Seniors' needs for health-related personal assistance

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Abstract

Objectives

This article examines social and economic differences in the prevalence of needs and unmet needs for health-related personal assistance among the household population aged 65 and older and the sources from which they received support.

Data source

The data are from the 1991 Health and Activity Limitation Survey (HALS).

Analytical techniques

All calculations were based on weighted data. Age-standardized percentages of people with needs and unmet needs for personal assistance were calculated by sex, marital status, living arrangements, education, and household income.

Main results

In 1991, 30% of seniors living in private households had some need for health-related personal assistance. Three-quarters of them required help only with instrumental activities of daily living (IADL); the remainder needed help with basic activities of daily living (ADL). The prevalence of need and unmet need was higher among women than men, was inversely related to household income and education, and was relatively high among formerly married seniors and those living alone. Household seniors were more likely to receive personal assistance from informal than formal sources, although this varied depending on their socioeconomic characteristics and the type of assistance they received.

Key words

activities of daily living, instrumental activities of daily living, formal care, informal care, help received, unmet needs

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In Canada and other industrialized countries, longer life expectancy and continued growth of the older population have heightened concern about the provision of long-term or "continuing" care.[1-11] These terms refer to extended health care services, including home and community-based care in addition to residential care, devoted to non-acute needs, especially needs for personal assistance among people with activity limitations.[1,3,12-14] Continuing care has been estimated to represent "the third largest component of government expenditures within the Canadian health care system, after hospitals and medical services."[15] Planning for future long-term care calls for assessment of the need and of the extent of care currently received.

This article uses data from the 1991 Health and Activity Limitation Survey (HALS) to examine social and economic differences in health-related needs for personal assistance among the elderly population residing in private households (see *Methods* and *Definitions*). It also assesses the extent of unmet needs and the sources from which seniors received assistance.

This analysis finds that in 1991, almost 2 million Canadians aged 15 and older living in private households had some need for health-related personal assistance. The elderly made up a disproportionate share of this group—45%—although they represented just 14% of the household population.

For seniors, provision of care at home may help them avoid, or at least delay, institutionalization. Yet only about half of seniors who required personal assistance had their needs fully met. The prevalence of unmet needs was greater among those in lower-income households and among those with relatively little education. Whether seniors got the help they needed depended on the sources of support available to them, which, in turn, reflected their marital status and living arrangements. In fact, although many received help from formal sources, the majority still relied on informal assistance such as that provided by a spouse, partner or children.

Needs rise with age

According to the 1991 HALS, 9% of the household population aged 15 and older, an estimated 1.9 million people, reported needing health-related personal assistance (Table 1). The prevalence of need increased sharply with age, from 2% among 15- to 24-year-olds to 61% at age 85 and older.

Methods

Data source

The data are from the post-censal Health and Activity Limitation Survey of 1991 (HALS).[16] (An earlier HALS was conducted in 1986/87.) The population aged 15 and older living in private households and in institutions was analyzed. For the total population, the sample size was 101,330, and for the household population, 91,360. For the household population, census questions on activity limitation and handicap were used to select an enriched sample with a far higher proportion of persons with disabilities than would have been possible without the use of the census questions. Additional details are available in the published documentation.[16]

Analytical techniques

Most of the analysis in this article pertains to the household population. Using the HALS master file, weights were recalculated for men and women aged 65 to 74, 75 to 84, and 85 and older. This was done for household data at the Canada level, according to the 1991 Census age- and sex-specific population distributions. All results shown here are based on weighted data.

The percentages of people with needs and unmet needs for health-related personal assistance were calculated for the total population by sex, marital status, education, income, and living arrangements. The percentages were age-standardized by the direct method to the total 1991 HALS population estimates.

Five sources of personal assistance were examined: spouse, children, other relatives, friends or neighbours, and formal services. The percentages of seniors receiving help from each of these sources were classified into overlapping categories and calculated by sex and marital status. The formal or informal character of the support received was then examined using mutually exclusive categories: informal only, formal only, and a mix of both. For all seniors receiving help, the percentages in these categories were calculated by sex, marital status, living arrangements, income, and education (see *Definitions*).

