

The changing family networks of elderly in the next 25 years: How Europe is different from Canada?

Jacques Légaré, Joëlle Gaymu, Marc-Antoine Busque, Samuel Vézina, Yann Décarie and Janice Keefe

Population aging among developed countries is well on its way. In the next 25 years, the most important increases within the elderly population, both in Canada and Europe, are expected to occur among the oldest old, *i.e.* people aged 75 years old and over. This rapid growth reflects the aging of the baby-boom cohort as well as an improved survival to and beyond the age of 75. Although many older people remain in good health until quite advanced ages, risks of becoming disabled increase significantly at age 75 and over. For many, daily assistance becomes then necessary. Therefore, the expected population aging both in Canada and Europe will most probably increase the need for home care support.

It is very important to stress the fact that the source of assistance is closely linked with the elderly people living arrangement and family network. Indeed, it was shown that spouse and children are the first providers of care for an old dependent person (Chappell, 1991; Walker et al., 1993). This means elderly people with a reduced family network needing assistance mostly rely on formal sources of help. Elderly people living alone receive a greater amount of help coming from the formal network than those living with their spouse or with other people (Arber et al., 1988; Grundy, 2006; Pickard et al., 2000)

Drawing conclusions on future needs from actual characteristics of the elderly may be misleading since tomorrow's elderly population will be different (Carrière et al., 2007). Indeed, Baby-boomers (which are the future elderly), compared to their parents, had different demographic behaviours in terms of fertility and marital status. The composition of the family network of elderly population is therefore expected to evolve rapidly in the coming decades. With this changing structure of the family network, the main component of the informal support network, pressure on the formal support network might therefore be affected in the near future. Therefore, in order to be policy relevant, elderly population projections and their implied needs for support should include decisive factors like marital status, living arrangements, health conditions, and potential support from surviving partner and children.

Methodology

In order to compare the Canadian situation to the European's in term of demographic aging, dynamic projections of the elderly population age 75 and over were produced. The European projections results were made available via the Future Elderly Living Condition In Europe (FELICIE) research program, whereas the Canadian projections were performed using Statistics Canada LifePaths microsimulation model.

The FELICIE project developed population projections of 9 European countries including sex, age and marital status using a dynamic modelling approach. Long and reliable data series were used to estimate transition probabilities between marital status groups. Transitions matrices were calculated using LIPRO model (Van Imhoff and Keilman, 1991). Finally, from these multi-state projections by age, sex and marital status,

static projections were generated for health, kinship support and socio-economic status (Gaymu et al., 2006).

As for LifePaths, the longitudinal aspect of the model allows the user to take into account part of the complexity of the life cycle (birth, death, immigration status, inter-provincial migration, marital history, educational history, employment history, and presence of children at home) of individuals who constitute the Canadian population. The microsimulation creates a synthetic cohort of individuals going through their life cycle with different probabilities of having specific events occurring, probabilities that vary across individuals depending on their characteristics. Every time an event occurs (e.g. leaving school), probabilities of other events occurring in the future will vary according to the changing characteristics of this individual.

Finally, it was arbitrarily set that people with severe or moderate disability status were considered as people in poor health; consequently, people with mild and no disability are people in good health. This distinction is crucial in the sense that future number of individuals in poor health will have significant impact on formal and informal support networks and also on the sustainability of health care system.

Results

According to the projections, within the next three decades, the population aged 75 years and over will increase by approximately 70% in Europe compared to 150% in Canada. In other words, during this time period the growth rate of the Canadian elderly population is twice as fast as it is in Europe. Though, up to 2020, the relative increase in the Canadian and in the FELICIE countries total population (all health status) and people in poor health aged 75 years and over is quite similar. Afterwards, the impact of the larger baby-boom that occurred in Canada differentiates this country considerably from FELICIE countries in terms of total population (all health status) and people in poor health (Légaré and Décarie, 2007).

