will benefit from the needs assessment. For the purposes of this needs assessment project, the stakeholders were defined as current or potential caregivers of senior citizens in Canada who may be experiencing stress from lack of resources from the healthcare system. These stakeholders may be service providers, professional organizations or decision makers. Specifically, the stakeholders are seniors, the family members of seniors, caregivers of seniors, and seniors' advocacy homecare provider agencies such as Community Support Services Agencies (CSSAs), Community Care Access Centers (CCACs), Long Term Care homes, Hospitals, Community Health Centers, Family Health Teams (FHTs), Clinicians and Health Professionals, policymakers, and health care policymakers at the Federal, State and local levels. It is hoped that the findings associated with this needs assessment will be found useful by one or more of these stakeholders.

Population and Sampling

The population for this project was defined as caregivers who provide services to seniors age 65 years and older in the community. A caregiver may be a family member, a friend, or others individual who provide unpaid care to a senior on a regular basis. Family caregivers are often described as the backbone of the health care system as they are vital

to health care, yet invisible and often vulnerable themselves. The role of a caregiver can begin suddenly due to a health crisis for which the caregiver typically has neither training nor experience (HCC, 2012).

The number of Canadians aged 65 and older is now close to 5 million (Statistics Canada, 2011). The 2011 Census counted 4,945,060 people aged 65 and older in Canada, an increase of more than 609,810, or 14.1%, between 2006 and 2011. This rate of growth was more than double the 5.9% increase for the Canadian population as a whole (Statistics Canada, 2011). It is estimated that caregivers provide between 80% to 90% of care to seniors (Keefe & Fancey, 1998). According to available data, the majority of home care clients are women. Approximately 40% of home care clients are over the age of 85, although in the Yukon, a slightly younger population of seniors uses home care services; about 20% are over the age of 85.

The number of people receiving home care in Canada has grown considerably (HCC, 2012). As noted by the HCC (2012), many home care recipients are seniors with chronic conditions and physical or cognitive limitations who want to stay in their homes as long as possible. Many seniors with complex and multiple health needs are receiving limited hours of home care, and as a consequence a considerable number of their family caregivers, many of whom are seniors themselves who are stretched beyond their capacity and reporting high levels of distress (HCC, 2012). Caregivers provide health and personal care (such as transfers, bathing, toileting, and administering injections), and assist tasks such as grocery shopping and other essential errands (HCC, 2012). Cranswick and Dosman (2008) note that in 2007, 2.7 million Canadian families caregivers over the

age of 45 were helping seniors with their long-term health conditions. Three-quarters of caregivers were aged 45 to 64, nearly 60% of these family caregivers were women, and 57% of caregivers were employed (Cranswick & Dosman, 2008).

To gather a sample from this population, a convenience sampling technique was used. It has been suggested (Burns & Grove, 2009; DeJong, 2002; Kerlinger Lee & Bay, 2000; Hagerty & Williams, 2007) that healthcare researchers often find it very difficult to recruit subjects for their studies and frequently must use a sample of convenience to obtain their sample. For example, Bay, Hagerty and Williams (2007) used convenience sampling to describe the depressive symptoms of individuals who experience mild to moderate traumatic brain injury (TBI). A convenience sample was used for this project plan because it is an inexpensive sampling technique that requires less time to acquire a desired sample size (Monette, Sullivan and DeJong, 2002).

Caregiver subjects were recruited into the study because they were in the right place at the right time to be surveyed. For example, a community caregiver support group was used to obtain completed surveys from willing caregivers. It should be noted that a community caregiver support group was located after this project had been approved and before IRB approval was granted. A written commitment to access of the members of the caregiver support group was obtained from the group leader prior to sampling.

Caregivers that are visiting seniors who have been admitted in an acute care hospital or living in the community were also asked to participate in the study. Caregivers whom themselves were admitted to a hospital due to caregiver burnout were enrolled into the study upon their hospital discharge; in addition, caregivers who were struggling with

their senior caregiving role in the community were also entered into the sample. Finally, subjects were enrolled in the survey because they expressed an interest in participating in the study. The final sample size obtained for this project was 25 valid participants. Prior to sampling, a written consent form was used to obtain informed consent to participate from each individual caregiver. All caregivers were asked to complete the survey that can be found in Appendix A.

Assessment of Needs and Service Utilization

As part of this needs assessment, identification of the formal and informal patterns of service utilization, as well as an assessment of the unmet needs of stakeholders, was conducted via a quantitative survey (see Appendix A for a copy of this survey). It has been suggested by the HCC (2012) that when home care is appropriately managed and properly integrated into the health care system, it can improve the health and well-being of many seniors and their caregivers. This in turn reduces the costs of care in hospitals and premature placement of seniors into long-term care facilities and ultimately reduce the stress of the caregivers. This project undertook a systematic quantitative survey of stakeholders to ascertain if this is in fact the case. In addition, this project sought to identify what is required to fill the needs of caregivers by determining the optimal solutions for all stakeholders.

Part of what assisted in meeting the goal of assessing needs and service utilization was an understanding of what is already in place and being used by the caregivers of seniors. Numerous formal plans are currently in place and being used by caregivers of seniors; one such example is the provincial-sponsored efforts being undertaken by the

Ontario Ministry of Health and Long Term Care (OMHLTC) to address issues of access, equity, choice, value, quality of care and support for caregivers of seniors (Sinha, 2012). Interestingly, caregivers of seniors tend to use formal community support services only as a last resort, mainly because caregivers have difficulty in accessing services (Dupuis, Epp & Smale, 2004; Sinha, 2012). In addition to formal support, there are several examples of informal support in place for the caregivers of seniors. For example, emotional support for caregivers is often provided informally by adult day programs and some long-term care homes (Dupuis et al., 2004). Counseling is an example of a resource that is formally and informally available to caregivers of seniors. Counseling is often provided by health care workers such as nurses, physicians, occupational/physical therapists, social workers in hospitals and community health agencies, but also through support groups and peers. Although formal and informal services are available to caregivers of seniors, these services often vary in terms of availability and cost. All Ontarians stand to benefit when caregivers can be supported with information and access to a range of supports which will allow them to continue assisting those they care about (Sinha, 2012).

Even though resources for caregivers are in place, it has been shown (OACCAC, 2013) that further resources are still needed. The resources that are still needed include improved senior caregiver access to information and referrals, improved access to care and caregiver support and increased support and service availability for seniors with complex care needs (OACCAC, 2013). Along these same lines, respite care programs (Gottlieb & Johnson, 2000), counseling programs (Mittelman, 2000; Whitlatch, Zarit, Goodwin, & Von Eye, 1995) and homecare support programs (Canadian Home Care

Association, 2001; Sinha, 2012) have also been suggested as resources that are needed by caregivers of seniors in Canada. Education on caregiving skill training is another needed resource for caregivers of seniors. Research suggests that education acquired by caregivers can play a part in delaying long term care placement of seniors in part by improving the psychological well-being of the caregiver (Dupuis et al., 2004; Harris & Peters, 1993; Kennet, Burgio & Schulz, 2000).

There has been an increase in the need for homecare for Canadian seniors. Yet the homecare systems in place for seniors currently are lacking in support for the seniors and caregivers (HCC, 2012). These services will need to grow as the population of seniors grows (HCC (2012)). It is projected by the HCC (2012) that the assistance provided to the 2.7 million Canadian caregivers who care for seniors with long-term health conditions by the Ontario government are inadequate, mainly because the numbers of hours of care that are provided by the provincial government are often capped. As a result, caregivers often have to pick up the slack. This means that the average hours of care provided by family caregivers has to increase significantly as a senior's needs increase. Private homecare agencies can help to pick up the slack, although these services often place a burden on the budgets of caregivers.

When all of the factors that play a part in caring for seniors are considered, it becomes arguable that many caregivers of seniors are under a great deal of stress, even though several resources are available for use by caregivers of seniors. It is the case that there is a distinct lack of information about what is needed to reduce stress among caregivers of seniors. Therefore, the purpose of this needs assessment project was to

determine the levels of stress that caregivers of senior citizens experience, as well as to investigate the resources that caregivers would like to have to help them to deal with their stress.

Protection of Human Subjects

This project was performed according to the ethical standards for research as defined by the Institutional Review Board (IRB) at Walden University. IRB approval was obtained before the onset of data collection activities (Approval No. 09-25-14-0188765). This approval expires in September, 2015. Full disclosure of the reasons for the current project was provided to the families, caregivers and the agencies and organizations involved in this study. Walden University's IRB regulations and research guidelines also provided specific about the research data collection, instrument and protection of human subjects (Walden University IRB, 2012).

This project was conducted within ethical standards in order to protect the human subjects involved in this study. Furthermore, the data collected during the distribution of the survey associated with this project (please see Appendix A for a copy of this survey) contained no identifying markers, thus rendering the data anonymous in nature. Since this project involves human subjects, it was reviewed by IRB before the project commenced. Special attention and proper precautions were taken regarding the risks posed by research involved in research: specifically, the questionnaire was designed to minimize any psychological, physical, legal, social, and/or economic harm (Bliss, 2012).

Data Collection and Analysis

Data were collected for this project via the survey instrument contained in Appendix A. The survey instrument contains nine questions that gathered data on demographic variables (i.e., gender, age, whether or not a respondent lives alone, marital status if a respondent has children of their own, employment status, income, whether or not a respondent feels financially secure, and highest education). In addition, a total of 24 five-point response questions which identify whether a respondent experiences specific forms of stress, one question on a scale of 1 to 10 that rates a caregiver's overall level of stress, and one open-ended question that asks respondents to identify what resources would help them to feel less stressed as a caregiver were included in the survey instrument. The primary researcher developed the question that, on a scale of 1 to 10, rates a caregiver's overall level of stress. The primary researcher also developed the open-ended question. The 24 five-point response questions were from the Caregiver Burden Inventory (CBI) developed by Novak and Guest (1989). As Chou, Chu, Tseng and Lu (2003) note, the CBI was developed as a multidimensional instrument that measures the impact of burden on caregivers. There are a total of five dimensions associated with the CBI, which are as follows: (a) time dependence burden; (b) developmental burden; (c) physical burden; (d) social burden, and; (e) emotional burden (Chou, Jiann-Chyun & Chu, 2002; Novak & Guest, 1989). These five separate dimensions can be aggregated together into a single scale that estimates a caregiver's overall level of burden.

Several authors have conducted reliability estimation of the five different dimensions of the CBI scale. Novak and Guest (1989) found that the Cronbach alpha

coefficients (Cronbach, 1970) for dimensions 1 through 5 listed above were .85, .85, .86, .73 and .77, respectively. An investigation by Caserta, Lund and Wright (1996) that used the CBI found that the Cronbach alpha coefficients for dimensions 1 through 5 of the CBI were .85, .87, .86, .69 and .81, respectively. A later study by Chou et al. (2002) found similar reliability estimates. In their research, the Cronbach alpha coefficients for dimensions 1 through 5 of the CBI were .93, .90, .93, .79 and .88, respectively. On the basis of this evidence it can be said that the CBI has proven to be a reliable scale. In order to ascertain the reliability of the CBI scale during the current study, a Cronbach alpha reliability estimate (Cronbach, 1970) was calculated for the scale items once the data has been collected. The value obtained is presented in the next section of this paper.

To date there have been two authors who have conducted validity estimation of the CBI. Novak and Guest (1989) conducted a construct validation of the CBI via factor analysis. Specifically, a principal components analysis with an orthogonal rotation for uncorrelated factors was used to investigate whether the hypothesized five-factor construct was valid as a function of empirical data. Results of the principal components factor analysis validated the five-factor model, with the factors being time dependence burden, developmental burden, physical burden, social burden, and emotional burden (Chou et al., 2002; Novak & Guest, 1989). These five factors accounted for 66% of the variance in the predictive model, with an approximately equal amount of variation (between 9% and 12%) being distributed among the five factors (Chou et al., 2003). Both concurrent and construct validity of the CBI was later demonstrated by Chou et al. (2002). Chou et al. used a principal component factor analysis with an oblique rotation

for correlated factors as their approach to demonstrating construct validity. The results of the factor analysis were similar to those of Novak and Guest (1989), as their five-factor model accounted for 63% of the variation in the predictive model. Chou et al. (2002) also demonstrated concurrent validity by correlating the CBI against a similar measure of caregiver burden known as the Cost of Care Index (CCI). The CCI was designed by Kosberg and Cairl (1986) to estimate the social, physical, personal, emotional and economic aspects of caregiving. A high correlation between two different instruments that are designed to measure a similar concept is said to demonstrate concurrent validity (Babbie, 2013). The correlation between the CBI and the CCI was .58, which speaks to the concurrent validity of the CBI.

Once the data was collected via the survey, it was analyzed using the descriptive and inferential statistics. For example, descriptive statistics, such as means, standard deviations, modes and ranges (as appropriate), were calculated to describe the data. Inferential statistics tests were calculated to see if there are differences in the 24 five-point response questions as a function of the demographic factors. These same inferential tests were used to see if there is a difference in one question measured on a scale of 1 to 10 as a function of the demographic factors. Finally, the open-ended responses to the question that asks what resources would help respondents to feel less stressed as a caregiver was subjected to a content analysis to see if there were themes within the data.