Limitations

HALS data analyzed in this article pertain to 1991. The National Population Health Survey of 1994/95 and the General Social Survey of 1996 provide more recent data, but the sample sizes are much smaller and would not permit the level of analysis presented here. As well, it is highly likely that the 1991 results are still relevant, as the variables examined are not subject to major or rapid change. A comparison of the 1991 data with the 1986/87 HALS showed that the need for health-related assistance, and whether that need was met, were quite similar (data not shown).

While this article focuses mainly on the household population, it is important to note that the institutional population accounts for a substantial portion of the total need for health-related personal assistance (see *Only part of the picture*).

Definitions

In this article, *health-related personal assistance* refers to help needed or received for *instrumental activities of daily living (IADL)* or for basic *activities of daily living (ADL).* IADL refers to grocery shopping, meal preparation, light or heavy housework, or going out for short trips. ADL refers to personal care (eating, bathing, dressing) or moving about within the residence. Because of the nature of the Health and Activity Limitation Survey (HALS), people needing such help must have had at least some degree of disability and must have needed or received help for reasons of health.

Virtually everyone with ADL limitations is also limited in IADL. However, many people with IADL limitations are not restricted in ADL. Therefore, priority was given to needs for help in ADL, grouping needs hierarchically into four categories (only the first applicable category was assigned):

- *Unmet ADL need.* People needing ADL assistance, but not receiving help or needing additional help for at least one ADL.
- *All ADL needs met.* Other people receiving ADL assistance. (This category may include persons with unmet IADL needs.)
- *Unmet need for IADL only.* People needing IADL assistance, but not receiving help or needing additional help for at least one IADL. (This category excludes persons with ADL needs.)
- *All IADL needs met.* Other people receiving IADL assistance. (This category excludes people with ADL needs.)

The sum of these four categories equals the population with any need for help.

When priority is given to ADL needs, people whose ADL needs are all met, but who still have unmet needs for assistance with IADL, are not shown as having unmet needs. Therefore, the population was also grouped by needs met or unmet, including both ADL and/or IADL needs, as follows:

- *Unmet needs for ADL and/or IADL.* People needing ADL and/or IADL assistance, but not receiving help or needing additional help for at least one ADL and/or IADL.
- *All ADL and/or IADL needs met.* Other people receiving ADL and/or IADL assistance.

The sum of these two categories also equals the population with any need for help.

Several questions on the 1991 HALS were used to determine the extent to which needs for health-related personal assistance were met. For example, with respect to personal care, for assignment to the *ADL need unmet* category, respondents must have **either** answered "no" to the question "Because of your condition, do you receive assistance with personal care, such as washing, grooming, dressing or feeding yourself?" and "yes" to the question "Because of your condition, do you need help with your personal care?", **or** "yes" to the first question and "yes" to the question "Because of your condition, do you need ADDITIONAL help with your personal care?"[17] Those who replied that they received help and did not require additional assistance were considered to have their personal care needs *fully met.*

For assignment to the *IADL need unmet* category with respect to light housework, for example, respondents must have **either** answered "yourself alone" to the question "Who usually does your normal everyday housework such as dusting, tidying up? and "yes" to the question "Because of your condition, do you need help doing your everyday housework?", **or** "yourself and someone else" or "someone else" to the first question plus "yes" to the question "Is this because of your health problem?" and "yes" to the question "Because of your condition, do you need ADDITIONAL help doing your everyday housework?"[17] Those who received help and did not require additional assistance were considered to have their light housework needs *fully* met.

Informal sources of help include an individual's spouse, children, other relatives, friends, and neighbours. *Formal* sources refer to voluntary organizations, government agencies, private organizations, or privately employed persons. Some examples of formal help are meals-on-wheels, attendant care, home care service, Victorian Order of Nurses, and friendly visitor service.[17]

Marital status was defined as single (never married); married (living with spouse or common-law partner); and formerly married (widowed, divorced or separated).

Education was defined according to the highest level successfully completed. For analyses of health-related needs, education was grouped into three categories: elementary or less; some high school; high school graduation (with or without additional postsecondary education).

Persons of all ages were categorized into five *income* groups of approximately equal size (quintiles), based on the ratio of economic family income to the Statistics Canada low income cut-offs for the relevant family size and community size groups. The same income cut points were used for all age groups. The quintiles were then grouped into lower (quintiles 1 and 2) and higher (quintiles 3, 4 and 5) income categories.