As mentioned earlier, spouse and children are the first providers of care for an old dependent person. Therefore, it is essential to take into account the presence of spouse and/or surviving children in analyses to assess future numbers of elderly having greater risks to depend on formal sources of assistance. Indeed, a particular family network configuration has a significant impact on the source of assistance received by elderly people needing help. However, one must keep in mind that the presence of surviving children does not mean that he children are available and/or able to provide assistance.

The results show quite similar profiles in Canada and in the overall nine FELICIE countries. In general, it is very clear that elderly women are more at risk than men to have a reduced family network, especially to count on the presence of a spouse. Nevertheless, in the next decades, the situation is expected to “improve”, especially in Europe where the proportion of married women with surviving children will double. European men will also be more likely to be married than Canadian men. It is interesting to note that the greatest part of the increase of the aged 75+ will consist of married people with surviving children (Table 1).

Table 1. Population aged 75+ according to specific family network configurations, Canada (2001 & 2031) and FELICIE countries (2000 & 2030)

CANADA *Married people include people in Common-Law Union.	2001		2031	
	Males	Females	Males	Females
Married with surviving children	44%	23%	46%	27%
Married without surviving children	10%	3%	7%	4%
Not married with surviving children	32%	60%	33%	57%
Not married without surviving children	14%	14%	14%	12%
Total	100%	100%	100%	100%

EUROPE	2000		2030	
	Males	Females	Males	Females
Married with surviving children	53%	16%	54%	30%
Married without surviving children	7%	3%	7%	3%
Not married with surviving children	29%	62%	28%	54%
Not married without surviving children	12%	19%	12%	13%
Total	100%	100%	100%	100%

Policy implications

What is clear that at a certain point the proportion of Canadians over 75+ will increase significantly - when the beginning of the baby boomers enter this age group. As with previous trends that have followed this “bulge”, the appropriate social policies levers will need to be put in place to support a smooth transition of these effects on multiple policy domains such as housing, home care, other chronic care services and the marketplace. That this does occur until 2020 provides Canadian society with ample time to put a strategy in place as it did when the baby boomers entered the school system, the labour force and so on. However, while we discuss the potential consequences, other than out pension system we have done little to ensure we are prepared for these demographic changes.

References

- Arber S., Gilber G.N., Evandrou M., 1988, “Gender, household composition and receipt of domiciliary services by elderly disabled people”, *Journal of Social Policy*, 17, p.153-175.
- Carrière Y, Keefe J, Légaré J, Lin X and Rowe G (2007) ‘Population aging and immediate family composition: Implications for future home care services’, *Genus* (forthcoming)
- Chappell N. L., 1991, “Living arrangements and sources of care giving”, *Journal of Gerontology*, 46, p. S1-8.
- Gaymu J., Delbès, C., Springer, S., Binet, A., Désesquelles, A., Kalogirou, S., Ziegler, U., 2006, “Determinants of the living arrangements of Older People in Europe”, *European Journal of Population*, 22(3), p. 241-262.

- Grundy E., 2006, "Ageing and vulnerable people: European perspectives", *Ageing and Society*, 26, p. 105-134.
- Légaré J., et Décarie Y. (2007). « Applying Canada LifePaths Microsimulation Model to Project the Health Status of Canadian Elderly », paper presented at the International Microsimulation Association Conference 2007, Vienna.
- Pickard L., Wittenberg R., Comas-Herrera A., Davies B., Darton R., 2000, "Relying on informal care in the new century? Informal care for elderly people in England to 2031", *Ageing and Society*, 20, p.745-772.
- Van Imhoff E., Keilman N.W., 1991, "LIPRO 2.0: An application of a dynamic demographic projection model to household structure in The Netherlands", NIDI CBGS Publications 23, Amsterdam/Lisse: Swets & Zeitlinger.
- Walker A., Alber J., Guillemard A.M., 1993, *Older People in Europe, Social and Economic Policies. The 1993 Report of the European Observatory*, Commission of the European Communities, Directorate General V, Employment, Social Affairs, Industrial Relations.