Data Evaluation Plan

Project evaluations should look at the implementation, effectiveness, efficiency,

cost-effectiveness, and attribution ability of the program (Hodges & Videto, 2011). Other factors to consider include whether the stakeholder engagement is strong if the outcomes of the project will have an impact, the benefit to seniors and their caregivers, if the project produces learning and if the project effectively addresses concerns that seniors and their caregivers have. Thus, the objective of this needs assessment project was to determine if the challenges involved in caring for seniors cause the caregiver who provide care to Canadian senior citizens to experience undue amounts of stress, as well as to understand what resources would help a caregiver who provide care to Canadian senior citizens to feel less stressed. Specifically, this project did the following:

1. Determined what services would help to reduce caregiver stress for those persons who provide care to Canadian senior citizens;
2. Administered a Stress Scale Inventory Questionnaire assessment tool that gathered information about a caregiving situation so that specific problems and needs of senior caregivers could be identified;
3. Reviewed existing data sources of current caregiver support services to help identify and describe the current state of caregiver services (if any);
4. Analyzed the collected data, reported the findings, and used the findings of this project as a basis for planning and allocating services for caregivers of senior citizens.

Hodges and Videto (2011) assert that a summative evaluation should focus on whether or not the program produces its intended effects rather than on whether or not the program provides information for improvement. Summative evaluation will demonstrate

if the aims and objectives of the project were achieved by determining if the work was useful and beneficial for caregivers of Canadian seniors. Additionally, the evaluation will help to determine if the project outcome is sustainable and if there is a need for improvement or further future research.

Summary

Currently, very little is known about the impact of caring for seniors on the caregiver's stress level. There is also a lack of knowledge concerning what resources would help caregivers who provide care to Canadian seniors cope with the stress they experience. In order to address these questions, this project gathered both qualitative and quantitative data in order to determine if the challenges involved in caring for seniors cause caregivers stress, as well as to understand what resources would help a caregiver to feel less stressed. The findings of this project study can be used to advance nursing practice and fill the gap in the knowledge base that currently exists regarding caring for seniors in Canada. This study also fulfills this researcher's personal interest in geriatrics and passion for seniors and their caregivers. It is expected that the finding of this project will help in shaping the way that people in the health industry currently provide care to seniors and their caregivers, as well as help seniors and their families.

Section 4: Results and Analysis

Introduction

As previously noted, there are four specific objectives of this needs assessment project:

1. To conduct a needs assessment that would determine what resources could help to reduce caregiver stress for those who provide care to Canadian senior citizens;
2. To administer a Stress Scale Inventory Questionnaire assessment tool that would gather information about a caregiving situation so that the specific problems and needs of senior caregivers could be identified;
3. To review current sources of caregiver support services to help identify and describe the current state of caregiver services (if any);
4. To analyze the collected data, report the findings, and use the findings as a basis for planning and allocating services for caregivers of senior citizens.

In order to address these questions, this project gathered data as part of a needs assessment so as to understand whether caring for seniors predicted the stress a caregiver experiences, as well as what services would help to reduce caregiver stress for those providing care to Canadian senior citizens. Data results are presented below.

Data Preparation

Prior to the calculation of any statistics, certain steps were taken to prepare the data for analysis. First, the data were restricted to only those respondents whose data on all of the questions within the dataset were valid. Missing data on a dependent variable will cause inaccurate variance estimation in a multivariate environment (Allison, 2001); thus, deletion of cases with missing data on a dependent variable was necessary. This

reduced the dataset from 33 to 25 respondents, which was the required sample size for the current project. Second, one scale was constructed for use in the current investigation. The Caregiver Burden Inventory was calculated as the addition of the 24 questions in the scale, with the resultant sum being divided by the number of questions present in the scale. In other words, all 24 items were added together and then divided by the number 24. This procedure allowed the scale to be interpreted as a function of the original five-point measurement metric for each of the questions in the scale. The measurement metric for the Caregiver Burden Inventory ranged from a low score of 1 (*never*) to a high score of 5 (*nearly always*). Finally, the variable that measured marital status was dichotomized given its distribution (64% married, 36% other).

Research Questions and Techniques Used to Investigate Each Question

This project set out to address two questions that are linked in scope. First, this project sought to understand if caring for Canadian seniors predicts the level of stress a caregiver experiences. Second, it sought to understand what resources would help senior caregivers cope with this stress.

The first research question, to understand if caring for seniors predicts the level of stress a caregiver experiences, was investigated statistically. The appropriate inferential statistics tests were used to see if there is a difference in the Caregiver Burden Inventory scale (CBI) as a function of demographic factors. Inferential tests were also used to see if there is a difference in the question that measures caregiver stress on a scale of 1 to 10 (Q34) as a function of demographic factors.

Summary of Demographic Variables

The demographic variables of age, income, and education were correlated against the CBI and Q34. Because the dataset had fewer than 30 respondents ($n=25$), a nonparametric statistical test was necessary (Sprenst, 1989) to perform the correlation. Therefore a Spearman correlation was calculated. This test was appropriate, given that the variables of age, income, education, the CBI, and Q34 were all continuous measures (Ritchey, 2008).

The following demographic variables all nominal-level dichotomous indicators: gender, whether a respondent lives alone, marital status, whether the respondent has children, and whether a respondent feels financially secure. An independent samples t test (Ritchey, 2008) would normally be used to see if the CBI and Q34 vary as a function of these nominal-level dichotomous indicators. However, because the dataset had less than 30 respondents ($n=25$), a nonparametric statistical test was necessary (Sprenst, 1989). Therefore, the Mann-Whitney U test was used in place of the independent samples t -test (Sprenst, 1989).

The demographic variable of whether a respondent is employed full-time, part time or is unemployed is a multiple category nominal level variable. A oneway analysis of variance (ANOVA; Ritchey, 2008) would normally be used to see if the CBI and Q34 vary as a function of this particular nominal-level dichotomous indicator. However, because the dataset has less than 30 respondents ($n=25$), a non-parametric statistical test is necessary (Sprenst, 1989). Therefore, the Kruskal-Wallis test was used in place of the oneway ANOVA (Sprenst, 1989).

The second research question sought to understand what resources would help senior caregivers who provide care to Canadian seniors cope with the stress they experience, was investigated via qualitative data analysis means. A content analysis (Creswell, 2011) was conducted on the open-ended data gathered via Question 35 of the survey. Question 35 of the survey asked respondents the following question: What resources would help you to feel less stressed as a caregiver?

Descriptive Statistics

Table 1 on the next page provides the means and standard deviations for all of the continuous variables used in the current investigation. As can be seen in Table 1, the average age of respondents is 47 years old. Income was coded on an eleven-point scale that ranged from a low of 1 (for '\$0-\$10,000 a year') to a high of eleven (for '\$100,000 or more a year'). The mean score of 5.96 suggests that average respondent income fell between \$50,001 and \$60,000 a year. Education was coded on a five-point scale that

Table 1

Means and Standard Deviations for All Continuous Variables

Variable	<i>M</i>	<i>SD</i>
Caregiver Burden Inventory	2.81	0.82
Caregiver stress level	5.96	3.27
Age of respondent	47.12	14.35
Income of respondent	5.72	2.42
Education of respondent	3.92	1.00

Note: n = 25.

Table 2

Frequencies and Percentages for All Discrete Variables

Variable	Frequency	%
Gender of respondent		
Male	3	12.0
Female	22	88.0
Does the respondent live alone?		
Yes	19	76.0
No	6	24.0
Marital status of respondent		
Married	16	64.0
Other	9	36.0
Does the respondent have children?		
Yes	17	68.0
No	8	32.0
Employment status of respondent		
Full-time	12	48.0
Part-time	10	40.0
Unemployed	3	12.0
Does the respondent feel financially secure?		
Yes	10	40.0
No	15	60.0

ranged from a low of 1 (for ‘Grades 1-8’) to a high of 5 (for ‘College 4 years or more’).

The mean of 3.92 suggests that the average education of respondents was some college.

The CBI was measured on a five-point metric, with higher scores indicating higher levels of caregiver burden. The midpoint of the CBI scale is 3.0. The average score of 2.81 suggests that the average respondent falls slightly below the midpoint of the scale.

Finally, the amount of caregiver stress is ranked on a scale of 1 to 10, with the midpoint

being 5. The average score of 5.96 suggests that the average respondent is slightly higher than the midpoint.

Table 2 presents the frequencies and percentages for all discrete variables in the dataset. As can be seen in Table 2, most of the sample (88%) is female. Three-quarters of respondents (76%) live alone. Two out of every three respondents (64%) are married, and two in three respondents (68%) have children. The sample is roughly split between those employed full-time (48%) and employed part-time (40%). Finally only 40% of the sample feels financially secure.

Table 3

Skewness and Kurtosis of Study Variables

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Caregiver Burden Inventory	25	0.36	0.46	-0.78	0.90
Caregiver stress level	25	-0.30	0.46	-1.29	0.90
Age of respondent	25	0.37	0.46	-0.60	0.90
Income of respondent	25	0.13	0.46	0.05	0.90
Education of respondent	25	-1.20	0.46	1.94	0.90
Gender of respondent	25	-2.49	0.46	4.56	0.90
Does the respondent live alone?	25	1.30	0.46	-0.35	0.90
Marital status of respondent	25	-0.62	0.46	-1.76	0.90
Does the respondent have children?	25	-0.82	0.46	-1.45	0.90
Employment status of respondent	25	0.64	0.46	-0.64	0.90
Does the respondent feel financially secure?	25	0.44	0.46	-1.98	0.90

Normality Testing of the Data of Study Variables

Table 3 presents the normality testing of the study variables. Normality testing is usually done to ensure that the study variables follow a normal distribution (Ritchey, 2008). Normality testing is also usually done to ensure that the study variables meet the

requirements of parametric statistical tests (Ritchey, 2008; Sprent, 1989).

As Sprent (1989) notes, parametric tests are those used when a sample size is greater than 30. In the current data analysis project, the sample size is below 30, which means that non-parametric statistical tests need to be utilized for all inferential analysis scenarios. Nevertheless, in an effort to be comprehensive, normality testing with the accompanying histograms was conducted. Histograms are presented in Figures 2 through 12 on the next pages.

With respect to the histograms and the data contained in Table 3, it should be noted that normally distributed data will have a skew value that is between -2.0 and +2.0 and a kurtosis value that is between -3.0 and +3.0 (Tabachnik & Fidell, 2013). As can be seen in Table 3, the variable gender falls outside this parameter.

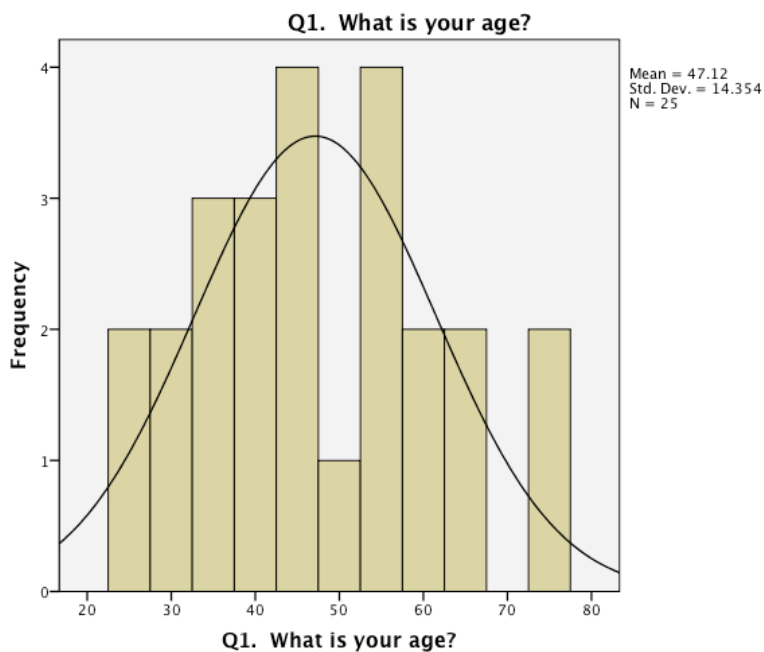


Figure 2. Histogram of age.