Living arrangements were grouped into those living alone and those living with others.

Only part of the picture

The household population is only part of the total picture of need for health-related personal assistance, especially among the oldest old and among people needing help with basic activities of daily living (ADL). In 1991, residents of private households represented 79% of the population aged 65 and older needing assistance with ADL and/or IADL, and 53% of the population aged 85 and older with such needs. The percentages are much lower when only those needing help with ADL are considered, because most people in institutions have such needs. The household population accounted for 53% of all people aged 65 and older requiring help with ADL, and at age 85 and older, just 36%.

On the other hand, exclusion of institutional residents makes relatively little difference to the size of the population requiring help with IADL only (data not shown), because those people typically do not require the level and kind of care provided in institutional settings.

By the year 2031, the population aged 85 and older is projected to more than triple.[18] This implies huge increases in the number of people with needs for personal assistance, particularly with ADL. Thus, to get the complete picture of projected needs and unmet needs, it is necessary to include residents of institutions.

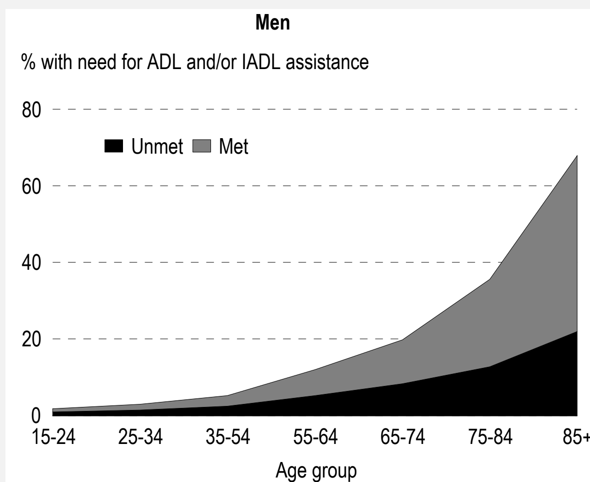
While the prevalence of need for personal assistance in the total population increases sharply with age for both sexes, so does the prevalence of unmet need, but to a much lesser extent. However, at all ages, women are more likely than men to need help as well as to have unmet needs.

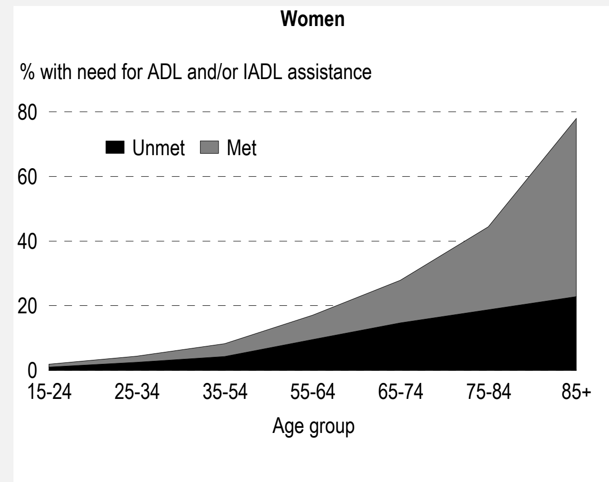
Prevalence of need for health-related personal assistance, total and household population aged 65 and older, Canada, 1991

	Total population with needs†		Household population with needs‡		Percentage point difference	Household as % of total population with needs
	'000	%	'000	%		
ADL and/or IADL needs						
Total 65+§	1,062	34	839	30	4	79
65-74	454	24	418	23	1	92
75-84	399	41	311	35	6	78
85+	209	75	110	61	14	53
ADL needs						
Total 65+§	338	11	179	7	4	53
65-74	83	5	60	3	2	72
75-84	134	14	75	8	6	56
85+	121	43	44	24	19	36

Data source: *1991 Health and Activity Limitation Survey*
† Percentage of total population
‡ Percentage of household population
§ Aged-adjusted

Prevalence of need and unmet need for health-related personal assistance, by sex and age group, total population aged 15 and older, Canada, 1991





Data source: *1991 Health and Activity Limitation Survey*

In 1991, about a third of the household population aged 65 and older—a total of 839,000—required health-related personal assistance. Most of them (661,000) needed help only with instrumental activities of daily living (IADL) such as grocery shopping, meal preparation, and housework. Far fewer seniors living in private households (179,000) needed help with basic activities of daily living (ADL) such as eating and bathing, possibly because many with such requirements reside in health-related institutions (see *Only part of the picture*).

