# Living to 100 and Beyond in Canada with Dignity

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## Abstract

By 2031, life expectancy at birth may reach 82 years for Canadian males and 86 years for Canadian females. Approximately 3 percent of the Canadian population will be aged 85 or older, including an estimated 14,300 who will be aged 100 and over. Five in eight of those living at age 85 or older will be women and at age 100 and older, 4 in 5 will be women.

These statistics suggest that the composition of the population in 2031 will be different from today. Unquestionably, medical discoveries, healthier nutrition and lifestyles, economic prosperity and social support systems have all contributed to the significant increase in life expectancy. But is living longer a desirable goal in itself; especially if it is accompanied by inadequate wealth and concerns regarding how to manage one's savings, or loss of mental faculties and a requirement for institutionalization?

This paper argues that living longer with dignity is what is desirable and also that this should be an objective in designing specific social support systems for the elderly. The paper identifies and discusses certain areas where dignity is lacking or where the likelihood of living with dignity could be enhanced, including:

- Financial savings of the elderly, whether the extent of financial risk to which they are exposed is desirable, and the replacement of the Old Age Security (OAS) benefit, which today is a demogrant to applicants aged 65 and older, by a demogrant at triple the current level for applicants aged 85 and older to ensure that Canadians are not living without dignity solely due to financial hardship;
- Certain alternative living arrangements, better integrated with communities, designed to enable the building and retention of social capital, to better support the future elderly population which will be dominated by females;
- Those suffering from severe pain or mental illness, including those who are institutionalized who are unlikely to be living with dignity and to ever return to a life with dignity, and proposes that such individuals be able to receive medical assistance to end their lives, in circumstances defined by law.

The paper contributes to the literature on social capital by defining life with dignity in terms of financial, social and human capital. It updates earlier work from the 1990s to show that the percentage of older women living on their own is likely to decline in the future.

## 1. Introduction and Background

Google "myths of immortality," and in seconds, pages of links are available. People of various backgrounds and cultures for hundreds of years have fantasized and philosophized about living forever. Is not "living to 100 and beyond" today's version of immortality for the affluent countries in Western society? But when you dig deeper into the myths, merely living forever is not what is sought. If physical immortality is desired, it is typically physical immortality without pain and suffering, e.g., in good health not subject to torture. If spiritual immortality is sought, it is in some blissful state, certainly not in a state of eternal damnation.

In this paper, I argue that "living to 100 and beyond" is only a worthwhile goal if it is "with dignity." The definition of "with dignity" should be defined by society. I present examples of situations that I believe lack dignity; however, this list is not comprehensive. One's life may cease to have dignity before physical death occurs, if financial, human and/or social capital has been severely depleted.

There are three main lines of argument in this paper.

- Society should provide adequate protection to ensure that outliving one's financial assets is not by itself reason to be living life without dignity.
- Policy actions could be taken to reduce the likelihood that social capital will become severely depleted.
- Sound-minded individuals should be permitted to decide upon the conditions under which their life would lack such dignity that death would be preferred and choose to have their life end if such circumstances occur.

Statistics will be presented and numbers analyzed to provide substance for the arguments in this paper. Nonetheless, many of the arguments are only supported by anecdotal experience. However, given the sensitive nature of the issues, it is difficult to do research in this area without offending some people. Before adopting the recommendations of this paper, it will be important for society to do the relevant research regarding individuals' preferences and the definition of dignity with which citizens are comfortable.

This paper discusses implications of current trends and conditions applied to population projections to 2031. In applying these trends and conditions, the implicit assumption is that there are no other changes in items such as disease treatment, onslaught of disease for certain age groups, etc. Undoubtedly, the world and the human conditions will continue to evolve and change, and developments in scientific, medical and other research can be expected to have an impact on the human condition in 2031. However, the approach of assuming no other changes provides a simpler and less contentious way to think about the future than one that attempts to incorporate speculation regarding future developments. This being said, the population projections from Statistics Canada on which this paper relies do make assumptions about demographic factors such as mortality, fertility and immigration, so there is a dynamic involved in the projections. The following Tables 2, 3 and 4 summarize Statistics Canada's low, moderate and high growth population projections for 2031 for various age-sex groupings, and Table 1 provides a comparison to July 1, 2005 population estimates (Belanger et al., 2005). Regardless of growth scenario, the Canadian population is expected to age over the next 25 years.

**TABLE 1**

**Estimated Population July 1, 2005**

| | **Males (thousands)** | **Females (thousands)** | **Males (Percent of total)** | **Females (Percent of total)** |
|---|---|---|---|---|
| **65 - 84** | 1,682.4 | 2043.2 | 5.21 | 6.33 |
| **85 - 99** | 150.7 | 336.5 | 0.47 | 1.04 |
| **100 and over** | 1.0 | 3.8 | Less than 0.01 | 0.01 |
| **Total Population** | 15,979.5 | 16,291.0 | 49.52 | 50.48 |

**TABLE 2**

**Estimated Population 2031 Low Growth Scenario**

| | **Males (thousands)** | **Females (thousands)** | **Males (Percent)** | **Females (Percent)** |
|---|---|---|---|---|
| **65 - 84** | 3,255.8 | 4,155.3 | 8.98 | 11.46 |
| **85 - 99** | 387.0 | 658.6 | 1.07 | 1.82 |
| **100 and over** | 2.6 | 10.4 | 0.01 | 0.03 |
| **Total Population** | 17,866.6 | 18,406.7 | 49.26 | 50.74 |

**TABLE 3**

**Estimated Population Moderate Growth Scenario**

| | **Males (thousands)** | **Females (thousands)** | **Males (Percent)** | **Females (Percent)** |
|---|---|---|---|---|
| **65 - 84** | 3,760.4 | 4,255.0 | 9.49 | 10.90 |
| **85 - 99** | 414.6 | 691.8 | 1.06 | 1.77 |
| **100 and over** | 2.9 | 11.4 | 0.01 | 0.03 |
| **Total Population** | 19,249.1 | 19,780.3 | 49.32 | 50.68 |

**TABLE 4**

**Estimated Population 2031 High Growth Scenario**

| | **Males (thousands)** | **Females (thousands)** | **Males (Percent)** | **Females (Percent)** |
|---|---|---|---|---|
| **65 - 84** | 3,872.4 | 4,354.3 | 9.26 | 10.41 |
| **85 - 99** | 442.9 | 725.4 | 1.06 | 1.73 |
| **100 and over** | 3.3 | 12.5 | 0.01 | 0.03 |
| **Total Population** | 20,647.1 | 21,163.7 | 49.38 | 50.62 |

The percentage of the population that will be female and aged 65 and over will increase from 7.4 percent in 2005 to 12.2 percent on the high growth scenario or to 13.3 percent on the low growth scenario by 2031. Female life expectancy is longer than male life expectancy. Canadian females tend to marry men who are older than they are. It is likely that for many married Canadian females, life will include a period of widowhood after the death of their spouse.