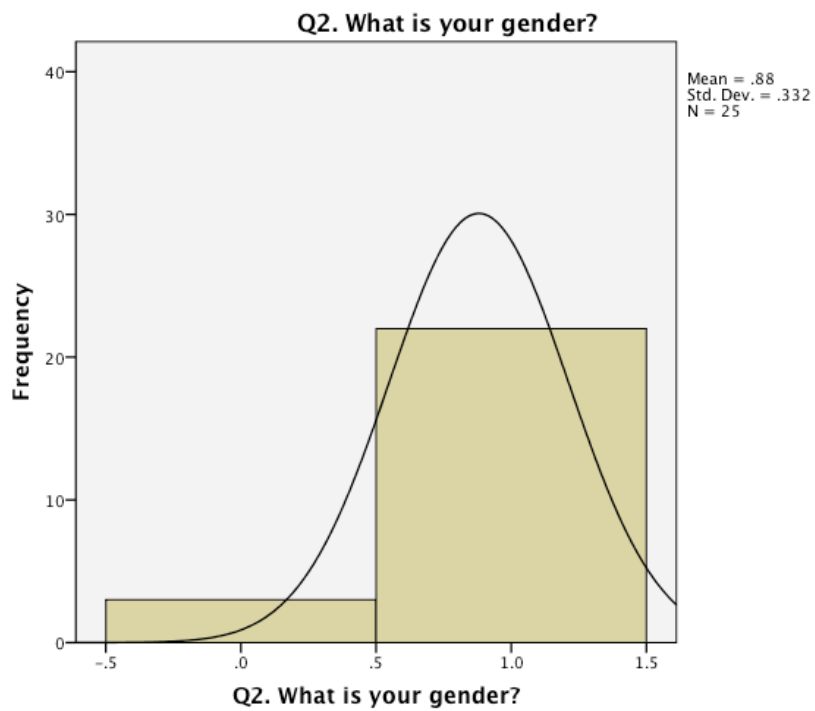


Figure 3. *Histogram of gender.*

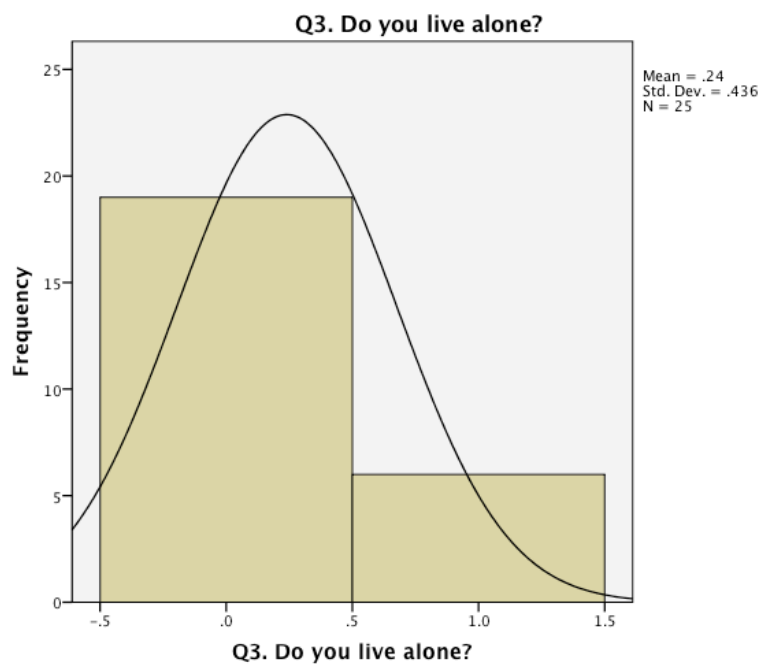


Figure 4. *Histogram of living alone.*

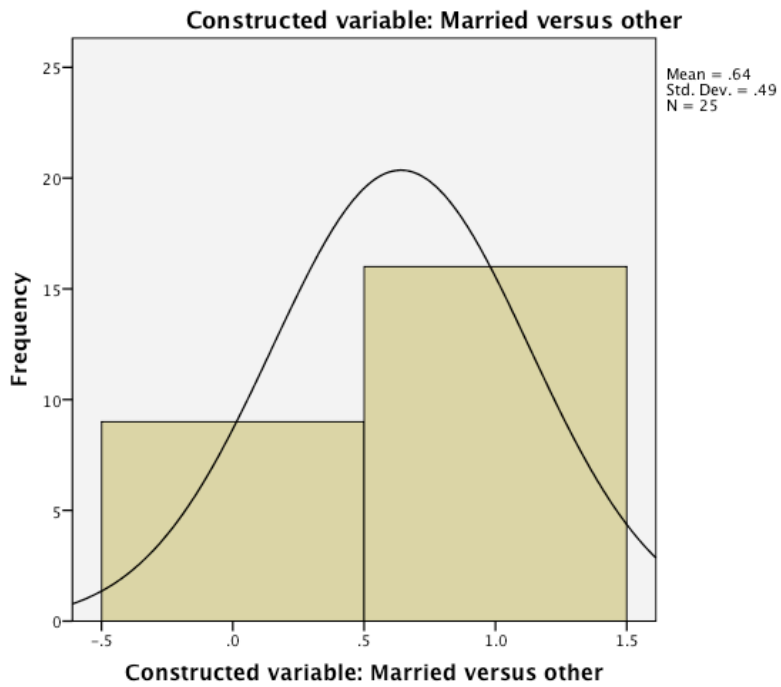


Figure 5. *Histogram of marital status.*

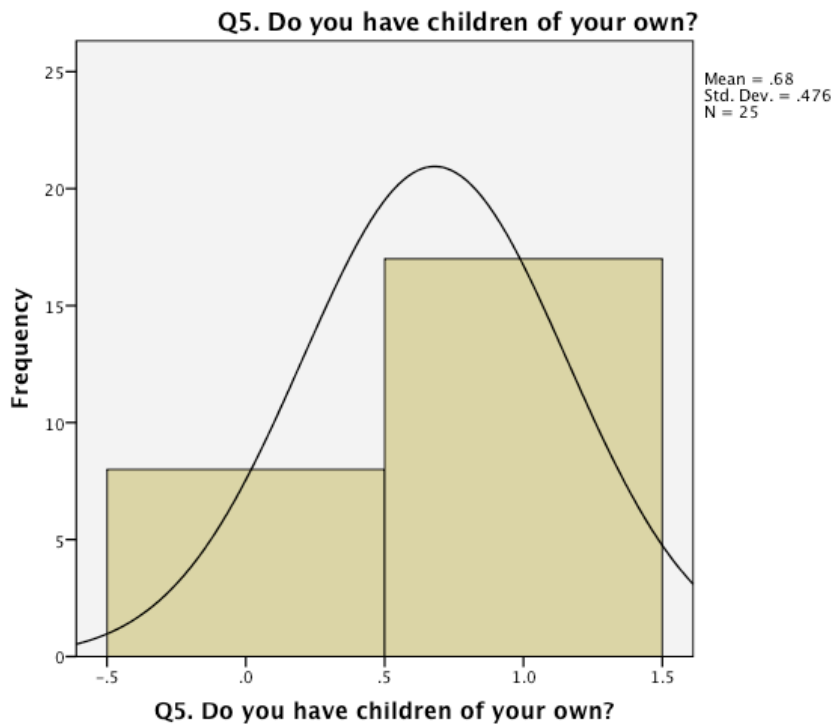


Figure 6. *Histogram of children.*

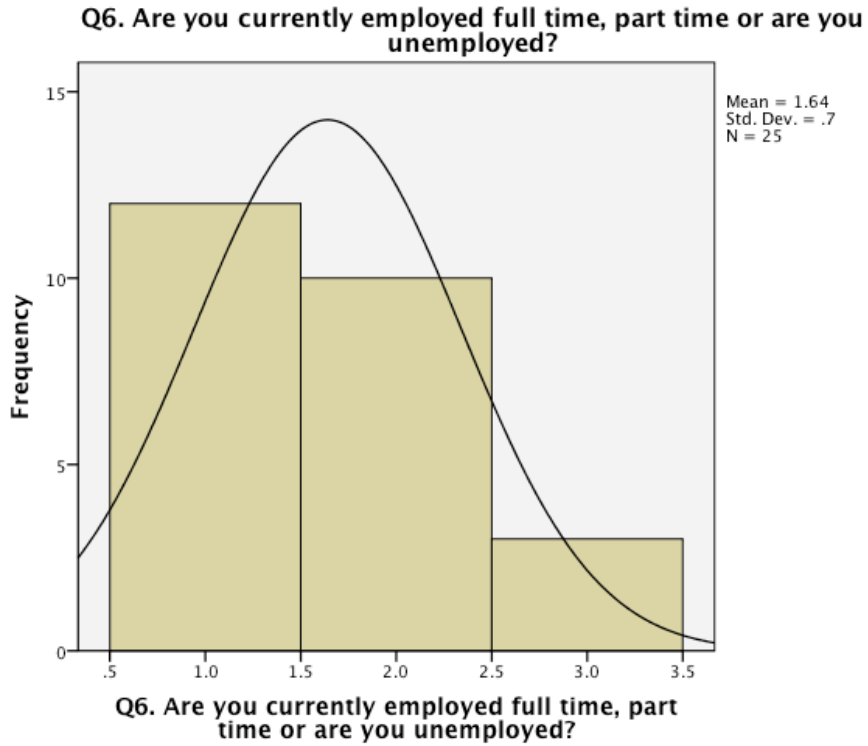


Figure 7. Histogram of employment status.

Q7. Your household's income (before taxes) from all sources this year will be:

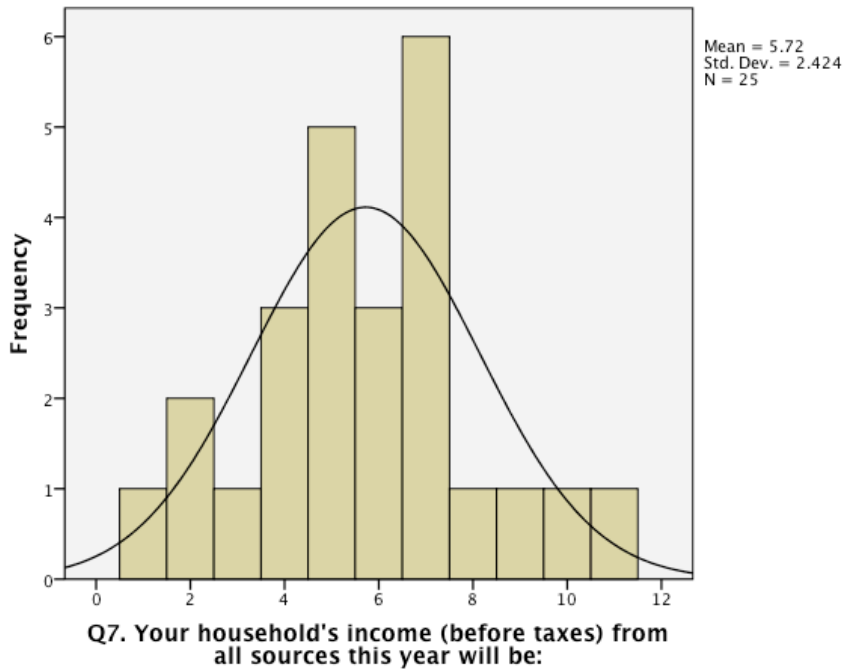


Figure 8. Histogram of household income.

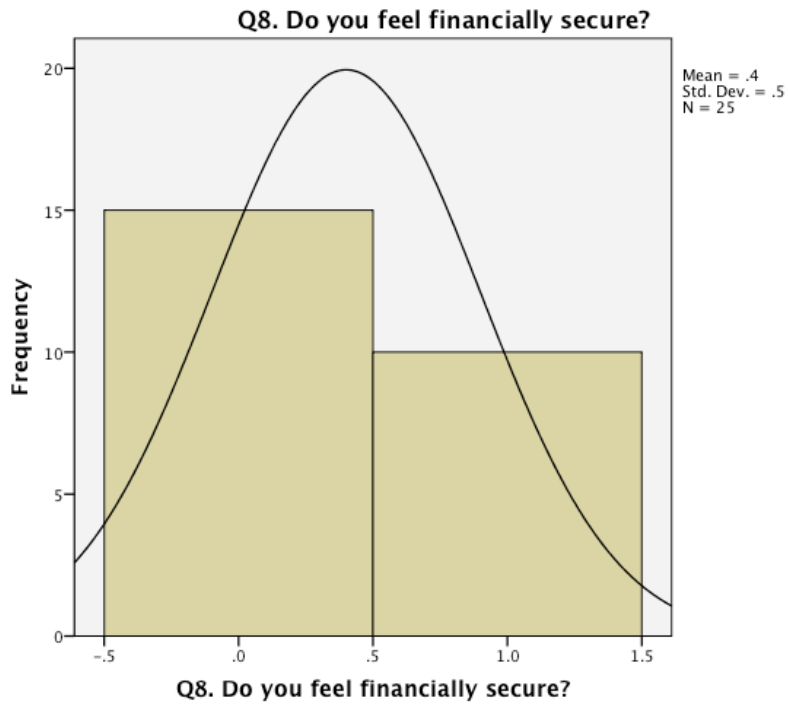


Figure 9. *Histogram of financial security.*

Q9. What is the highest grade or year of school you completed (including home school)?