Aging was also associated with an increase in unmet need for help. The prevalence of unmet need for ADL and/or IADL rose from 1% among 15- to 24-year-olds to 12% at ages 65 to 74, and to 35% at age 85 and older.

Among seniors, the prevalence of both needs and unmet needs was higher for women than for men.

Table 1
Prevalence of need and unmet need for health-related personal assistance, by type of need, sex and age, household population aged 15 and older, 1991

		IADL and/or ADL needs		IADL needs only		ADL needs	
	Population	Total	Any unmet	Total	Any unmet	Total	Any unmet
	'000	%					
Both sexes 15+†	**21,063**	**9**	**5**	**7**	**4**	**2**	**1**
15-24	3,766	2	1	1	1	1	-
25-34	4,778	3	2	3	2	1	-
35-54	7,247	6	3	5	3	1	1
55-64	2,365	14	7	12	6	2	1
65-74	1,838	23	12	19	9	3	2
75-84	889	35	18	27	13	8	4
85+	180	61	35	37	19	24	10
65+†	2,907	30	16	23	11	7	3
Men 15+†	**10,294**	**7**	**4**	**6**	**3**	**2**	**1**
15-24	1,910	2	1	1	-	1	-
25-34	2,369	3	2	2	1	1	-
35-54	3,608	5	2	4	2	1	1
55-64	1,159	11	5	9	4	2	1
65-74	828	18	8	16	6	3	2
75-84	358	31	14	25	11	6	2
85+	62	56	30	34	14	22	9
65+†	1,248	26	12	20	8	5	2
Women 15+†	**10,769**	**11**	**6**	**9**	**5**	**2**	**1**
15-24	1,856	2	1	1	1	-	-
25-34	2,410	4	3	4	2	1	-
35-54	3,639	8	4	7	4	1	1
55-64	1,206	16	10	14	8	2	1
65-74	1,010	26	15	23	12	4	3
75-84	530	38	21	28	14	10	5
85+	118	64	38	38	22	26	10
65+†	1,659	33	19	26	13	8	4

Data source: *1991 Health and Activity Limitation Survey*
† Age-adjusted
- Nil or zero

Needs vary with socioeconomic characteristics

For seniors of both sexes, the age-adjusted prevalence of need for personal assistance with ADL and/or IADL was higher among those with lower socioeconomic status (Table 2 and Chart 1). Almost a third (32%) of seniors in lower-income households had such needs, compared with 25% of those in higher-income households. The prevalence of need was also greater among seniors with less than high school education (32%), compared with those who had at least graduated from high school (26%).

Seniors who never married or were formerly married (the majority of whom were widowed) and those who lived alone tended to have a relatively high prevalence of need for personal assistance. While 34% of seniors who were formerly married or who lived alone needed such help, the figures were 27% and 28% for those who were married or living with others, respectively. The pattern was similar for men and women, although the prevalence of need was always higher for women.

Needs for help with ADL, which are more basic, were more common among those with lower socioeconomic status. Overall, 7% of seniors in lower-income households needed assistance with ADL, compared with 4% of those in higher-income households. Formerly married seniors also had a higher prevalence of ADL need (8%) than did those who were currently married or never married (5% and 6%).

However, the prevalence of need for help with ADL among seniors in the household population did not vary greatly by living arrangements (Table 2). This was perhaps because many seniors with ADL needs, especially those without adequate support in the community, were living in health-related institutions.

Table 2
Prevalence of need and unmet need for health-related personal assistance among seniors, by type of need, sex and selected characteristics, household population, Canada, 1991