However, compared to 2005, the period during which women are living alone may diminish. Part of this change is as a result of improving male life expectancy. Note that the ratio of the elderly females to elderly males is expected to decline, except for the age group 100 and over. The ratio of elderly females age 65 and over to comparably aged males is projected to decline from 1.30 in 2005 to 1.19 in 2031. An even more dramatic decline will occur in the ratio of elderly females age 80 and over to comparably aged males that is projected to decline from 1.84 in 2005 to 1.46 in 2031. But by 2031, the ratio of elderly females 100 and over to comparably aged males will either stay at the 2005 level of 3.8 under the high growth scenario or increase to 4 or 3.9 under the low and medium growth scenarios respectively. By 2031 it is projected that 5 in 8 of those living at age 85 or older will be women and at age 100 and older, 4 in 5 will be women. Life with dignity must address the living arrangements of elderly women.

## 2. Outlining Dignity

I was very pleased to be asked to speak at the 2005 Symposium of Living to 100 and Beyond; however, when I advised two of my usually supportive relatives who were over 80 years of age, both responded: “Oh dear.” In follow-up discussions with them, it was clear that living to 100 and beyond was not something that they looked forward to or that they would view as valuable in its own right. Granted, this is a limited sample, but consider some other relevant factors about these two. They both lived on their own, their husbands were deceased, they both owned cars and were able to drive themselves and their friends, both had some physical illness, such as arthritis, high blood pressure, etc., but not so severe that they required walking devices, both had acute mental faculties and participated in volunteer and community activities. Compared to the general population over age 80, these two could be considered in “prime condition.” So why would living to 100 and beyond not be attractive to them?

The answer is that they realized that it was unlikely that they would be able to continue for another 15–20 years in similar health and be able to do the types of activities they were presently doing. But, more importantly, they did not want to be kept alive merely because life is considered valuable and precious, if they could not function and derive joy from life and provide others with joy.

One of these two persons stated repeatedly that if she fell ill and life-support systems including intravenous feeding were necessary to keep her alive, that she would rather be dead. Her written wishes specified that she not be on life support. In the last two years such a situation arose, and she has died.

The other person is younger than most of her friends, who are mainly in their 90s and some are over 100. Naturally she sees deterioration in her friends as they age. While not desired, deterioration due to aging can be accepted by her, except for certain forms. She has friends who are institutionalized because they suffer from severe Alzheimer’s disease—the patients are apparently not suffering greatly but one speculates that this is because they are not able to reflect upon or remember their situation or family; however, the family that visits faithfully the beloved patient is suffering. This is not a situation in which this person would wish to be living to 100

and beyond, i.e., as an institutionalized Alzheimer's patient unable to recognize and remember. Another type of situation she has observed among some friends is painful final illness, which although final, may persist for years. An example of such a situation would be lying in a hospital bed for months, in a coma-like state, heavily medicated to reduce the pain. This is not a desirable way to be living to 100 and beyond.

From the early years of the actuarial profession, actuaries have gathered information regarding the deceased, by walking through cemeteries looking at tombstones or reading obituaries. Based on the very interesting material presented in earlier symposia of this series, I have developed the practice of reading obituaries for those who have lived to 100 and beyond. Consider the difference in these excerpts from two obituaries.

"died July 14, 2006 at her home in London in her 102nd year…She was always interested and interesting, not only to her family but to her many friends and faithful caregivers. We are grateful for the exemplary care given her… [that] made it possible for her to live in the house she shared with [her husband] and where her children were raised, until she died."[1]

"1922-2006 – Sadly…died on December 16, although Alzheimer's had taken her away from us several years previously."[2]

I did not know either of these people and know nothing more about them than what I've read in the obituaries, but there is a striking difference in these two obituaries. The first person had likely deteriorated physically because there are repeated references to caregivers, but there is a sense that this individual lived and died with dignity. She "was always interested and interesting, not only to her family but to her many friends" and she lived until death in the family home. The other obituary was brief but suggests that although physical and final death occurred in 2006, the person had been taken away several years earlier. Are you beginning to get a sense of what dignity meant, at least within the examples provided?

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[1] Thompson obituary, The Globe and Mail, July 15, 2006.

[2] Whittall obituary, The Globe and Mail, Dec. 22, 2006.

## 2.1 Types of Capital

It is relatively common to talk about financial capital and human capital but less common to refer to social capital. Financial capital refers to financial assets. When considering the adequacy of one's preparedness for retirement, we consider accumulated financial assets and other assets that could be liquidated to provide income, as well as programs that provide income commitments, such as defined benefit pension plans or annuities.

Human capital is more difficult to define. It includes health stock, education and training, and it refers to the aggregated benefits from these undertakings that one possesses and that make one's life useful or valuable, in a non-financial sense.

Social capital is even more difficult to define. Some might argue that it forms part of human capital. For this paper, it will be treated as a separate capital component. Social capital refers to the internal social and cultural coherence of society, the norms and values that govern interactions among people and the institutions in which they are embedded (Rose 1999). It is the psychological and social well-being one derives from one's interactions with other human beings. Social capital is being studied for the benefits it can bring in sustainable development and alleviation of poverty (Grootaert, 1998). I will argue that social capital can be an important consideration in defining a life with dignity. At least three dimensions of social capital that have been identified in our relationships with other humans that are relevant to this discussion are: *bonding social capital* from strong ties with family; *building social capital,* which is weaker and comes from connections to friends and acquaintances; and *linking social capital* from our formal links with others in volunteer organizations (Sabatini, 2006).