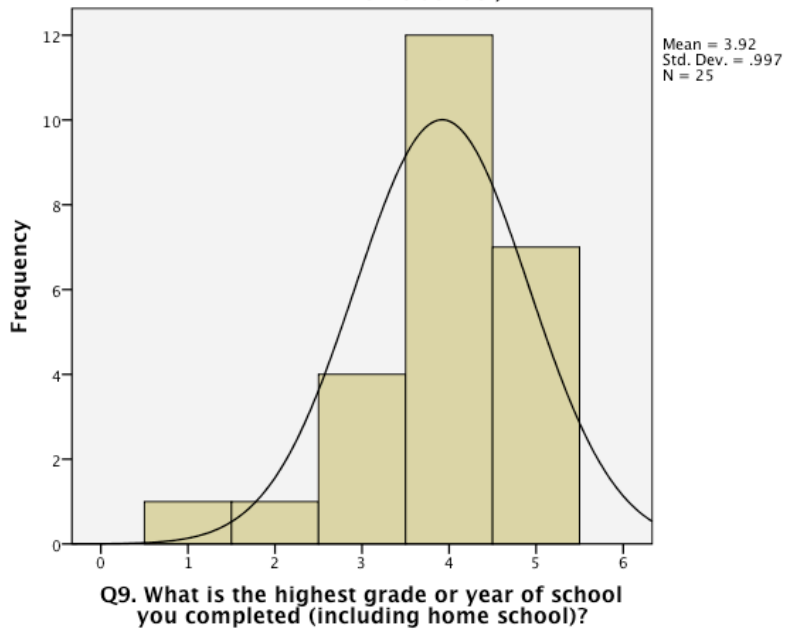


Figure 10. *Histogram of education.*

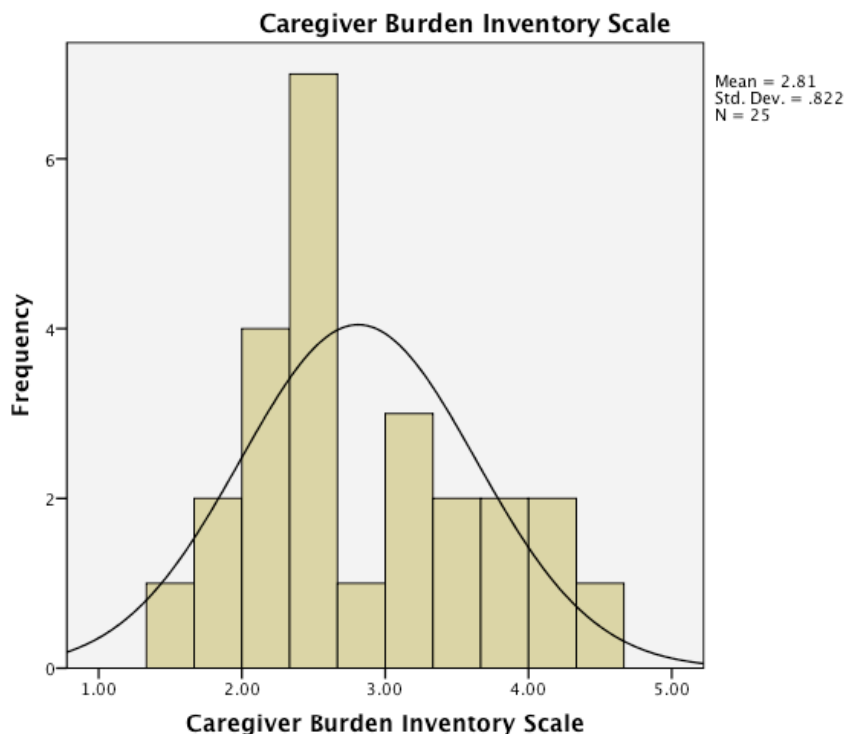


Figure 11. Histogram of caregiver burden inventory.

Q34. On a scale of 1 to 10, with 10 being high and 1 being low, overall, how stressed do you feel in caring for your relative?

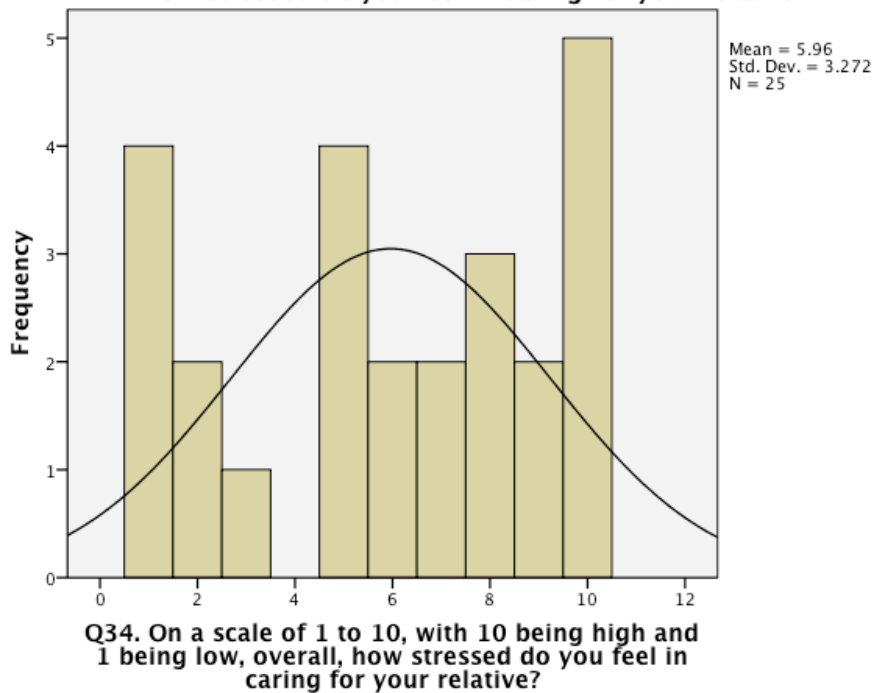


Figure 12. Histogram of caregiver stress.

Cronbach α Reliability Estimation

Table 4

Internal Consistency Values (Cronbach α)

Scale	α
Caregiver Burden Inventory	0.954

Table 4 above presents the Cronbach alpha reliability coefficients for the CBI used in the current investigation. As Tavakol and Dennick (2011) note, the alpha statistic was developed by Lee Cronbach to provide a measure of the internal consistency of a scale as a function of its reliability. The measure of alpha ranges between a value of 0 and 1 with higher scores generally indicating better reliability for data analysis. Scores of .70 or higher suggest that a scale has an acceptable level of reliability (Cronbach, 1970), although lower levels of alpha are also seen as reliable when a scale has only a few items (Tavakol & Dennick, 2011). The CBI demonstrates outstanding reliability.

Research Question 1

Spearman Correlations

Table 5

Spearman Correlations Among Continuous Variables

Variables	Age	Income	Education
Caregiver Burden Inventory scale	.548**	-.188	-.433*
Caregiver stress level	.502*	-.335	-.452*

Note: *= $p < .05$, **= $p < .01$, two-tailed tests. $n=25$.

Table 6

Mann-Whitely U Test Results

Variable	Male		Female		U	p
	Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks		
Caregiver Burden Inventory	14.33	43.00	12.82	282.00	29.0	
Caregiver stress level	16.33	49.00	12.55	276.00	23.0	

Note: *=p<.05, **=p<.01, ***=p<.001, two-tailed tests. n=25.

Variable	Live alone		Do not live alone		U	p
	Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks		
Caregiver Burden Inventory	15.33	92.00	12.26	233.00	43.0	
Caregiver stress level	14.92	89.50	12.39	235.50	45.5	

Note: *=p<.05, **=p<.01, ***=p<.001, two-tailed tests. n=25.

Variable	Married		Other		U	p
	Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks		
Caregiver Burden Inventory	11.53	184.50	15.61	140.50	48.5	
Caregiver stress level	11.31	181.00	16.00	144.00	45.0	

Note: *=p<.05, **=p<.01, ***=p<.001, two-tailed tests. n=25.

Variable	Has children		Has no children		U	p
	Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks		
Caregiver Burden Inventory	13.29	226.00	12.38	99.00	63.0	
Caregiver stress level	12.79	217.50	13.44	107.50	64.5	

Note: *=p<.05, **=p<.01, ***=p<.001, two-tailed tests. n=25.

Variable	Financially secure		Financially insecure		U	p
	Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks		
Caregiver Burden Inventory	9.85	98.50	15.10	226.50	43.5	
Caregiver stress level	9.55	95.50	15.30	229.50	40.5	

Note: *=p<.05, **=p<.01, ***=p<.001, two-tailed tests. n=25.

Table 5 on the previous page presents the Spearman correlations among the variables of age, income, education the CBI and Q34. The results in Table 5 show that as a respondent's age increases, caregiver burden increases and caregiver stress increases. Table 5 also shows that as a respondent's education increases, caregiver burden decreases and caregiver stress decreases. Income was found to be statistically unrelated to caregiver burden and caregiver stress.

Mann-Whitney U Tests

Table 6 on the previous page presents the Mann-Whitney U test results to see if the caregiver burden (as measured by the CBI) and caregiver stress vary as a function of a respondent's gender, whether a respondent lives alone, marital status, whether the respondent has children, and whether a respondent feels financially secure. As can be seen in Table 6, none of the results are statistically significant. As such, it can be concluded that neither caregiver burden nor caregiver stress vary as a function of a respondent's gender, whether a respondent lives alone, marital status, whether the respondent has children, and whether a respondent feels financially secure.

Kruskal-Wallis Tests

Table 7 presents the Kruskal-Wallis test results to see if the CBI and Q34 vary as a function of whether a respondent is employed full-time, part-time, or unemployed. As can be seen in Table 7, none of the results are statistically significant. As such, it can be concluded that neither caregiver burden nor caregiver stress vary as a function of a whether a respondent is employed full-time, part-time, or unemployed.

Table 7

Kruskal-Wallis Test Results

Variable	Full time	Part time	Unemployed	χ^2	df	p
	Mean Rank	Mean Rank	Mean Rank			
Caregiver Burden Inventory	13.46	10.15	20.67	4.82	2	
Caregiver stress level	12.54	11.15	21.00	4.30	2	

Note: *= $p < .05$, **= $p < .01$, ***= $p < .001$, two-tailed tests. $n=25$.

Research Question 2: Content Analysis Results

There are several trends in the qualitative data. In question 2, 27 respondents completed valid data for the qualitative (descriptive) analysis, therefore, for question 2, 27 respondents was used for this analysis. Subjects overwhelmingly stated that they needed financial support, emotional support, more information in order to be a better caregiver, as well as needing time away from being a caregiver in order to get things done and recharge emotionally. Five subjects mention specifically that the CCAC needs to be doing more to help caregivers. Several other respondents mentioned the need for more government support as well without directly mentioning the CCAC. In other words, CCAC needs to care for senior clients, and also provide care where needed for the caregivers of senior citizens.

The most common theme to emerge from the data was the need for respite from being a caregiver. Whether this was the desire for adult daycare, evening care, or night care, 12 out of 27 people mention this as a great need. Several respondents stated that they only needed a few hours of respite a week in order to get errands completed, while

others stated that they needed longer periods of time, including one person who really wanted someone to stay in the night so they could sleep without worrying that the person they were caring for would be safe. Respite care was a common theme, as 13 out of 27 respondents also mentioned needing access to respite care in a nursing home for the person for whom they were providing care. Many of these respondents noted how they needed access without having to wait through the complex and complicated placement process. Numerous respondents also noted that it often took several weeks of wait time to obtain a weekend relief at a long-term care facility. The need for permanent long-term care placement of seniors was mentioned by 9 out of 27 respondents who stated that easier access to a nursing home for the senior they were providing care without having to deal with the complicated placement process would be helpful. Several respondents called for placement process change by the Ontario Ministry of Health and long-term care through CCAC. Caregivers indicated that navigating the healthcare and social services available are difficult and complex, and that the decision of how much care and who provides care to their senior loved one is sometimes determined without their input. Respondents also suggested that current provincial health programs do not factor in the needs of caregivers in their funding programs equations, and this should be evaluated and considered during the funding programs formula.

Ten caregivers noted the need for more social and emotional support, which was the second most common theme to emerge from the data. Four respondents stated they would like caregivers support group, while two mentioned the need for a survivors support group. Four others mentioned how they would like to see greater emotional help,

such as counseling, while two respondents mentioned needing help with outside relationship like family member and spouses, church groups or neighbors while they are engaging in caregiving. Some of these same respondents also mentioned how they needed more help and support for their families and their communities while they are caring for the person. Half of the people who were surveyed directly stated they needed more emotional support, access to adult daycare and greater family support. Several respondents mentioned that this additional support should be coming from the CCAC. As one respondent stated,

government should ensure adequate help is given to those relatives who feel stressed due to providing care for their loved ones. I have seen situations where caregivers themselves developed failing health, and as such, not only in relatives have one sick person to care for, but more and more are experiencing ill health due to stress!

An excerpt from a different respondent helps to drive home the need for greater emotional support:

Another thing that is essential is learning how to reframe the word “guilt” as we are often faced with the idea that somehow asking others to step in when a break [is needed] somehow translates into “failure.” the idea that we should be able to muscle thru and carry all the load ourselves perpetuates this sense of failure if we cannot manage this. It would be helpful if we could empower caregivers to see that asking for help, whether it be for... the health of the caregiver and the wellbeing of the senior they care about is absolutely necessary not seen as a

failure. The demand of care giving can provoke many emotions that we never expected would arise...and yet in times of stress...they do.

Compassion fatigue is another theme that the respondents expressed as occurring during their role as a caregiver for a senior. Compassion fatigue refers to the profound emotional and physical exhaustion that caregivers can develop over the course of their caring for a senior (Mathieu & McLean, 2014). As one respondent noted, caring for a senior causes “a gradual erosion of all the things that keep us connected to others: our empathy, dreams, hope, our love and of course our compassion - not only for others but also for ourselves.” This quote also helps to illustrate some points on compassion made by O’Rourke and Dufour (2012), who note that compassionate caring is a partnership where one person reveals their pain, brokenness and vulnerability to another. Through a relationship of trust, caregivers work together towards healing and wholeness. But in the case of caregivers for senior citizens, compassionate care can lead compassion fatigue, a situation that occurs when a caregiver goes where it hurts, enters into places of pain, shares in brokenness, fear, confusion and anguish, all the while expressing a full immersion into the condition of being human (O’Rourke & Dufour, 2012).

Several respondents stated that they needed greater help from CCAC, including financial support, the need for expanded care opportunities, and flexibility in the care that their senior received from CCAC and as well as better relations with personal support workers providing supplementary care from CCAC. Most of the comments that involved the CCAC were cross-linked with comments about the need for greater financial help while taking care of a senior not directly from CCAC but from the provincial government

in the way of better tax incentives. Suggestions for this by respondents included greater financial support for time off from jobs, as well as increasing support for caring for the senior.