Sex and selected characteristics	Population	IADL and/or ADL needs		IADL needs only		ADL needs	
		Total	Any unmet	Total	Any unmet	Total	Any unmet
	'000	Age-adjusted %					
Both sexes†	**2,907**	**30**	**16**	**23**	**11**	**7**	**3**
Household income							
Lower	1,673	32	19	24	13	7	4
Higher	1,159	25	11	21	9	4	2
Education							
Elementary or less	1,151	32	17	25	12	7	3
Some high school	708	30	15	23	10	7	4
High school graduation	1,048	26	14	20	11	5	2
Marital status							
Formerly married	972	34	20	26	14	8	4
Never married	246	30	10	24	8	6	1
With spouse or partner	1,688	27	14	21	10	5	3
Living arrangements							
Alone	764	34	21	27	16	6	4
With others	2,069	28	14	22	10	6	3
Men†	**1,248**	**26**	**12**	**20**	**8**	**5**	**2**
Household income							
Lower	701	27	13	21	9	6	2
Higher	530	21	10	18	8	3	2
Education							
Elementary or less	472	26	11	21	8	5	2
Some high school	319	25	13	19	7	6	4
High school graduation	458	23	11	19	9	4	2
Marital status							
Formerly married	183	27	13	21	8	7	4
Never married	88	29	17	23	15	6	1
With spouse or partner	977	24	11	20	8	5	2
Living arrangements							
Alone	167	27	16	22	13	5	3
With others	1,064	24	11	19	8	5	2
Women†	**1,659**	**33**	**19**	**26**	**13**	**8**	**4**
Household income							
Lower	972	35	23	26	16	9	5
Higher	629	29	13	25	10	4	2
Education							
Elementary or less	680	36	21	28	14	8	5
Some high school	388	35	17	27	12	8	4
High school graduation	591	28	17	22	13	6	3
Marital status							
Formerly married	789	35	21	27	15	8	4
Never married	159	34	9	28	6	6	2
With spouse or partner	711	31	18	24	13	7	4
Living arrangements							
Alone	598	36	22	29	17	7	4
With others	1,004	31	17	24	12	7	4

Data source: *1991 Health and Activity Limitation Survey*
† Includes persons with data missing on selected characteristics.

Same pattern for unmet needs

For both sexes, the age-adjusted prevalence of at least one unmet need for personal assistance was also higher among seniors with lower socioeconomic status. While 19% of seniors in lower-income households had unmet needs, this was the case for only 11% of those in higher-income households. Similarly, 17% of seniors with less than high school had unmet needs, compared with 14% of those with at least high school graduation.

Socioeconomic inequality in unmet need among seniors was mainly attributable to differences among women. The age-adjusted prevalence of unmet need was 23% among women in lower-income households, compared with 13% among women in higher-income households. And while 21% of senior women with less than high school had unmet needs, the figure was 17% of those who had at least some high school. By contrast, for men, the prevalence of unmet need varied little by socioeconomic status and was lower than that for women in each category, indicating that senior men's needs were generally better met.

Formerly married seniors of both sexes had a higher prevalence of unmet need than did those who were currently married. However, unmet need tended to be more common among married women than among married men. In fact, one reason for the higher level of unmet need among senior women overall is that husbands are often older, and thus, more likely to be frail and less able to provide support to their wife.[19] Another reason is that women tend to live longer than men, and so are more likely to be widowed and to live alone.

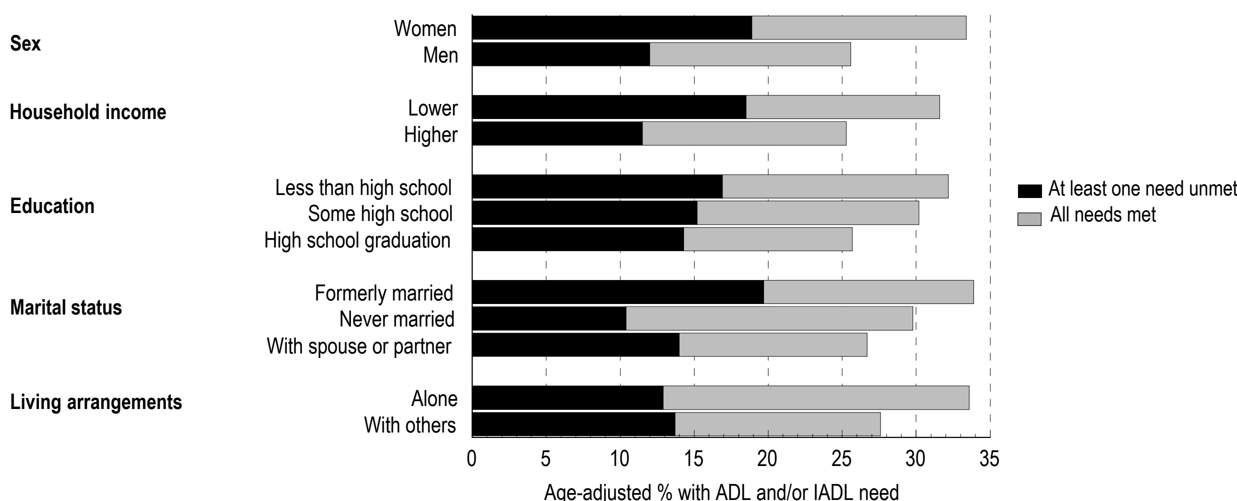
Indeed, the prevalence of unmet need was much higher among seniors living alone (21%) than among those living with others (14%). This mostly reflected unmet need for assistance with IADL. In fact, the prevalence of unmet need for help with ADL varied little by living arrangements. Once again, this may be, at least in part, because many seniors with ADL needs were no longer part of household population.