## 2.2 Life with Dignity

Death occurs when our physical human capital is so used that life cannot be supported. The concept of living to 100 and beyond is solely measuring time until death occurs. Another measure would be life with dignity. I will argue in this paper that human capital may become so used that life has ceased to have dignity. Moreover, if social capital has been significantly drained or exhausted, or due to health conditions, the possibility of creating additional social

capital is remote, life may also have ceased to have dignity. Many people would view living to 100 and beyond with dignity as an improvement on merely living to 100 and beyond.

For some of the elderly inadequate financial capital or concern that financial capital may be inadequate may prevent them from living to 100 and beyond and from living with dignity. It is my contention that with properly designed social support systems, inadequate financial capital should not be a reason why Canadians cease to live in dignity.

Society has a role to play in establishing conditions conducive to being able to lead a life with dignity. In Canada, there is a system of social security programs that provide income, income support and social assistance, and a set of preferential tax provisions to encourage retirement savings. Access to physician and hospital services is available to the entire population without charge at point-of-service, for medically necessary care. Subsidized housing is available for those with low income. Retirement, nursing and acute care homes are available on subsidized or free basis for veterans. Education is available on a free basis through secondary school. Subsidized training programs are available for adults in certain situations. This collection of programs is designed to ensure that Canadians have an opportunity to live in dignity.

The definition of dignity and lack of dignity will vary by individual. Regardless of the collection of social programs developed, there may be situations where an individual's life lacks dignity, in that individual's assessment. For some, lack of dignity might mean living with constant, severe pain; for others it might mean having a severe mental illness such as Alzheimer's disease; for still others, it might be the loneliness and isolation that comes from outliving your family and friends. It could mean living in severe financial hardship. From an individual's perspective, when the combination of financial, human and social capital has been so depleted and the likelihood of the replenishment of those sources of capital to an acceptable level has become so low, life may lack dignity and death may be preferred to life.

In this paper, I will argue that with an affordable change to Canada's social security system, no Canadian need feel that life lacks dignity for financial reasons. Furthermore, better-planned housing arrangements for seniors would provide opportunities for some seniors to build or retain social capital for longer periods of time; hence, extending the period for which life may

retain dignity. Nonetheless, due to various circumstances, largely beyond society's control, an individual's life may reach a point where the individual believes that life lacks dignity, that dignity will not be restored and that death is preferable to life. In such circumstances and provided procedures defined by society have been followed, I contend that individuals should be permitted to die and receive medical assistance in accomplishing their final wish should they wish to die.

## 3. Policy Option 1: Ensuring Financial Dignity

It is difficult to obtain precise data on the adequacy of Canadians' financial preparation for retirement. Statistics Canada data in respect of retirement savings in 1999 estimates that "33 percent of family units with a major income recipient between age 45 to 64 may not, given their current asset situation, have saved enough to replace two-thirds of their earnings, or to generate income in retirement that is likely to be above the low income cutoff (LICO)" (Maser et al., 2001). A more recent report by the Canadian Institute of Actuaries estimates that based on current retirement savings behavior, approximately two-thirds of Canadians who will retire in 2030 are not saving enough to meet necessary expenses for the expected duration of their retirement (Canadian Institute of Actuaries, 2007). Both these studies use relative measures to define required expenses in retirement. In a keynote address to the International Actuarial Association Pension Benefits and Social Security Colloquium, Erkki Likanen, governor of the Bank of Finland, stated that research continues to show that the elderly actually spend less in retirement than what is projected.[3] Consequently, more of the elderly may well be able to live an adequate existence than is suggested by the statistics quoted above.

That being acknowledged, it is still my contention that for some of the elderly, savings and other assets will be insufficient to provide an adequate existence. Moreover, given the longer life expectancy of females and that married females tend to be younger than their spouse, if assets and income prove to be insufficient for couples, females and especially widowed females are likely to bear a greater share of the financial burden and are more likely to outlive the

[3] Likanen, Erkki, "Aging and Financial Markets," keynote address to the International Actuarial Association Pension Benefits and Social Security Colloquium, May 23, 2007.

financial assets. Given the uncertainty regarding how long one is likely to live and the required amounts that may be necessary to provide for an adequate existence, a significant portion of the elderly will be concerned about having sufficient financial assets.

Research regarding factors affecting mortality rates among seniors indicates that psychological distress increases mortality rates. Financial worry, a form of psychological distress, is positively associated with higher rates of mortality among females (Wilkins, 2006). There are positive and affordable policy actions that could be taken to reduce financial worry, which should result in mortality improvements. Moreover, I would argue that dignity of life would be improved in many situations if financial worry that increases mortality rates were relieved.

## 3.1 Policy Proposal

The Canadian retirement income system has the following main components:

- Old Age Security ("OAS"), a demogrant to those age 65 and over meeting residency requirements
- Canada/Quebec Pension Plan ("C/QPP"), a defined benefit mandatory employment-based publicly administered pension plan, paid for by the contributions of employees and their employers
- Voluntary tax-assisted retirement savings through such means as private pension plans and Registered Retirement Savings Plans
- Other voluntary retirement savings.

The first two components are designed to replace approximately 40 percent of the worker's earnings on earnings up to the average industrial wage, which was approximately $44,000 in 2007. However, due to participation requirements and earnings history in respect of C/QPP and residency history in respect of the OAS, few Canadians receive the targeted replacement ratio. On the Canadian model, individuals who desire additional retirement income beyond what is provided by OAS and C/QPP are expected to arrange their financial plan accordingly, through pension plan participation and/or voluntary savings. However, for those

with very low retirement incomes, certain supplementary social assistance programs are available.