The final theme to emerge from the open-ended data revolved around the desire among respondents for more information about services available. Several respondents expressed their frustration about how it was not easy to find information that would help them to care for seniors. This extended to wanting better information from health care providers, such as nurses, doctors, social workers, healthcare provider agencies like the CCAC, health clinics, walk-in clinics, district family health care teams, family physician offices and homecare agencies. As one respondent stated,

I feel that walking the role of being a caregiver for a senior is something that few of us are not adequately equipped to do... it is challenging to be both a daughter/son/husband/wife and the caregiver all at the same time, as each role is uniquely different. Learning how to separate yet merge both of these roles and finding resources information to help balance within them all at the same time plays a role in how it impacts ones stress level. A list of resources and ideas could be helpful.

Summary and Evaluation of Findings

This project demonstrated that there is stress associated with providing care for seniors. The results associated with this project also suggest that well-structured resources are needed to respond to the various stressors that impact caregivers as a result of taking care of seniors. Some of the suggestions made by caregivers for resources

include a formal or informal person to confide in (i.e., a counselor), caregiver support groups, relief from caregiving via respite care, and greater information on services available to caregivers of seniors. Several of the respondents indicated a need for proper training in providing care to senior loved ones. Respondents also indicated the need for training and education programs on how to navigate the healthcare system. The evidence also suggests that as age of the respondent increases, the stress and burden associated with caring for seniors increases, and that the education of a respondent increases, the stress and burden associated with caring for a senior decreases.

The most requested resource made by the respondents is to have a sense of control in the decision-making process concerning their caregiving situation. To this end, greater amounts of information from healthcare agencies and healthcare providers should be made available to the caregivers of seniors. Respondents also noted that they do not feel totally in control of the care they provide for seniors, a finding that aligns with the work of Smale and Dupuris (2004). Smale and Dupris noted that there are substantial numbers of caregivers who apparently do not feel they have control over their caregiving situation. Their investigation showed that half of caregivers indicated that there was no way they could solve some of the problems they were experiencing as a result of their caregiving, a fact that made caregivers vulnerable to caregiver stress/burden.

Discussion of Findings in Context of Literature and Frameworks

The purpose of this needs assessment project was to determine if providing care to seniors predicts the levels of stress that caregivers of senior citizens experience, as well as to investigate the resources that caregivers would like to have to help them to deal with

their stress. Evidently, many caregivers of seniors are under a great deal of stress, even though several resources are available for use by caregivers for seniors. The findings associated with this project suggest that there is a distinct lack of information about what is needed to reduce stress among caregivers of seniors.

The findings associated with this project align with other research projects (Cairl & Kosberg, 1993; FGA, 2012; Mathieu & McLean, 2014; Smale & Dupuis, 2004), which suggests that caring for seniors is stressful for caregivers. The evidence from this study suggests that more resources and information on caregiving would help caregivers cope with their caregiving role. Some of the resources outlined below would help caregivers:

1. Adequacy of number of hours of support and adequacy of number of services for both care receivers and caregivers;
2. Better information to caregivers about available resources;
3. Easier access to respite care in a nursing home when needed;
4. Revamp the current LTC placement process of seniors without having to wait 2 years to 5 years before being placed in LTC home;
5. Training and education programs on how to navigate the health and social services available to make the process less difficult and complex;
6. Education and training how to provide care seniors including what to expect, and inclusion of the senior caregivers in the decision of how much care and who provides care to their senior care receivers;

7. Mandatory requirement governmental funded programs to make the public aware of the services they are providing to ensure that they are not operating in silos;
8. Individual counselling, organization of support groups, and caregiver training to assist caregivers in making decisions and solving problems relating to their caregiving roles;
9. Structure support, recognition senior caregivers by the healthcare system, caregiver support groups and governmental ministries;
10. Respite care for caregiver relief, to enable caregivers to be temporarily relieved from their caregiving responsibilities be it in-home care, adult day care, and overnight respite in LTC homes;
11. A multidisciplinary team approach and effectively and consistent communication amongst the healthcare providers and provider agencies on the issues of senior care and related available services.

These suggested interventions translate into problem-solving and behaviour management interventions have been found to demonstrate the greatest effectiveness (Pusey & Richards, 2009). Caregiver support groups are also highly recommended as a coping strategy. Caregiving is a partnership where one person reveals their pain, brokenness and vulnerability to another through a relationship of trust; they work together towards healing and wholeness (O'Rourke & Dufour, 2012). As the baby boomers and their parents' age, the number of Canadian seniors requiring care will increase. Therefore, their support and recognition by the current Canadian healthcare

system will go a long way to sustain the already stretched dollar amount for healthcare for seniors.

Implications for Practice, Action, Future Research, and Social Change

Caregiving for seniors impacts heavily on the lives of the caregivers physically, mentally, emotionally and psychologically, all of which increases feeling of being trapped with no means to escape. The amount of stress indicated in this study originates from the responsibilities of assuming a caregiving role and the significant amount of time the caregivers are spending providing care. This in turn translates to missing time out of their own personal relationships with their own families and friends. A number of needed resources have been suggested by the caregivers themselves and include a need for respite care, greater amounts of social and emotional support, CCAC support and more information on services available. It is imperative to support the caregivers of seniors in their caregiving role; failure to do so will have detrimental effects to the physical, mental, social, and psychological well-being of not only the caregivers but also the seniors they care for.

The evidence presented in this study suggests that as the caregiving role increases, the threat to the overall well-being of caregivers become greater. Neuman (1995) defined a person as a being consisting of six subsystems: physiological; psychological; socio-cultural; spiritual; developmental, and; the environment. Support for caregivers needs to be based on these totalities of care needs in these subsystems. Furthermore, offered

services must be appropriate to the caregiver's needs. Services offered must be culturally appropriate and acceptable to the caregiver.

It is important to stress that simply providing a brochure or telephone number may not be as beneficial as actual linkages to services. In a study by Weuve, Boult and Morishita (2000), caregivers who were provided a detailed care management plan and linked directly to services reported less caregiver burden and stress than a control group, which was only provided written information and service referrals. The finding of this study creates opportunity for future research on the topic and issues of caregiving in all ages and health illnesses caregivers.

It is expected that the finding of this study will translate into a different way of providing care to seniors and their caregivers in Ontario as well as in Canada. The findings of this study can be applied to all caregivers all ages and healthcare conditions. Caring is a partnership where one person reveals their pain, brokenness and vulnerability to another. Through a relationship of trust, they work together towards healing and wholeness (O'Rourke & Dufour, 2012).

Project Strengths and Limitations

Strengths

The strength of this study is that it speaks to the real needs of caregivers of seniors through their own accounts of their personal experiences. Another strength of this study relates to the benefits of finding of resources that the caregivers themselves outlined would help them cope better with their caregiving role and responsibilities. The important strength of this study is that the participants are sampled from hospitals, communities,

and care facilities across the province of Ontario. The use of the evidence-based data is the critical strength of this study.

Limitations

On the other hand, the number of the participants is part of the limitation of the study because it may affect the generalizability of the results of this study. The study was limited to 25 participants who currently or previously provided care to seniors and were primary caregivers. Another limitation of this study is cultural aspect of caregiving was not studied in detail; therefore, this leaves room for future research study.

Project Recommendations

The finding of this study creates opportunity for future research on the topic and issues of caregiving in all ages and health statuses of caregivers. It is hoped that the finding of this study will translate into a different way of providing care to seniors and their caregivers in Ontario as well as in Canada. Providing care to senior caregivers will not only save money and resources, it will go a long way to improve the lives of Canadian aging seniors.

The finding of this study creates opportunity for future research on the topic and issues of caregiving in all ages and health statuses of caregivers. It is hoped that the finding of this study will translate into a different way of providing care to seniors and their caregivers in Ontario as well as in Canada. Providing care to senior caregivers will not only save money and resources, it will go a long way to improve the lives of Canadian aging seniors.

The following recommendations are based on the empirical findings of this project study. Evidence from this study has shown that older respondents have more stress and caregiver burden. Therefore, it is recommended that caregivers of seniors who are themselves senior citizens should receive more attention, more support, more information, more respite care and more assistance from CCAC than younger caregivers of senior citizens. This project also found that educated respondents have less stress and caregiver burden than caregivers of seniors who have less education. This finding suggests that educated caregivers may be able to more easily navigate the healthcare system and connect with healthcare providers and social support agencies than less educated respondents. Therefore it is recommended that greater efforts to provide support to less educated respondents be undertaken.

On the basis of the qualitative data analysis, it is recommended that healthcare provider agencies across the province of Ontario not operate in silos. In other words, it is imperative that each provider agency needs to provide adequate and appropriate public information of the services they are providing. Caregivers also noted that they want more help and assistance from CCAC specifically because the CCAC has come to be a reliable healthcare provider agency that caregivers of seniors are depending on and counting on for assistance.

It is further recommended that the provincial healthcare programs need to factor in the needs of caregivers in their funding programs equations, and this should be evaluated and considered during the funding programs formula the health care provider agencies in the communities.

To healthcare provider agencies, it is strongly recommended that they implement the following caregiver suggested resources, as the resources outlined below would help caregivers cope with the caregiver burden and stress they feel.

1. Adequacy of number of hours of support and adequacy of number of services for both care receivers and caregivers;
2. Better information to caregivers about available resources;
3. Easier access to respite care in a nursing home when needed;
4. Revamp the current LTC placement process of seniors without having to wait 2 years to 5 years before being placed in LTC home;
5. Training and education programs on how to navigate the health and social services available to make the process less difficult and complex;
6. Education and training how to provide care seniors including what to expect, and inclusion of the senior caregivers in the decision of how much care and who provides care to their senior care receivers;
7. Mandatory requirement governmental funded programs to make the public aware of the services they are providing to ensure that they are not operating in silos;
8. Individual counselling, organization of support groups, and caregiver training to assist caregivers in making decisions and solving problems relating to their caregiving roles;
9. Structure support, recognition senior caregivers by the healthcare system, caregiver support groups and governmental ministries;

10. Respite care for caregiver relief, to enable caregivers to be temporarily relieved from their caregiving responsibilities be it in-home care, adult day care, and overnight respite in LTC homes;
11. A multidisciplinary team approach and effectively and consistent communication amounts the healthcare providers and provider agencies on the issues of senior care and related available services.

Analysis of Self

Analysis of self as scholar, as practitioner, as project developer, and as a professional is critical at this stage of this project and appropriate.

As a compassionate self: I empathize with others and feel their pain in effort to provide healing. I aspire to treat others the way I like to be treated.

As a scholar: I am a believer in a lifelong learning; therefore, it is with hope and aspiration that the findings of this study will be translated into relieving the suffering I have seen in the faces and lives of caregivers of seniors. As a practitioner, the experiences I have gained from this project study will guide me in the way I provide care to all of my patients and their caregivers, as well as how I treat my colleagues who provide care to patients/clients.

As a project developer: I have experienced physical, mental, emotional and psychological feelings of joy, sadness, frustrations and happiness, but most importantly, the experiences of being a project developer has provided me with mental and psychological growth that is difficult to describe in words. The experiences will guide me for the rest of my personal and professional life.

As a professional: I have developed skills, knowledge, and experiences that will help in the way I deliver care to all of my patients and their caregivers. This project has taught me as a professional that there is a lot more to providing care than just providing the prescribed medications and treatments. This project has taught me creativity, advanced critical thinking and reasoning, and most importantly perseverance. As a professional, the journey of this project has taught me the true meaning of compassion which asks us to go where it hurts, to enter into place of pain of others, to share in brokenness, fear, confusion and anguish, expressing a full immersion into the condition of being human (O'Rourke & Dufour, 2012). It is through true care and compassion that healing and wholeness can be achieved, not just for me but also for both seniors and the caregivers of seniors.

Summary and Conclusions

Caregivers typically struggle with more than one caregiving concern and the responsibilities associated with caregiving. A review of current literature demonstrates that caring for seniors influences the stress levels of the caregiver. Evidence from various literature and research reviews points to the fact that there are few current available supports and resources available for caregivers of seniors, and that many of these resources are either difficult to obtain or are limited. This project set about to address two questions that are linked in scope. First, this project sought to understand if caring for seniors predicts the level of stress a caregiver experiences. Second, this project sought to understand what resources would help senior caregivers who provide care to Ontario seniors cope with the stress they experience.

The first research question, to understand if caring for seniors predicts the level of stress a caregiver experiences, was investigated via statistical means. When all the statistical analysis of result of questionnaire survey was analyzed, the results suggested that as the age of a respondent increased, the level of caregiver burden and caregiver stress also increased. The results also suggest that as the educational level of a respondent increased, the level of caregiver burden and caregiver stress decreased. The second question sought to understand what resources would help senior caregivers who provide care to Ontario seniors cope with the stress they experience. The second question was investigated via qualitative data analysis means. A content analysis (Creswell, 2011) was conducted on the open-ended data gathered via Question 35 of the survey. Question 35 of the survey asked respondents the following question: What resources would help you to feel less stressed as a caregiver?

Based on the accounts of the caregivers themselves, a lists of eleven resources have been outlined which are evidence based in practice to alleviate the stress the caregivers experience from their caregiving role and responsibilities. This project determined that resources flexible enough to meet the unique needs of different caregivers can be most successful to prevent cookie cutter resources for every caregiver of a senior citizen. It is important to incorporate multiple aspects of resources to better position to affect positive outcomes for caregivers. The effects of implementation of any resources design would benefit from future investigations in this area. It is important to note that the application of these resources has shown outstanding successful results during my various clinical placement efforts.