Help from a variety of sources

Earlier studies have found that among seniors living in private households who received help, the majority received it from informal sources.[20-24] According to the 1991 HALS, at least half of seniors receiving help relied on informal sources only, while another 28% for IADL and 17% for ADL received help from both formal and informal sources (Chart 2). However, this means that approximately half of all seniors receiving help got at least some of it from formal sources.

Older people with health-related needs for personal assistance tend to stitch together a support

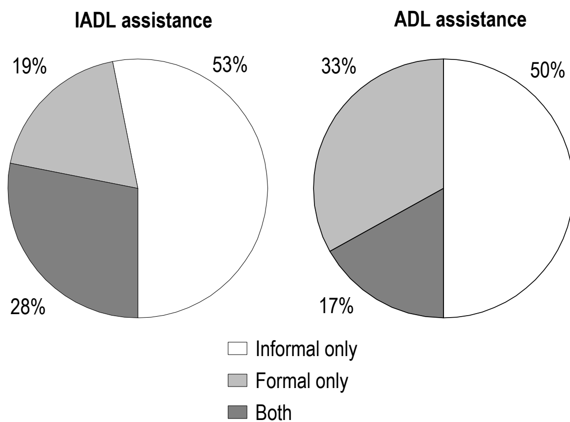
Chart 1
Prevalence of need and unmet need for health-related personal assistance among seniors, by selected characteristics, household population, Canada, 1991



Data source: *1991 Health and Activity Limitation Survey*

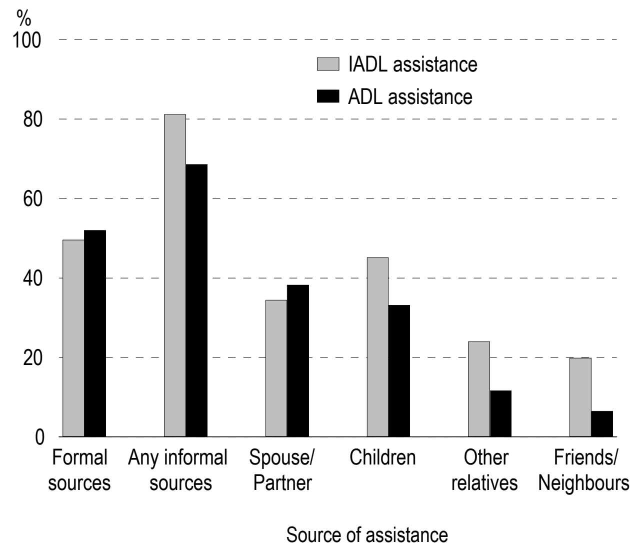
network. This support network consists of formal sources, spouse or partner, children, other relatives, and friends and neighbours (Chart 3). However, the specific components of this network varied with the sources of support available to individual seniors, which, in turn, were influenced by their socioeconomic characteristics.

Chart 2
Formal or informal character of health-related personal assistance received by seniors, by type of assistance, household population, Canada, 1991



Data source: *1991 Health and Activity Limitation Survey*

Chart 3
Sources of health-related personal assistance received by seniors, by type of assistance, household population, Canada, 1991



Data source: *1991 Health and Activity Limitation Survey*
Note: *Because individuals may receive help from more than one source, percentages receiving help from various sources total more than 100%.*

Sources of support differ

The association between household income and sources of support varied by sex and type of need (Table 3). Whether they were receiving assistance with ADL or IADL, over half of senior men relied exclusively on informal sources, regardless of their household income. However, among men receiving help with ADL, those in lower-income households were more dependent on formal sources only (27%) than were those in higher-income households (7%). Women in lower-income households, particularly those receiving help with ADL, also tended to rely on formal sources or on a combination of formal and informal help. This highlights the importance of formal sources in the provision of support to economically disadvantaged elderly people who need assistance with basic activities.