Compared to 29 other OECD countries, the Canadian system of government-administered programs is below average on level of income replaced and pension wealth but scores very highly on equity measures (Whitehouse, 2006). As a Canadian taxpayer, I am not anxious to be paying for higher amounts of government-administered programs, and I am happy to see that the current programs are considered to be highly equitable. Nonetheless, if the government-administered programs could be improved without additional cost, I would likely support the changes.

In this regard, I would propose that Old Age Security be revised to be a demogrant to those age 85 and over and that it be increased to three times its current level. Based on data presented in the Canadian Institute of Actuaries' report referred to above, in combination with C/QPP benefits, such a level would be almost sufficient to pay for necessary expenses (Canadian Institute of Actuaries, 2007). Moreover, based on the Statistics Canada population estimates, the total cost of OAS at triple its current level but payable only to those 85 and over would be considerably less than the total cost of paying the current level to those 65 and over, whether 2005 or 2031 population figures are used.

However, there are some significant implications to such a dramatic change to the retirement income system:

- Until sufficient time has passed to permit the population to adjust to the savings' requirements of the new system, there will be a need to provide social assistance support to more individuals. This is an added cost.
- The pattern of spending of retirement savings will likely change. Rather than trying to preserve voluntary savings to prevent outliving assets, family units would likely plan to spend much of their voluntary retirement savings during retirement up to age 85, when the revised OAS providing a higher level of income would be received.

From the perspective of certainty in retirement planning, this approach of having to save adequately for a foreseeable horizon, the period until age 85, is a significant improvement over

the current approach, which requires Canadians to save sufficiently for an unpredictable horizon that may vary greatly by individual. It is reasonable to expect that most working Canadians could save and invest to supplement their retirement income from the C/QPP up until age 85 to meet necessary expenses, as those Canadians so determine. After age 85, Canadians would receive sufficient income from government-administered sources to provide for necessary expenses as determined by government. Certainly some Canadians will not be able to achieve these objectives through no fault in their planning but due to causes such as disability, unemployment, etc., and for such circumstances an enhanced means-tested social assistance program should be provided.

An important benefit of such a policy would be that it should greatly reduce financial worry and stress among the elderly, especially elderly females, which should be associated with reduced mortality rates. While the significant use of human and social capital may be reasons that life ceases to have dignity, inadequate financial capital need not be a reason that life ceases to have dignity.

## 4. Policy Option 2: Living Arrangements that Enhance Social Capital

Since it is my contention that one component of a life with dignity may be having adequate social capital, I begin with a brief review of the relevant research on social capital.

### 4.1 Social Capital and Welfare

The research on the impact of social capital on economic development and individual welfare is limited, as this has been an area of research for less than a decade. The World Bank's Social Capital Initiative has emphasized the role of social capital in economic development, sustainability and poverty alleviation, which is not the focus of this paper. The following paragraphs list relevant research supporting my contention that social capital contributes to individual well-being and that the absence of social capital reduces well-being.

The connection between reduction in social capital and increased mortality rates has been established by Canadian research (Wilkins, 2006).

- Widowers had a strikingly higher likelihood of dying. The protective effects of marriage for men—an indicator of social support and social integration—with respect to mortality has been widely observed.

In a study of social capital and individual welfare in Russia (Rose, 1999), the following conclusions relevant to this paper are derived by multivariate analysis. Rose acknowledges that Russia is not a modern economy, but he thinks his findings may still apply to modern economies.[4]

- Social capital networks do promote individual welfare—but differ in specifics and extent from one situation to another.
- Informal networks of individuals who share opinions, information and trust each other also frequently augment welfare.
- Social capital networks appear to have pervasive utility, for the cumulative involvement in a generic network influences income security, having a sufficiency of food and emotional health.

The following findings regarding the relationships between social capital, economic development and sustainability (Grootaert et al., 2001) appear relevant to the considerations in this paper:

- Women and their associations were found to be consistent diffusers of information and technology, and able to tap into and generate social capital.

In a summary of empirical evidence from the social capital initiative (Feldman et al., 1999), the following findings relevant to our considerations are described:

- Social capital can act as a substitute for a lack of physical or financial capital.
- Village-level social capital is an important contributor to household welfare.

[4] Canada is considered a modern economy; although Rose does not so state.

## 4.2 Elderly Women Living With Family

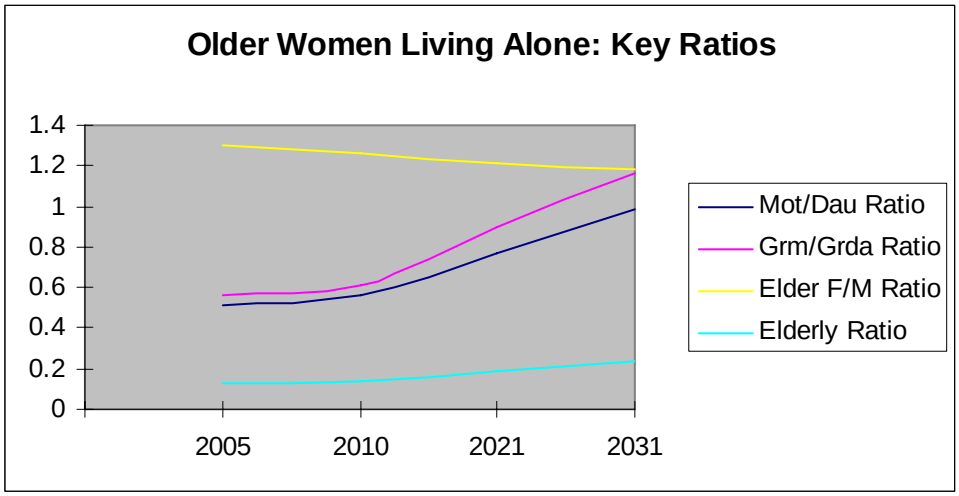
The “Introduction and Background” section indicates that elderly women do and will continue to outnumber elderly men, and that the ratio of elderly women 100 and over to elderly men of comparable age will stay the same or increase depending on the population growth assumptions. Accordingly, a component of social policy to address living with dignity should address the living arrangements of the elderly, particularly elderly single females.