Unfortunately, most programs and studies are concerned only with care receiver needs and outcomes. Little is known about the impact of stress on the health of the caregivers of seniors, nor is it clear what resources caregivers of seniors would need to help them cope with their stress. The main two quantitative findings that emerged as part of the data analysis of this study shows the following: (a) as a respondent gets older, their caregiver burden and their stress increases; (b) more educated respondents have less caregiver burden and less stress. These are the only two statistically significant findings in this study. With respect to the qualitative data analysis, there were only five findings within the data: (a) caregivers want more support; that is, more emotional support and more social support; (b) caregivers want more information on how to be a better caregiver; (c) caregivers want more respite care, mainly because (d) caregivers are suffering from compassion fatigue, and; (e) caregivers want more help and assistance from CCAC specifically and the government in general in the form of tax incentives and caregiver allowances. The finding of this project suggests that there is an important trend emerging with respect to caring for seniors. This trend is that seniors and their caregivers want to be involved in the care decisions made for the seniors. This emerging trend is creating a challenge that community services and governmental agencies must address in an effort to keep seniors and their caregivers out of acute care hospital. Addressing this trends in senior care will increase informal senior care giver satisfaction, promote wellness, and reduce caregivers' stress.

Section 5: Scholarly Product for Dissemination

PRACTICAL APPLICATION AND MANAGEMENT

The Impact of Caring for Seniors on the Caregiver's Stress Level

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INTRODUCTION

When a senior can no longer care for him or herself, and when that senior cannot access a LTC facility, a caregiver must step up and provide support for the senior. In society today, older adults and their caregivers often face situations which increase the caregiver's stress levels, such as the seniors' difficulty with mobility, safety problems, falls, cognitive deficits, fecal and urinary incontinence, chronic health conditions and psychosocial behavioral changes. Caregiver burnout occurs when people are stretched beyond their capacity to provide assistance. In other words, when caregivers report high levels of stress, depression, and difficulties in continuing to provide care (Health Council of Canada, 2012), they are by definition burnt out. There are very few resources available to help caregivers to cope with the stress they experience from caregiving.

Objective. The purpose of this project is to conduct a needs assessment of caregivers of senior citizens in Ontario, Canada. This project set about to address two questions that are linked in scope. First, this project sought to understand if caring for seniors predicts the level of stress a caregiver experiences. Second, this project sought to understand what resources would help senior caregivers who provide care to Canadian seniors cope with the stress they experience.

Method. This project used a needs assessment methodological design. A needs assessment is best described as the process by which information as part of an assessment is collected so as to determine how many people in a community need a particular service. A needs assessment is often accomplished through the use of a quantitative needs assessment survey (Monette et al., 2002; Singleton and Straits, 2010). Therefore, a caregiver questionnaire survey was used to conduct this needs assessment.

RECOMMENDATIONS

Questionnaire. The first project question, to understand if caring for seniors predicts the level of stress a caregiver experiences, was investigated via statistical means. Inferential statistics tests were used to see if there was a difference in the Caregiver Burden Inventory scale (CBI) as a function of the demographic factors. Inferential tests were also used to see if there is a difference the question that measures caregiver stress on a scale of 1 to 10 (Q34).

Participants. The ages of the caregivers who participated in this study range from 45 to 85 years, and the sample consisted of both males and females. The data included information from 25 participants.

RESULTS

The quantitative results suggest that as a caregiver gets older, the level of their caregiver burden increases, and their stress increases. The quantitative results also indicate that higher levels of education result in less stress and less caregiver burden among caregivers.

With respect to the qualitative data analysis, there were only five findings within the data: (a) caregivers want more support, that is, more emotional support and more social support; (b) caregivers want more information on how to be a better caregiver; (c) caregivers want more respite care, mainly because (d) caregivers are suffering from compassion fatigue, and; (e) caregivers want more help and assistance from CCAC specifically and the government in general in a way of tax incentives and caregiver allowances.

Based on the accounts of the caregivers themselves, a lists of eleven resources has been outlined which are evidence based in practice to alleviate the stress the caregivers experience from their caregiving role and responsibilities.

These proposed resources are as follows: Adequacy of number of hours of support and adequacy of number of services for both care receivers and caregivers;

- Better information to caregivers about available resources;
- Easier access to respite care in a nursing home when needed;
- Revamp the current LTC placement process of seniors without having to wait 2 years to 5 years before being placed in LTC home;
- Training and Education on how to navigate the health and social services available to make the process less difficult and complex;
- Inclusion of the senior caregivers in the decision making process of how much care and who provides care to their senior care receivers;
- Mandatory requirement on governmental funded programs to make the public aware of the services they are providing to ensure that they are not operating in silos;
- Individual counseling, organization of support groups, and caregiver training to assist caregivers in making decisions and solving problems relating to their caregiving roles;
- Structured support and recognition senior caregivers by the healthcare system and support for caregiver support groups by the governmental ministries.
- Respite care for caregiver relief, to enable caregivers to be temporarily relieved from their caregiving

responsibilities be it in-home care, adult day care, and overnight respite in LTC homes;

- A multidisciplinary team approach and effectively and consistent communication amounts the healthcare providers and provider agencies.

It is important to incorporate multiple aspects of resources as discovered in this project to better position to affect positive outcomes for caregivers. The effects of implementation of these futuristic resources design would benefit from future investigation.

Summary of Recommendations: The finding of this study creates opportunity for future research on the topic and issues of caregiving in all ages and health statuses of caregivers. It is hoped that the finding of this study will translate into a different way of providing care to seniors and their caregivers in Ontario as well as in Canada. Providing care to senior caregivers will not only save money and resources, it will go a long way to improve the lives of Canadian aging seniors.

The finding of this study creates opportunity for future research on the topic and issues of caregiving in all ages and health statuses of caregivers. It is hoped that the finding of this study will translate into a different way of providing care to seniors and their caregivers in Ontario as well as in Canada. Providing care to senior caregivers will not only save money and resources, it will go a long way to improve the lives of Canadian aging seniors.

The following recommendations are based on the empirical findings of this project study. Evidence from this study has shown that older respondents have more stress and caregiver burden. Therefore, it is recommended that caregivers of seniors who are themselves senior citizens should receive more attention, more support, more information, more respite care and more assistance from CCAC than younger caregivers of senior citizens. This project also found that educated respondents have less stress and caregiver burden than caregivers of seniors who have less education. This finding suggests that educated caregivers may be able to more easily navigate the healthcare system and connect with healthcare providers and social support agencies than less educated respondents. Therefore it is recommended that greater efforts to provide support to less educated respondents be undertaken.

On the basis of the qualitative data analysis, it is recommended that healthcare provider agencies across the province of Ontario not operate in silos. In other words, it is imperative that each provider agency needs to provide adequate and appropriate public information of the services they are providing. Caregivers also noted that they want more help and assistance from CCAC specifically because the CCAC has come to be a reliable healthcare provider agency that caregivers of seniors are depending on and counting on for assistance.

It is further recommended that the provincial healthcare programs need to factor in the needs of caregivers in their funding programs equations, and this should be evaluated and considered

during the funding programs formula the health care provider agencies in the communities.

CONCLUSION

Caregivers typically struggle with more than one caregiving concern and the responsibilities associated with caregiving. A review of current literature demonstrates that caring for seniors influences the stress levels of the caregiver. Evidence from various literature and research reviews points to the fact that there are few current available supports and resources available for caregivers of seniors, and that many of these resources are either difficult to obtain or are limited. This project set about to address two questions that are linked in scope. First, this project sought to understand if caring for seniors predicts the level of stress a caregiver experiences. Second, this project sought to understand what resources would help senior caregivers who provide care to Ontario seniors cope with the stress they experience.

The first research question, to understand if caring for seniors predicts the level of stress a caregiver experiences, was investigated via statistical means. When all the statistical analysis of result of questionnaire survey was analyzed, the results suggested that as the age of a respondent increased, the level of caregiver burden and caregiver stress also increased. The results also suggest that as the educational level of a respondent increased, the level of caregiver burden and caregiver stress decreased. The second question sought to understand what resources would help

senior caregivers who provide care to Ontario seniors cope with the stress they experience. The second question was investigated via qualitative data analysis means. A content analysis (Creswell, 2011) was conducted on the open-ended data gathered via Question 35 of the survey. Question 35 of the survey asked respondents the following question: What resources would help you to feel less stressed as a caregiver?

Based on the accounts of the caregivers themselves, a lists of eleven resources have been outlined which are evidence based in practice to alleviate the stress the caregivers experience from their caregiving role and responsibilities. This project determined that resources flexible enough to meet the unique needs of different caregivers can be most successful to prevent cookie cutter resources for every caregiver of a senior citizen. It is important to incorporate multiple aspects of resources to better position to affect positive outcomes for caregivers. The effects of implementation of any resources design would benefit from future investigations in this area. It is important to note that the application of these resources has shown outstanding successful results during my various clinical placement efforts.

Unfortunately, most programs and studies are concerned only with care receiver needs and outcomes. Little is known about the impact of stress on the health of the caregivers of seniors, nor is it clear what resources caregivers of seniors would need to help them cope with their stress. The main two quantitative findings that emerged as part of the data analysis of this study shows the following: (a) as a respondent gets older, their caregiver burden and

their stress increases; (b) more educated respondents have less caregiver burden and less stress. These are the only two statistically significant findings in this study. With respect to the qualitative data analysis, there were only five findings within the data: (a) caregivers want more support; that is, more emotional support and more social support; (b) caregivers want more

information on how to be a better caregiver; (c) caregivers want more respite care, mainly because (d) caregivers are suffering from compassion fatigue, and; (e) caregivers want more help and assistance from CCAC specifically and the government in general in the form of tax incentives and caregiver allowances.

References

- Allison, P. D. (2001). *Missing Data*. Thousand Oaks, CA: Sage.
- Amelta, E.J. (2010). Presentation of illness in older adults. *Association of Geriatric Nurses Journal*, 83(2), 372-389.
- Ampalam, P., Gunturu, S. & Padma, V. (2012). A comparative study of caregiver burden in psychiatric illness and chronic medical illness. *Indian Journal of Psychiatry*, 54(3), 239–243. doi: 10.4103/0019-5545.102423
- Babbie, E. (2013). *The Practice of Social Research, 13th edition*. Belmont, CA: Wadsworth.
- Bliss, J. (2012). Human subjects in research, CPHS. Retrieved from www.cphs@csumb.edu
- Burns, N., & Grove, S.K., (2009). *The practice of nursing research: Appraisal, synthesis, and generation of evidence*. (6th ed.). St. Louis, MO: Saunders Elsevier Inc.
- Bryan, K. (2010). Policies for reducing delayed discharge from hospital. *British Medical Bulletin*, 95, 33-46. doi: 10.1093/bmb/ldq020
- Bryant-Lukosius, D. (2004). Conducting a Needs Assessment. McMaster University, City, Province, Country. [Unpublished post-doctoral presentation]
- Byrne, M. W., & Keefe, M. R. (2007). Building research competence in nursing through mentoring. *Journal of Nursing Scholarship*, 34(4), 391-396.
- Care Planning Partners Inc. (2012). *The care guide. Assisted living*. Retrieved from <http://www.thecareguide.com/AssistedLiving/Default.aspx>

- Canadian Health Services Research Foundation (2011). *Better With Age: Health Systems Planning for the Aging Population—Synthesis Report*, Ottawa, Ont.: Author.
- Canadian Home Care Association. (2008). *Portraits of home care in Canada*. Mississauga, ON: Author.
- Canadian Home Care Association. (2008). *Portraits of home care in Canada*. Mississauga, ON: CHCA
- Canadian Institute for Health Information. (2009). *Alternate level of care in Canada*. Ottawa, ON: CIHI
- Canadian Institute for Health Information. (2009). *Alternate level of care in Canada*. Ottawa, ON: CIHI.
- Canadian Institute for Health Information. (2011). *Health care in Canada, 2011: A focus on seniors and aging*. Ottawa, ON: CIHI.
- Canadian Study of Health and Aging Working Group. (2005). Patterns of caring for people with dementia in Canada: the Canadian Study of Health and Aging. *Canadian Journal of Aging*, 13, 470-487.
- Canadian Home Care Association (2001). Commission on the future of health care in Canada: Formal submission from the Canadian Home Care Association. Ottawa, ON: Canada.
- Cairl, R., & Kosberg, J. (1993). The interface of burden and level of task performance in caregivers of Alzheimer's disease patients: An examination of clinical profiles. *Journal of Gerontological Social Work*, 19, 133-151.

- Cameron, S.D. (2003). *This day is for me: Caring for the caregivers*. Montreal, QC: J.W. McConnell Family Foundation.
- Cranswick, K. & Dosman, D. (2008). *Eldercare: What we know today*. Ottawa, ON: Statistics Canada.
- Canadian Caregiver Coalition. (2008). *A framework for a Canadian caregiver strategy*. Mississauga, ON: Canadian Caregiver Coalition. Retrieved from <http://www.ccc-ccan.ca/media.php?mid=229>
- Caserta, M. S., Lund, D. A., & Wright, S. D. (1996). Exploring the caregiver burden inventory (CBI): Further evidence for a multidimensional view of burden. *International Journal of Aging and Human Development*, 43(1), 21-34.
- Chou, K., Chu, H., Tseng, C., & Lu, R. (2003). The measurement of caregiver burden. *The Journal of Medical Sciences*, 23(2), 73-82.
- Chou, K., Jiann-Chyun, L., & Chu, H. (2002). The reliability and validity of the Chinese version of the caregiver burden inventory. *Nursing Research*, 51(5), 324-331.
- Costa, A.P., & Hirdes, J.P. (2010). Clinical characteristics and service needs for alternative level of care patients waiting for long-term care in Ontario hospitals. *Journal of Health Policy*, 6 (1), 32-46.
- Cody, W, (2006). *Philosophical and theoretical perspectives for advanced nursing practice*, (4th ed.). Sudbury, MA: Jones and Bartlett Publishers.
- Cooper, R. K. (2010). *Stress map: personal diary edition: The ultimate stress management, self-assessment and coping guide developed by Essi Systems, Inc.* Essi Systems.