The relationship between education and sources of help was different from that for income. Both men and women with little education tended to rely most on informal support for health-related personal assistance. At higher levels of education, formal sources, either alone or combined with informal sources, accounted for larger shares of assistance received. This suggests the possibility that for seniors with little education, lack of knowledge of the availability of formal services, or assumed costs, may have been a barrier to access. Also, they may have been more reluctant to seek help from unknown persons.

Seniors with no spouse or partner were more likely than those who had a spouse or partner to depend exclusively on formal sources, particularly for assistance with ADL. About half of those with no spouse or partner who got help with ADL relied solely on formal sources. By comparison, whether they were receiving help with ADL or IADL, only about one in ten seniors with a spouse or partner depended exclusively on formal sources.

To a large extent, these variations by marital status in sources of support reflect seniors' living arrangements. Those who lived alone depended more heavily on formal support. Almost three-

quarters (73%) of women who lived alone and received ADL assistance relied on formal sources; just 16% received help only from informal sources. (Data for senior men living alone who reported sources of help with ADL are not shown because the sample size was too small to provide a reliable estimate.) For both men and women who lived alone and were receiving help with IADL, formal sources, exclusively or combined with informal help, still predominated, although informal sources played a somewhat larger role.

By contrast, as previously observed, the majority of seniors who lived with others and received help with IADL or ADL depended only on informal sources. For married seniors, when sources of support were classified into more detailed but overlapping categories, informal support, especially from a spouse or partner, predominated. This was true for men and women and for ADL and IADL assistance (Table 4). Moreover, the proportions of married men and women receiving at least some help from a spouse or partner was the same for IADL assistance. This does not imply that the

Table 3
Formal or informal character of health-related personal assistance received by seniors residing in private households, by sex, type of need and selected characteristics, Canada, 1991

Type of need and selected characteristics	Total receiving assistance		Sources of assistance: Informal only		Formal only		Both formal and informal	
	Men	Women	Men	Women	Men	Women	Men	Women
	'000		%					
Instrumental activities of daily living (IADL)								
Total†	**290**	**537**	**55**	**51**	**20**	**19**	**25**	**30**
Household income								
Lower	187	341	59	43	15	24	26	33
Higher	100	168	50	68	26	8	24	24
Education								
Elementary or less	125	250	64	59	9	17	27	23
At least some high school	165	287	48	44	28	20	24	35
Marital status								
Not with spouse or partner	70	342	46	45	26	24	28	31
With spouse or partner	220	195	58	61	18	11	24	28
Living arrangements								
Alone	44	216	35	29	35	33	30	38
With others	242	294	59	68	16	8	24	24
Activities of daily living (ADL)								
Total†	**52**	**100**	**56**	**47**	**20**	**38**	**24**	**14**
Household income								
Lower	31	69	56	43	27	41	17	16
Higher	19	21	57	69	7	20	37	11
Education								
Elementary or less	21	46	81	55	10	23	10	22
At least some high school	31	54	34	40	29	54	37	6
Marital status								
Not with spouse or partner	12	67	52	37	43	53	6	11
With spouse or partner	40	33	57	68	12	12	31	20
Living arrangements								
Alone	--	33	--	16	--	73	--	11
With others	46	56	57	69	17	14	26	17

Data source: *1991 Health and Activity Limitation Survey*
Note: *Percentages based on persons receiving help for whom source of assistance was known.*
† Includes persons with data missing on selected characteristics.
-- Number of respondents in cell is too small to provide reliable estimate.

amount of help provided was sufficient to meet the spouse's needs. As noted earlier, married women were considerably more likely than married men to have unmet needs.

In addition to receiving assistance with ADL from their spouse or partner, married seniors more commonly got such help from formal sources rather than from children. Thus, for ADL assistance, married seniors seemed to rely on formal support as a second alternative more than they did on children. However, for IADL support, married seniors were as likely to receive help from children as from formal sources.