One alternative would be for the elderly to live with their children. This approach is common in many cultures. Canada is a culturally diverse country and such an approach would be expected in many of the cultures that are represented. Wolf has used demographic ratios to estimate the percentages of older women living alone (Wolf, 1995). In 1995, using multivariate analysis, he projected that 21.9 percent of older women would be living alone in 2005; this percentage would decrease to 21.6 percent in 2010; and then would increase steadily reaching 25.2 percent in 2025, the last year for which he shows a projection. Wolf identifies three demographic ratios that may be used to make such projections. An increasing ratio of elderly mothers to daughters is positively associated with an increasing percentage of older women living alone. An increasing ratio of elderly grandmothers to granddaughters is negatively associated with an increasing percentage of older women living alone. A decreasing ratio of elderly women to elderly men is positively associated with a decreasing percentage of older women living alone. “Elderly women” refers to women 65 and over, and the other definitions are as used by Wolf in the referenced paper.

I recalculated the demographic ratios based on the Statistics Canada population projections used throughout this report. Although I attempted to apply Wolf’s regression method to this data, I was unable to obtain results that aligned with what he reported. Nevertheless, the ratio of elderly mothers to daughters I calculated is consistent with that calculated by Wolf. The ratio of elderly women to elderly men I calculated is lower than that calculated by Wolf. If Wolf’s theory is correct, this suggests a reduction in the percentage of elderly women expected to be living alone, i.e., an improvement.

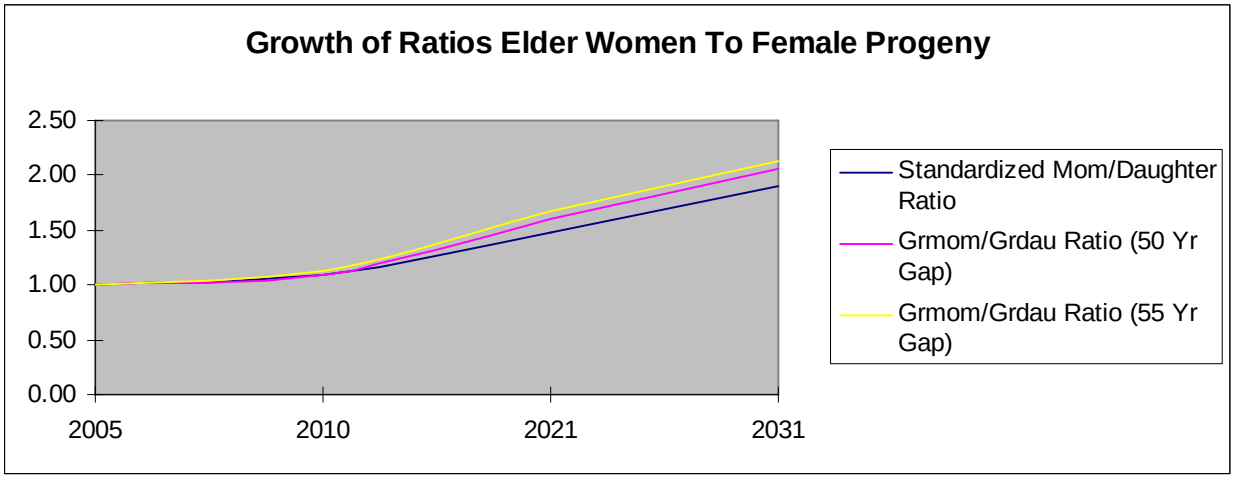
Wolf does not report the ratio of elderly grandmothers to granddaughters he calculated, but he does state that it is continuously increasing. The ratio I calculate of elderly grandmothers to granddaughters is continuously increasing. Wolf uses a difference between the age of grandmothers and the age of granddaughters of 50 years. Since 1990, when Wolf was writing, there has been a tendency for women to delay the age at which they give birth to their first child. I recalculated the elderly grandmothers to granddaughters ratio using a difference between the age of grandmothers and the age of granddaughters of 55 years. For each year of analysis, this calculation not only produced higher ratios than the calculation using a difference of 50 years, but also the ratios were increasing at a faster rate. If Wolf's theory is correct, this suggests a further improvement in the percentage of elderly women expected to be living alone.

The results of my calculations are summarized in the following chart. The ratio of mothers to daughters increases from 2005 to 2031 (blue line), but the rate of increase is not as great as the rate of increase in the ratio of grandmothers to granddaughters (pink line). The ratio of elderly women to elderly men decreases throughout the period (yellow line). The turquoise line shows that that elderly percentage of the population continues to rise.




The following chart shows that the ratio of grandmothers to granddaughters increases faster when a 55-year gap between the generations is used (yellow line) than when a 50-year gap is used (pink line), and that both these ratios increase faster than the ratio of mothers to daughters (blue line). This is significant because in Wolf's regression, the coefficient for the grandmothers

to granddaughters ratio is a larger negative number than the positive coefficient for the mothers to daughters ratio; hence, the percentage of women living alone can be expected to decrease.




So the demographic ratios suggest that the percentage of elderly women living alone will be less than projected by Wolf. Based on the discussion regarding types of capital, a living arrangement, which creates the opportunity to develop social capital, is desired and could enhance the opportunity to live a life of dignity. Living with family would provide such an opportunity. Nonetheless, there will be women who do not live with their families for various reasons. For these people, it is suggested that seniors-friendly communities be built.

## 4.3 Integrated Living Arrangements for Seniors

Scandinavian countries are leaders in the development of seniors-friendly communities. For example, for those unable to live independently in their homes, Denmark provides collective housing and sheltered housing (Raffel et al., 1987). Both of these forms of housing are equipped with facilities for the physically challenged and provide access to nursing care and a general practitioner. Central dining facilities are available, although those in collective housing who require less assistance may have their own dining facilities as well. Although not referred to by these names, Ontario and other Canadian provinces have a number of types of similar housing arrangements, often called retirement homes. However, Canadian retirement homes tend to be standalone facilities. They are seldom integrated with seniors' centers, churches, medical clinics, bridge clubs, hair salons or grocery stores. Consequently, the residents are isolated from the community unless they have friends or family that visit regularly and can take them into the

community. A more senior-friendly design would integrate the retirement home with the other community services. This will require more attention to community planning.