- Covinsky, K.E, Palmer, R.M, Fortinsky R.H, Counsell S.R, Stewart A.L, Kresevic D, Burant C.J, & Landefeld C.S. (2008). Loss of independence in activities of daily living in older adults hospitalized with medical illnesses: increased vulnerability with age. *Journal of American Geriatrics Society*, 51, 451–458. doi: 10.1046/j.1532-5415.2008.51152.x.
- Creswell, J. W. (2011). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.)*. Upper Saddle River, NJ: Pearson Education.
- Cronbach L. J. (1970). *Essentials of Psychological Testing*. Harper & Row.
- Day J. R., & Anderson, R.A. (2011). Compassion Fatigue: An Application of the Concept to Informal Caregivers of Family Members with Dementia. *Nursing Research and Practice*, Article ID 408024. 10 pages.
- DiCensor, A., Guyatt, G., & Ciliska, D. (2005). *Evidence-based nursing. A guide to clinical practice*. St. Louis, MO: Mosby, Inc.
- DePalma, J. A., & McGuire, D. G. (2005). Research. In A. B. Hamric, J. A. Spross, & C. M. Hanson (Eds.), *Advanced practice nursing: An integrative approach* (3rd ed.). Philadelphia, PA: SaunderDuthie, S.J., Whalley, L.J., Collins, A.R., Leaper, S., Berger, K., & Deary, I.J. (2008). Homocysteine, B vitamin status, and cognitive function in the elderly. *American Journal of Clinical Nutrition*, 75(5), 908-913.

- Ducharme, F., Levesque, L., Giroux, F., & Lachance, L. (2005). Follow-up of an intervention program for caregivers of a relative with dementia living in a long-term care setting: Are there any persistent and delayed effects? *Aging & Mental Health*, 9, 461-469.
- Ducharme, F., Lévesque, L., Caron, C., Pinsonnault, E., & Girouard, D. (2009). Support to Caregivers Needs Assessment: An Innovative Tool Called Entente sur le soutien aux proches-aidants (agreement on support to caregivers. Health and Social Services- University Institutes of Geriatrics of Sherbrooke, volume 11, issue 1, Quebec, Canada.
- Dupuis, S. L., Epp, Tim, & Smale, Bryan (2004). Caregivers of Persons with Dementia, Roles, Experiences, Supports and Coping. A Literature Review. Alzheimer Research and Education Program, University of Waterloo, Ontario, Canada.
- Evans, M. (2008). *Essi Systems Inc.: Recommended and promising practices for situational assessment tools*. San Francisco, CA. Retrieved from http://www.thcu.ca/workplace/sat/pubs/sat_0030_v102.pdf
- Family Caregiver Alliance. (2012). Caregiver assessment: Principles, guidelines and strategies for change, Volume I. San Francisco, CA: Author.
- García-Alberca, J. M., Lara, J. P., & Berthier, M. L. (2011). Anxiety and depression in caregivers are associated with patient and caregiver characteristics in Alzheimer's disease. *The International Journal of Psychiatry in Medicine*, 41(1), 57 – 69. doi: 10.2190/PM.41.1.f

- Gottlieb, A.S, Caro. F. (1999). Extending the Effectiveness of Home Care through Low-Cost Adaptive Equipment. *Public Policy and Aging Report*, 10(1):13–5.
- Gottlieb, B, & Johnson, J. (2000). Respite programs for caregivers of persons with dementia: A review with practice implications. *Aging and Mental Health*, 4, 119-129.
- Graf, C. (2006). Functional decline in hospitalized older adults. *American Journal of Nursing*, 106(1), 58-67. Retrieved from <http://journals.lww.com/ajnonline/pages/default.aspx>
- Grinfeld, E., Glossop, R., McDowell, I. & Danbrook, C. (2007). Caring for elderly people at home: the consequences to caregivers. *Canadian Medical Association Journal*, 157(8), 1101-1105.
- Guberman, N. (2006). Designing home and community care for the future: Who needs to care? In Grant, K.R., Amaratunga, C., Armstrong, P., Boscoe, M., Pederson, A., & Willson, K. (Eds.), *Caring for/caring about: Women, home care and unpaid caregiving* (pp. 75-90). Aurora, IL: Garamond Press.
- Harris, B. (2012). *Caregiver Stress Syndrome: Identifying Symptoms, Finding Solutions*. Washington, DC: Author. Retrieved from <http://www.caregiving.com>
- Hargrave, R. (2006). Caregivers of African-American elderly with dementia: A review and analysis. *Annals of Long-Term Care*, 14(10), 36-39.

- Hartmann, L., Wens, J., Verhoeven, Remmen, R. (2012). The effect of caregiver support interventions for informal caregivers of community-dwelling frail elderly: a systematic review. *International Journal of Integrated Care*, 12, 1-16.
URN:NBN:NL:UI:10-1-113108 / ijic2012-133 – <http://www.ijic.org/>
- Haleya, W. E., Gitlin, L. N., Wisniewski, S. R., Feeney Mahoney, D., Coone, D. W., Winterb, L., Corcoran, M., Schinfeld, S. & Ory, M. (2007). Well-being, appraisal, and coping in African-American and Caucasian dementia caregivers: Findings from the REACH study. *Aging and Mental Health*, 8(4), 316-329.
- Hodges, B. C., & Videto, D. M. (2011). *Assessment and planning in health programs* (2nd ed.). Sudbury, MA: Jones & Bartlett Learning.
- Health Council of Canada. (2012). *Seniors in need, caregivers in distress: What are the home care priorities for seniors in Canada?* Toronto: Health Council of Canada.
- Hollander, M.J., Miller, J.A., MacAdam, M., Chappell, N., & Pedlar, D. (2009). Increasing value for money in the Canadian healthcare system: New findings and the case for integrated care for seniors. *Healthcare Quarterly*, 12(1), 38-47.
Retrieved from <http://www.longwoods.com/publications/healthcare-quarterly>
- Jones, M. E. (2008). Clinical significance of research: A growing concern. *Canadian Journal of Nursing Research*, 24, 1-4.
- Judge, K.S., Cho, K., Gagnon, D., Driver, J.A., Kosik, N., Lanes, S., & Lawler, E. (2011). Partners in dementia care: A care coordination intervention for individuals with dementia and their family caregivers. *The Gerontologist*, 51 (2), 261-272.

- Kettner, P. M., Moroney, R. M., & Martin, L. L. (2013). *Designing and managing programs: An effectiveness-based approach* (4th ed.). Thousand Oaks, CA: Sage.
- Keefe, J., Guberman, N., Fancey, P., Barylak, L. & Nahmiash, D. (2008). Caregivers' Aspirations, Realities, and Expectations: The CARE Tool. *Journal of Applied Gerontology* 27(3), 286-308. doi: 10.1177/0733464807312236
- Kosberg, J. I., & Cairl, R. E. (1986). The cost of care index: A case management tool for screening informal care providers. *The Gerontologist*, 26(3), 273-278.
- Knickman, J., & Snell, E.K. (2010). The 2030 problem: Caring for aging baby boomers. *Health Service Research*, 37(4), 849–884. doi:10.1034/j.1600-0560.2002.56.x
- Lee, H., & Singh, J. (2010). Appraisals, burnout and outcomes in informal caregiving. *Asian Nursing Research*, 4(1), 32-44. doi: 10.1016/S1976-1317(10)60004-7
- Lim, S.C., Doshi V., Castasus, B., Lim, J.K., & Mamun, K. (2006). Factors causing delay in discharge of elderly patients in an acute care hospital. *Ann Acad Med Singapore*, 35, 27–32.
- Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage.
- Mathieu, F. (2008). *Running on empty: compassion fatigue in health professionals*. Retrieved from <http://www.compassionfatigue.org/pages/RunningOnEmpty.pdf>
- Miller, C.A., (2006). *Nursing for wellness in older adults: Theory and practice* (4th ed.). Cleveland, OH: Lippincott Williams and Wilkins.
- Meredith, G. (2006). *Respite for family caregivers program: Final evaluation report*. Hamilton, ON: J.W. McConnell Family Foundation.

- Monette, D. R., Sullivan, T. J. and DeJong, C. R. (2002). *Applied Social Research: Tools for the Human Services*. Fort Worth, TX: Harcourt.
- Morris, R.G, Morris, L.W., Britton, P.G. (2008). Factors affecting the emotional wellbeing of caregivers of dementia sufferers. *British Journal of Psychiatry*, 153, 147-156.
- Myers, A.M. (1988). Needs assessment: Broadening the perspective on its utility and timing. *Canadian Journal of Program Evaluation*, 3(2), 103-113.
- Novak, M., & Guest, C. (1989). Application of a multidimensional caregiver burden inventory. *The Gerontologist*, 29(6), 798-803.
- Ontario Association of Community Access Centres (OACCAC). (2013). *Operating plan 2013-2014*. Ottawa, Canada, Author.
- Potter, P., & Perry, A.G. (2009). *The Canadian fundamentals of nursing* (4th. ed.). Toronto, CAN: Mosby Elsevier Canada Ltd.
- Public Health Agency of Canada. (2006). *Healthy aging in Canada: A new vision, a vital investment, from evidence to action* (Ottawa, Ont.: PHAC, 2006). Accessed from <http://www.phac-aspc.gc.ca/seniors-aines/alt-formats/pdf/>
- Reinhard, S. C, Given, B., Petlick, N. H., & Bemis, A. (2008). Supporting family caregivers in providing care. In Hughes, R. G. (Ed.), *Patient Safety and Quality: An Evidence-Based Handbook for Nurses* (Chapter 14). Rockville (MD): Agency for Healthcare Research and Quality.
- Ritchey, F. (2008). *The Statistical Imagination: Elementary Statistics for the Social Sciences, 2nd Edition*. Boston, MA: McGraw-Hill.

- Roberts, J., Brown, R., & Gafni, A. (2007). Specialized continuing care models for persons with dementia: A systematic review of the research literature. *Canadian Journal of Aging, 19*, 106-126.
- Sabo, B.M., (2006). Compassion fatigue and nursing work: can we accurately capture the consequences of caring work? *International Journal of Nursing Practice, 12*(3), 136-142.
- Smale, B. & Dupuis, S. L. (2004). *In Their Own Voices: Guiding Principles & Strategies for Change Identified by and for Caregivers in Ontario*. University of Guelph, Guelph, Ontario, Canada.
- Schulz, R., Visintainer, P., & Williamson, G. M. (2009). Psychiatric and physical morbidity effects of caregiving. *Journal of Gerontology, 45*, 181-191.
- Schumacher, K., Beck, C.A. & Marren, J. M. (2006). Family caregivers: caring for older adults, working with their families. *American Journal of Nursing, 106*(8), 40-49.
- Sinha, S, K., (2012). *Living longer, living well, seniors strategy for Ontario*. Toronto, Ontario, Canada: Author.
- Simmons, B. (2010). Clinical reasoning: concept analysis. *Journal of Advanced Nursing, 66*(5), 1151–1158.
- Shamoo, A.E., & Resnik, B.R. (2007). *Responsible conduct of research*. Oxford, UK: Oxford University Press.
- Singleton, R. A. and Straits, B. C. *Approaches to social research, 5th edition*. New York: Oxford University Press.

- Spillman, B. C., & Long, S. K. (2009). Does high caregiver stress predict nursing home entry? *Inquiry, 46*(2), 140–161.
- Sprent, P. (1989). *Applied nonparametric statistical methods*. Boca Raton, FL: Chapman & Hall/CRC.
- South West Community Care Access Centre. (2012). London, Ontario, Canada: Author.
- Statistics Canada, Demography Division. (2011). *Population projections for Canada, Provinces and Territories: 2009 to 2036* (Ottawa, Ont.: Minister of Industry, 2011), p. 50, accessed from <http://www.statcan.gc.ca/daily-quotidien/100526/dq100526b-eng.htm>.
- Stone, R.I, Keigher, S.M., “Toward an Equitable, Universal Caregiver Policy: The Potential of Financial Supports for Family Caregivers” *Journal of Aging and Social Policy*. 1994;6(1–2):57–75. [PubMed]
- Sutherland, J.M. & Trafford Crump, R. (2011). *Exploring alternative level of care (ALC) and the role of funding policies: An evolving evidence base for Canada*. Ottawa, ON: Canadian Health Services Research Foundation.
- Sutton, M., Grimmer-Somers, K., Jeffries, L. (2008). Screening tools to identify hospitalized elderly patients at risk of functional decline: a systematic review. *International Journal of Clinical Practice, 62*(2), 1900-1909.
- Tabachnik, B.G., & Fidell, L.S. (2013). *Using multivariate statistics* (6th ed.). Boston, MA: Allyn & Bacon.