A benefit of retirement homes that are integrated with the community is that the residents may retain stronger links to the community, thus retaining or enhancing social capital. Enhanced social capital can be an important aspect of leading a life of dignity.

The results of a survey of Koreans in their 50s, described as the next wave of seniors, shows that loneliness and housekeeping are considered the most difficult aspects as one ages (Choi, 2006). The former arises from declining social capital. The latter becomes difficult due to declining physical, i.e., human capital. Seniors' communities need to be designed to address both these needs. The survey also finds that the exercise room is a preferred meeting place compared to a meeting room or kitchen. But the preference for space to meet, i.e., to build or retain social capital, varies by region, with participants in Seoul having different preferences than those outside Seoul. Choi suggests that seniors' centers have a large flexible living room that could serve multiple purposes. While such a suggestion is a practical one, a more customized approach of building different designs of centers, e.g., some with exercise facilities, some with large living rooms, some with smaller meeting rooms, depending on the preferences of those in the regions or communities, may have greater success in the development of social capital among residents.

## 4.4 Caregiving

Caregiving is an important topic for research and development. There is increasing interest in this area, and there are numerous papers addressing different aspects of the issues. As such, this brief subsection is intended only to draw attention to some of the issues that are related to the themes in this paper.

One important issue is the likelihood that there will be insufficient caregivers to address the needs of an aging population. In Ontario, the number of licensed occupational therapists is reported to be less than 80 percent of the current requirement.[5] With increasing longevity, there

[5] Based on a conversation with Robyn Hastie of the University of Toronto on Oct. 19, 2007, who presented the findings of research regarding The Age Structure of Occupational Therapists Working in Ontario.

is likely to be an increasing demand for occupational therapy due to increased exposure (because people live longer) and due to increased intensity (because the elderly may require more therapy). At the same time, the pool of occupational therapists is aging. It is likely that the older occupational therapists, say those 60 and over, will find the work physically demanding and may wish to reduce their hours of work. This may exacerbate the supply problem.[6]

It is likely that similar comments pertain to other groups of skilled practitioners in the health services sector. A potential solution to the supply problem may lie in relaxing the licensing requirements and permitting "less than fully licensed professionals" to perform some services. Such proposed solutions are not new, but in the past they have met strong resistance from professional organizations and change is slow to take place.

Another potential avenue for relief is that families can provide more caregiving. As discussed in the "Elderly Women Living with Families" subsection, the demographic ratios suggest that this area may have potential. Here also, it will be important to remember that family members are also aging, and their physical abilities to care for the elderly member may decline. If family members are to play an essential role in caregiving, it will be important for the family to plan for its involvement. McDonald et al. (2007) studied caregivers who had retired early to caregive by one of two routes: the first route was precipitated by a crisis and was viewed as temporary; the second route was planned and permanent. They found that at the conclusion of the caregiving, the crisis caregivers lived in abject poverty while those for whom caregiving was planned reported adequate income. Moreover, caregiving can place significant burdens on the caregiver's mental and physical health. It can reduce the caregiver's contact with friends and community, potentially reducing the caregiver's social capital. Without appropriate attention to planning for caregiving for family members, the dignity of the former caregivers' lives may be denigrated.

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[6] A related problem is matching supply to demand. In a situation where supply shortages exist, the neediest seniors may not get the required care if the system is most responsive to the most vocal and well-connected seniors. In commenting on this paper, Bruce MacDonald observed that an additional type of caregiver role as "advocate" is necessary, especially for those not familiar with the system or the elderly who are frail and lack family members to assist them in obtaining the required care.

Technology may be developed that can facilitate caregiving and help address the issues of inadequate supply of caregivers. For example, University of Waterloo researchers have developed a design for a multiple-user intelligent feeding robot for elderly and disabled people (Pourmohammadali et al., 2007). The robotic feeding system has been designed to feed a maximum of four persons in a single sitting and would reduce the number of caregivers required. It is also delivers cost improvements on single-user feeding machines. Four users sit around the robot with its accompanying food tray. On voice command by a user the robotic spoon delivers food to the user.

There may be many other technological developments that can deliver effective methods for providing care to the elderly and reducing the required number of caregivers. However, in assessing these technologies, it will be important to consider whether the dignity of the elderly is maintained or enhanced through the introduction of the technological solution. Such assessments involve subjective judgments, and it is desirable to seek input from the elderly regarding their perceptions of the dignity associated with the technological solution. For example, in the case of the multiple-user feeding machine, some might feel a loss of dignity sitting around a machine with three others being fed. Moreover, the researchers noted that the elderly might have trouble making their voices heard and recognized by the robot in a noisy feeding hall. On the other hand, the researchers observed that the elderly with physical disabilities such as lack of strength or severe tremor had difficulty feeding independently. Such individuals might consider the feeding experience more dignified if the robot would deliver food when called. Regardless of the solution proposed, an assessment of the dignity of the solution as perceived by the potential users should be an important consideration before adopting it.

## 5. Policy Option 3: Providing Choice

In the 1960s, when Canada introduced its program of universally accessible physician and hospital services for medically necessary care, it took a major step to enabling its citizens to live with dignity, by removing the fear and the possibility that they might suffer from a catastrophic illness that would leave them financially destitute and unable to get the necessary care. Eliminating the fear of outliving one’s financial assets as proposed in policy option 1 is an important next step in enabling people to live with dignity. Creating retirement homes integrated

within communities as proposed in policy option 2 is a further step to enhancing the life experience by creating the opportunity to retain social capital through being connected. These are all important steps, but there may be other reasons that the dignity in people's lives is reduced as they age.

Given that the definition of living with dignity or lacking dignity may differ by individual, it is impossible to quantify the number of people who may be living without dignity. This section will identify some of the potential groups that may be living without dignity and will attempt to quantify those groups.

An end-of-life care survey (Straw et al., 2003) indicates that many of the elderly consider life in certain states as worse than death. Almost 90 percent said that total physical dependency would be worse than death; 70 percent or more said that being unable to communicate their wishes or living with great pain is worse than death. Given these statements, is it not more humane to provide an option for those in a circumstance in which they would prefer death, to be able to have their wishes acted upon by a medical practitioner?

## 5.1 Alzheimer's Disease and Other Dementia

Mental illness that is incapacitating would likely be one area that some people would identify as a loss of dignity. Alzheimer's disease is such a dementia. It accounts for two-thirds of all dementias in Canada. Age is the greatest risk factor for Alzheimer's disease—about 1 in 13 Canadians over age 65 has Alzheimer's disease or other dementia, increasing to 1 in 3 Canadians over age 85.[7] Most people understand what Alzheimer's disease is, but for sake of common understanding, the following quotations regarding this disease and other dementia, may be helpful.

> **Dementia** is a general term that describes a set of symptoms caused by diseases of the brain. Symptoms include loss of memory, judgment, ability to communicate, and severe changes in mood and behavior…. Alzheimer's disease is a progressive, degenerative brain disease that destroys vital brain cells…. It eventually results in complete loss of independence and is the fourth leading cause of death among seniors…. The causes of

[7] Alzheimer Society Toronto, pamphlet entitled "Alzheimer Disease and Other Dementias."

> Alzheimer's disease are not known. There is currently no cure for the disease, and no treatment that will stop its progression. Certain medications can slow down the decline of memory, language and thinking abilities. The treatments do not work for everyone and are effective for a limited time.[8]

Ontario, Canada's largest province, has organized senior care into eight types of providers. In degree of increasing level of care, the types of providers are: Community Support Services, Home Health Care, Independent/Supportive Living, Retirement Residences, Assisted Living, Long-Term Care Homes, Alzheimer Care and Hospice Care. Alzheimer's care may also be provided in a designated secure section of other providers such as Retirement Homes and Long-Term Care Homes. Although some short-stay options are provided, placement in Alzheimer's Care is normally for those with advanced stages of the disease and is a permanent placement decision. Such care is frequently 24-hour care and is relatively expensive.

What might we expect by 2031, if there has been no change to the way in which we care for Alzheimer's patients and assuming that no cure or onslaught-reducing treatment has been found? The following table uses population projections prepared by Statistics Canada to estimate the potential number of persons with Alzheimer's disease or other dementia by 2031. Low, moderate and high growth projections are shown. A comparison to July 1, 2005 is presented.

The table shows that the number of cases of Alzheimer's disease is projected to more than double by 2031 and that the number of cases as a percent of the population is projected to increase by approximately 80 percent. When one considers that many of these cases will require 24-hour care, the cost associated with caring for persons with Alzheimer's disease will increase significantly. Moreover, if the individuals had decided in advance, when they were of sound mind, that they did not wish to continue living, if the state of Alzheimer's disease required them to be institutionalized, why would we not respect their wishes?

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[8] Ibid.

**TABLE 5**

**Estimated Alzheimer's Cases 2031**

| Year & Growth Rate | Population Age 65 and Over (in thousands) | Estimated No. of Alzheimer's Cases (in thousands) | Alzheimer's Cases As Per Cent of Total Population |
|---|---|---|---|
| **2005 for Comparison** | 4,217.6 | 324.4 | 1.0 |
| **2031 Low** | 8,469.7 | 651.5 | 1.8 |
| **2031 Moderate** | 9,136.1 | 702.8 | 1.8 |
| **2031 High** | 9,410.8 | 723.9 | 1.7 |

A review of the National Guidelines (Canadian Coalition for Seniors' Mental Health 2006) regarding the treatment of individuals with mental health problems is revealing. The general approach to care is a desire to build social capital by encouraging and supporting the involvement of the family in the institutionalized life of the older resident. When there are only symptoms of depression, social contact interventions to promote meaning and structured recreational activities to engage the individual are recommended. However, social-capital-related strategies are not effective at more advanced and severe states of mental illness. In these states drug therapy is recommended, or when the individual is not responding to medication electroconvulsive therapy is recommended. If mental illness had progressed to such a state that neither social capital nor medication approaches were effective, death might be preferred to electroconvulsive therapy.

## 5.2 "Living Wills"[9]

As should be clear by now, I contend that there are circumstances in which an individual may believe it is preferable to die than to continue to live and that assisted death should be an available alternative in circumstances authorized by society. There are many sensitive and

[9] The term "living will" has a specialized meaning in certain countries. The term is being used here as it is defined and described in this subsection and will appear in quotation marks. This usage may not be consistent with the specialized meaning.

controversial issues to be addressed. It is important that open discussions be held and that the law be changed in a way that reflects the public will. For the purpose of initiating discussion of this issue, I will make the following proposal, recognizing that it may not reflect the general will.

An individual of sound mind should be able to execute a legally binding written document, in the presence of a lawyer or notary, which specifies circumstances under which the individual would wish to have medically trained and licensed personnel end the individual's life. Furthermore, for purposes of discussion, I will propose that the individual must be at least age 70 at the time his or her life is to be ended.

There is a complicated set of laws and professional codes in Canada which would need to be revised in order to implement the policy to receive medical assistance to fulfill one's final wishes. Although, the successful act of suicide is not illegal in Canada, attempted suicide is a crime and assisting someone with suicide is also a crime. Moreover, the medical profession with its focus on doing whatever is possible to preserve life does not want to be assisting people in dying, unless some higher authority, such as federal lawmakers or a properly constituted, decision-making committee in a hospital, has sanctioned the actions. With the exception of the Royal Dutch Medical Association, medical associations around the world appear to be opposed to authorizing or counseling their members to provide assistance to those who wish to die.[10]

To be able to enlist the support of medical associations, it appears that at a minimum, the law would need to specifically permit medical practitioners to act on the patient's request for assistance in dying, in defined circumstances. The law should be written to make legal a "living will" that not only specifies the type of care one wishes to receive and who is authorized to make decisions regarding care but that also defines the conditions under which the individual would wish to have medically trained personnel end the person's life. A medical practitioner that assists in carrying out the instructions specified in a "living will," when the circumstances described occur, should not be guilty of any crime. As noted earlier, a "living will" would be a written

[10] Oregon passed the Death with Dignity Act, 1994 defining the conditions for legal physician-assisted suicide. Some 300 terminally ill Oregonians have taken advantage of this law to die peacefully. Similar legislation proposed in Washington state was defeated in 1994, but there is talk that such legislation will be proposed again in November 2008.

document prepared in the presence of a lawyer or a notary, by an individual who is of sound mind, that defines the conditions under which the individual would wish to have medically trained personnel end the person's life, provided that the individual is at least age 70 at the time of his or her proposed death. The requirement that the individual be at least age 70 makes it unlikely that a cure for the individual's condition, which would enable the individual to live with dignity for many years in the future, will be found.