- Takaiemail, M., Takahashi, M., Iwamitsu, Y., Ando, N., Okazaki, S., Nakajima, K., Oishi, S., & Miyaoka, H. (2009). The experience of burnout among home caregivers of patients with dementia: Relations to depression and quality of life. *Archives of Gerontology and Geriatrics*, 49(1), 1-5. doi: 10.1016/j.archger.2008.07.002
- Takaiemail, M., Takahashi, M., Iwamitsu, Y., Oishi, S., & Miyaoka, H. (2011). Subjective experiences of family caregivers of patients with dementia as predictive factors of quality of life. *Psychogeriatrics*, 11(2), 98–104. doi: 10.1111/j.1479-8301.2011.00354.x
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55.
- Terry, A. J. (2012). *Clinical research for the doctor of nursing practice*. Mississauga, Ontario: Jones & Bartlett Learning.
- Tesch, R, 2006, *Qualitative research: Analysis, types and software tools*. Falmer, London.
- Wagner, E.H., Austin, B.T., Korff, M. (1996). Improving outcomes in chronic illness. *Managed Care Quarterly*, 4(2),12–25.
- Wagner, E.H., Davis, C., Schaefer, J., Von Korff, M., Austin, B. (1997). A survey of leading chronic disease management programs: Are they consistent with the literature? *Managed Care Quarterly*, 7(3), 56–66.
- Walker, D. (2011). *Caring for the Aging Populaation and Adressing Alternative Level of Care*. Toronto, Canada, Author.

- Werner, Carrie A. (2011). *Older population: 2010*. Washington, DC: United States Census Bureau. Retrieved from www.census.gov/prod/cen2010/briefs/c2010br-09.pdf
- White, K. M., & Dudley-Brown, S. (2012). *Translation of evidence into nursing and health care practice*. New York, NY: Springer.
- Yin, K. (2005). *Case study research: Design and methods*. Newbury Park, CA: Sage Publications.
- Yurko-Mauro, K., McCarthy, D., Rom, D., Nelson, E.B., Ryan, A.S., Blackwell, A., MIDAS Investigators. (2010). Beneficial effects of docosahexaenoic acid on cognition in age-related cognitive decline. *Alzheimer's Dementia*, 6, 456-64.
- Zaccagnini, M. E., & White, K. W. (2011). *The doctor of nursing practice essentials: A new model for advanced practice nursing*. Sudbury, MA: Jones & Bartlett Publisher.

Appendix A: Caregiver Stress Scale Inventory Questionnaire

Survey No: _____

Directions: The purpose of this survey is to help a doctor of Nurse Practice student understand and determine the levels of stress that caregivers of senior citizens experience, and to highlight the resources that caregivers would like to have to help them deal with their stress. Please answer each question carefully and honestly. Your name will never be used. Your information is entirely confidential and will be used only for the purpose of the study proposal. This survey will take approximately 20 minutes of your time. Thank you for participating and to adding to my proposal. It is important that you understand that your participation is strictly voluntary in nature, if you feel uncomfortable or do not feel right participating you can stop without penalty or reprisals. If you wish to keep a copy of your signed consent, you are more than welcomed to do so. If you have any questions regarding this project study please contact Georgina Njoku at 226-650-7932.

Age What is your age? _____ years

Gender What is your gender?

- Male
- Female

Alone Do you live alone?

- No
- Yes

Marital status: What is your current marital status?

- Married
- widowed
- divorced
- separated
- in a relationship with an unmarried partner
- never married

Family Do you have children of your own?

- No
- Yes

Employment Are you currently employed full time, part time or are you unemployed?

- Full time
- Part time
- Unemployed

- Income** Your household's income (before taxes) from all sources this year will be:
- \$0-\$10,000
 - \$10,001-\$20,000
 - \$20,001-\$30,000
 - \$30,001-\$40,000
 - \$40,001-\$50,000
 - \$50,001-\$60,000
 - \$60,001-\$70,000
 - \$70,001-\$80,000
 - \$80,001-\$90,000
 - \$90,001-\$100,000
 - more than \$100,000 dollars
 - don't know / not sure
- Economy** Do you feel financially secure?
- No
 - Yes
- Education** What is the highest grade or year of school you completed (including home school)?
- never attended school or only attended kindergarten
 - grades 1 – 8 (elementary)
 - grades 9 – 11 (some high school)
 - grade 12 or GED (high school graduate)
 - college 1 year to 3 years (some college or associate degree)
 - college 4 years or more (bachelor degree or higher)

Questions

For each item please indicate the answer that represent how often the statement describes your feelings about the person you provide care for.

No 1. He/she needs my help to perform many daily tasks.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 2. He/she is dependent on me.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 3. I have to watch him/her constantly.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 4. I have to help him/her with many basic functions.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 5. I don't have a minute's break from his/her chores.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 6. I feel that I am missing out on life.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 7. I wish I could escape from this situation.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 8. My social life has suffered.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 9. I feel emotionally drained due to caring for him/her.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 10. I expected that things would be different at this point in my life.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 11. I'm not getting enough sleep.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 12. My health has suffered.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 13. Caregiving has made me physically sick.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 14. I'm physically tired.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 15. I don't get along with other family members as well as I used to.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 16. My caregiving efforts aren't appreciated by others in my family.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 17. I've had problems with my marriage (or other significant relationship).

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 18. I don't get along as well as I used to with others.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 19. I feel resentful of other relatives who could but do not help.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 20. I feel embarrassed over his/her behavior.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 21. I feel ashamed of him/her.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 22. I resent him/her.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 23. I feel uncomfortable when I have friends over.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 24. I feel angry about my interactions with him/her.

- Never 0
- Rarely 1
- Sometimes 2
- Quite frequently 3
- Nearly always 4

No 25. On a scale of 1 to 10, with 10 being high and 1 being low, overall, how stressed do you feel in caring for your relative?

1 2 3 4 5 6 7 8 9 10

No 26. What resources would help you to feel less stressed as a caregiver? Please write your answer in the box below.

SCORING KEY, QUESTIONS 1-24:

0 to 25 = little or no stress

25 to 50 = mild to moderate stress

50 to 75 = moderate to severe stress

75 to 100 = severe stress

Appendix B: Permission to use the Novak and Guest (1989) questionnaire survey tool

Title: Application of a
Multidimensional Caregiver
Burden Inventory
Author: Mark Novak, Carol Guest
Publication: Gerontologist, The
Publisher: Oxford University Press
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Appendix C: Curriculum Vitae

Georgina Njoku

gina_ugo@hotmail.com

Career Objective:

- Senior Leadership/Management position that will utilize my advanced nursing skills, knowledge, skills and educational level.
- Design strategies to deal with health and social determinants of health using case management protocol and support.
- Use: client focus, problem solving, transformational leadership and teamwork skills to contribute to the success of the organization.
- To implement and promote best practices guidelines in an organization and to develop, write and implement policies and grant proposal initiatives.

Qualifications:

- Excellent interpersonal and organizational skills;
- Excellent computer and communication skills;
- Good knowledge of Local, Provincial and Federal health regulations and programs.
- Ability to thrive in a multi-tasked environment advanced planning skills; accountable, reliable; and proactive transformational leadership style

EDUCATION**Doctor of Nursing Practice (DNP) Student**

March, 2012-March,2015, Walden University, 650 South Exeter Street, Baltimore Maryland (MD), 21202, US.

Masters of Science in Nursing (MSN) Graduated June 2011

Leadership and Management Program: May 2009-June, 2011, Walden University, 650 South Exeter Street, Baltimore Maryland (MD), 21202, US.

Expert Gerontological Nursing (Certified Gerontologist, June 2012)

Canadian Nurses Association, Ottawa, Ontario, Canada

Proposal Leader for Meadow Park London**Completed Proposal**

- Designed and Facilitation of interdisciplinary teams process for implementing this pilot Best Practice guideline for Delirium, Depression and Dementia (3Ds), Responsive behaviour guidelines and design and implementation as per the Ministry of Health and Long-Term Guidelines. Pain Assessment guidelines and management specific to the home, and allowed permission for the home to share these processes and outcomes corporate wide with the organization
- Completed the 3 phases of proposal identifying existing resources within the

guideline to adjust or implement suggestions within education for residents, families, and staff, documentation, policy, and interdisciplinary processes to improve care services while decreasing the risk of adverse events between residents and residents to staff due to Delirium, Depression and Dementia.

- Investigate and follow systematic processes for complaint resolution

Hons BScN degree: 2004- 2008 St. Francis Xavier University, Antigonish, Nova Scotia

Hons. B.A. Social Sciences: 1988-1992 University of Western Ontario, London, Ontario, Canada

RN Refresher Program 1995: School of Nursing, Fanshawe College of Applied Science and Technology and School of Nursing, Mohawk College of Applied Science and Technology, Hamilton, Ontario, Canada.

Diploma: Nursing and Health Care Leadership/Management Program 2004. McMaster University, Hamilton, Ontario, Canada.

Diploma: Civil and Criminal Investigation 1994
ITI investigation Training Institution London, ON. Canada

Diploma: Health office Administrator Program 1993
Fanshawe College of Applied Arts and Technology, London, ON.

Diploma 3 year General Nursing Program 1979-1981
School of Nursing, Our Lady of Lourdes Hospital
Ihiala, Anambra State, Nigeria.

EMPLOYMENT HISTORY

Hospital Clinical Advance Practice Nurse Student Practicum placement: 2014
ST.Thomas Elgin General Hospital

Hospital Placement Nurse Case Manager 2009- 2014 F/T: London Health Science Centre, Victoria Hospital, Westminster Campus and South Street.

Community Nurse Case Manager 2006 – 2009 F/T North West Team SWCCAC, London, Ontario.

- Comprehensive and holistic Health Assessment and Evaluation of patient condition and Ministry regulated criteria for home, long term care, complex care and restorative care health services
- Extensive collaboration and planning with both hospital inter-professional team members, patients, families and community partners to develop safe and timely discharge plans in surgery, medical and adult LTC placement at LHSC

- Westcampus and South Street.
- Working collaboratively with the multidisciplinary teams, provider agencies and LTC homes regarding, client service care planning, health funding, and goals of care.
 - Budget planning and management of assigned department and area.
 - Participation in SWCCAC region-wide integrated committee for developing standardized equipment and supplies ordering processes.
 - Interprofessional collaboration in care services delivery while ensuring applicable legislation and regulatory body standards are incorporated into developed practices and care planning for clients.
 - Leading staff in culture shifting and process changes to accommodate increased and complex care needs of Clients and expanding on scope of practice

Community Nurse Case Manager 2005 – 2006 North West Team SWCCAC, London, Ontario continued

- Supporting excellence in care through following existing policies for positive disciplinary approaches with staff where necessary & facilitating annual performance evaluations for my team supporting staff
- Accessing and utilizing quality reports to influence resident care through RAI _HC, organizational quality indicators, client and family feedback

RN Supervisor: 2002-2003 P/T: Longworth Long-term Care, Nursing Home

RN Team Leader: 1996-2001 F/T: London Psychiatric Hospital London (Regional Mental Health care) London, ON.

Instructor P/T: 2009-2011, Physical Health Assessment 1&11(Laboratory Practice 1 Nrsg-1049-01LC) – Fanshawe College of Applied Arts and Technology, London Campus, London, ON.

Staff Tutor: Visions Investigations London, London, ON.

Director: 2011- Present P/T
Nursing Health Home Care and Training Services
London, Ontario

Unit Manage/RN Supervisor: 2001-2011
Dearness Home Services, The Corporation of the **City of London**, London, ON.

RN Supervisor: 2003-2006 P/T: Versa Care, Elmwood Place Nursing Home
London, ON.

Research Assistant Work
Fanshawe College of Applied Arts and Science

Meadow Park Nursing Home - London, ON

Best Practice Guidelines Implementation

(January 2011 – June 2011)

Research Supervisor Dr R. Harris and Dave Goddard (DOC)

Majority of responsibilities were based on pre-test data collection, tool development, and the post-instruction data collection with the use of the Interdisciplinary team members, Medical director, Nurse Practitioner, Residents/ family and stakeholders.

Licenses and Certificates

RN License: College of Nurses of Ontario

Date January, 2015 to December, 2015

Member: Registered Nurses' Association of Ontario (RNAO) January, 2015 to December, 2015

LAP: Legal Assistance Program

CNPS: Canadian Nurses' Protective Society: Eligible. **Human Rights and Equity**

Chair: Ontario Nurses' Association

January 2011 to Present

Certified Case Manager Certificate: 2006: Georgina College of Applied Arts and Technology, Orillia, ON

Certificate Gerontology Nursing: 2007: St. Francis Xavier University

Certified Legal Nursing Consulting Expert, 2010: Toronto, ON

Certificate of Completion: 2011 London: Personality Disorders, Institute for Brain Potential, Calgary, Alberta, Canada.

Certificate P.I.E.C.E.S. 2008: Educational program, Ontario Ministry of Health & LTC

Certificate of Completion: 2011: First Aid, CPR/AED Instructor/ Trainer:

Canadian Red Cross, London, ON.

Community Volunteer:

Board of Director Cross Cultural Learner Center, London Ontario

Board of Director: African Canadian Federation of London and Area

Soccer Coach: Men's Soccer League, London Ontario

Vice President: WAFRIKA Organization London Ontario.

Regional Chair: Human Rights and Equity for SWCCAC.

Hobbies: Soccer, Dancing, Reading and Jogging.

References Available Upon Request