This is an emotionally charged issue, and there is potential for unscrupulous individuals to attempt to profit at the expense of an individual suffering from severe pain or whose social capital is depleted. One can imagine family members who might receive a significant inheritance conniving to have the benefactor end his or her life early. Such family members might seek assistance from dishonest lawyers or misguided medical practitioners. The law would need to consider such circumstances and to provide adequate protections and appropriate penalties for those convicted of wrongdoing. Potential safeguards might be that "living wills" must be registered, must not be able to be acted on for a period of 60 days after execution, and expire if not renewed every few years while the individual is sane. With proper attention to drafting, I am confident that a suitable law can be prepared and enforced.

## 5.3 What's The Evidence?

The foregoing arguments are controversial and illegal in many parts of the developed world. Is there any evidence to support my contentions or are these questions both unwanted and unwarranted?

The evidence is primarily anecdotal. It is very difficult to perform research with respect to the opinions and feelings of the elderly with respect to death and assisted death. Given that assisted death is illegal in most countries, the value of such research would be questioned and it would be difficult to obtain funding to support such research and to find organizations that were willing to participate. Moreover, given the laws governing confidentiality of private information, it would be difficult to gather and publish information regarding individuals' opinions and feelings. Because many of the elderly whom it would be desirable to interview may suffer from mental and physical disabilities, it may be necessary to have caregivers present during the

interviews. The presence of a caregiver adds another level of complexity regarding the gathering of people's frank thoughts and sensitive feelings.[11]

However, I will offer the following anecdote from a column by Christine Blatchford titled, "Old age is not for sissies' Home care? Nursing home? Family? The options aren't pretty."[12] The column reports the story of a murder-suicide involving an elderly Toronto couple, both in failing health and declining quickly. The couple still lived in their home but one spouse had been diagnosed with stomach cancer. What were the alternatives: home care, nursing homes, or hospitalization? Each of us might choose a different alternative. This couple "chose" murder-suicide.

If that is an alternative, and certainly it was an alternative for this couple, then we need to rethink our approach as a society to this issue. Should we leave our laws as they are and acknowledge that some will have their lives end in murder-suicide? I would argue that we need to address this issue in public debate and that there are more humane ways to accommodate the needs of the elderly as they approach their final years. If an individual's life is to end, it is more acceptable to me that it end in the care of trained medical practitioners rather than it end, in relative isolation, through the act of a spouse. Having a "living will," which has been properly prepared and attested that clearly sets out one's wishes in particular circumstances, is one such way and is worthy of consideration.

## 6. Conclusion

### 6.1 Well-Being

Deiner et al. (2007) identify that most metrics for evaluating policies within societies use economic indicators. They argue that economic and financial measures provide only one dimension and that in evaluating policies that impact human lives additional dimensions are required. They suggest that policies be assessed with respect to their impact on well-being, which

[11] For further information regarding research difficulties, see de Witt (2007). She interviewed eight women between the ages of 58 and 86 who lived alone and suffered from Alzheimer's disease.

[12] The Globe and Mail, Saturday, Oct. 20, 2007, A27.

includes all of the evaluations, both cognitive and affective, that people make of their lives and components of their lives. Well-being includes pleasure, engagement and meaning.

The line of argument presented by Deiner et al. has similarities to the arguments presented in this paper. However, a significant difference is the group on which the measure of well-being is focused. Deiner et al. discuss the lives of those who are employed and the well-being that comes from productive work and social interactions. They discuss the benefits to well-being of being married and of having a purpose in life. Unquestionably those are important considerations, and I encourage them to continue to perform research in this area. But there is a need for theory and research specifically related to the elderly; those who are no longer active in full-time work and perhaps not in any work at all; those who are losing their social networks through loss of a spouse, due to deaths of their friends, or who are becoming more isolated as they or their friends are required to change their living arrangements. I would expect that life with a high level of well-being would be a life with dignity. But I expect that the definition of those terms will change as one ages. As we conduct research and develop new approaches in these areas, we should recognize the different situations and experiences of the elderly and adapt our social policies and laws to accommodate and cater to their needs.

## 6.2 Summary

This paper has contributed to the literature on social capital and on conditions surrounding life for the elderly. It argues that life with dignity is frequently preferable to life for its own sake, especially among the elderly. Although life with dignity must be defined by society and will change over time and be different from society to society, I have outlined some of the social and individual considerations regarding defining life with dignity. Moreover, a proposal has been made to initiate discussion.

I have presented three specific policy recommendations:

1. To revise the Old Age Security benefit by replacing the current OAS by a demogrant triple the current level but only payable to those age 85 and over.
2. To develop living arrangements for seniors that are more integrated with communities in order to provide seniors with opportunities to build and retain social capital.

3. To amend the law to provide for “living wills” that specify circumstances under which a medical practitioner may act to end an individual’s life in accordance with the individual’s wishes.

If acted upon, these recommendations would mean that: an individual’s life would not lack dignity due to financial hardship; there would be greater opportunities for seniors to retain and build social capital through their living arrangements, thereby providing a setting for living in dignity; and, should the circumstances be such that an individual perceived that life lacked so much dignity that death was preferable, there would be a humane way to act on this perception.

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