Implications

According to the 1991 Health and Activity Limitation Survey, seniors who were formerly married (the majority of whom were widowed) and those who lived alone (often the same people) were the most likely to need health-related personal assistance. And perhaps because these were the groups who lacked easy access to informal sources of support (i.e., within the same household), they also had the highest levels of unmet need. Conversely, seniors whose needs were met tended to have a marital status and living arrangements that put informal sources of help in close proximity.

Widowhood, therefore, has serious consequences for elderly people who need health-related personal assistance, as it usually results in the creation of a one-person household. Living alone, particularly for women, was associated not only with relatively heavy dependence on formal sources for support, but also with a relatively higher likelihood that needs would not be met. Notably, widowed seniors were just as likely, if not more so, to mention receiving help from formal sources as from children.

To some degree, the importance of joint contributions of informal and formal support may have resulted from an emerging cultural norm in Western countries that "the aged as a rule do not wish to feel that they are dependent in this way on their offspring."[10,25] Preference for care from formal services rather than from children has been documented in Canada as well.[26,27] Moreover, smaller family size, greater geographic mobility, and women's increasing labour force participation may have reduced the number of family members available to provide informal care.[10,11,25, 26,28-30]

Table 4
Sources of health-related personal assistance received by seniors residing in private households, by sex, marital status and type of need, Canada, 1991

Type of need and marital status	Total receiving assistance		Sources of assistance†											
			Spouse or partner		Children		Other relatives		Friends or neighbours		Any informal		Formal sources	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
	'000		%											
Instrumental activities of daily living (IADL)														
Total	**290**	**537**	**51**	**25**	**41**	**48**	**17**	**28**	**21**	**19**	**81**	**81**	**47**	**51**
Not with spouse or partner	70	342	...	...	35	51	39	32	31	23	78	77	56	58
With spouse or partner	220	195	63	63	42	42	9	20	18	12	82	89	44	40
Activities of daily living (ADL)														
Total	**52**	**100**	**61**	**27**	**27**	**36**	**12**	**11**	**13**	**3**	**82**	**62**	**50**	**53**
Not with spouse or partner	12	67	...	...	12	40	31	13	17	3	56	49	53	63
With spouse or partner	40	33	79	74	32	28	6	8	12	4	90	89	49	33

Data source: *1991 Health and Activity Limitation Survey*
† Because individuals may receive help from more than one source, percentages receiving help from various sources total more than 100%.
... Not applicable

It should be noted that some types of care may require more skill or strength than informal caregivers possess, so recourse to formal services may be necessary. Also, as well as the care that they do provide, informal caregivers may facilitate seniors' access to formal services for additional support, resulting in a greater likelihood of care being provided by a mix of formal and informal sources.

The importance of combinations of formal and informal support may also result, in part, from an increasing emphasis on community-based formal services that aim at mediating the pressures toward institutionalization and burdens on families.[6,28] The substantial proportion of care that was provided by a mix of formal and informal sources indicates that formal support has been widely used to *complement* rather than substitute for informal sources.

Differences in unmet need by marital status and living arrangements reflect the presence or absence of informal support. Without the assistance of spouses, children, relatives and friends, or if for any other reason informal care becomes less available in the future, the need for home care services and residential care institutions would be much greater.

The prevalence of need and unmet need for personal assistance was greater among lower-income and less educated seniors, compared with those who lived in higher-income households and had more education. As well, seniors with lower income were more dependent on formal services than were higher-income seniors. Thus, without formal support, socioeconomic disparities in unmet needs might have been wider, with a consequent worsening of health for those not receiving necessary care.

With an aging population, Canada may see an increase in the demand for formal support, whether these services are institutional or community-based, provided by voluntary, private, or government sources. Financing community-based formal services has been suggested as a possible means of reducing long-term care costs associated with institutionalization. Consequently, it is becoming increasingly important to understand the relationship between formal and informal care.[24,28,30-32] Knowledge of these relationships is essential for planning health care services and long-term funding of personal assistance.

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References

1 Health and Welfare Canada, Federal/Provincial Territorial Subcommittee on Continuing Care. *Future Directions in Continuing Care.* Ottawa: Health and Welfare Canada, 1992.

2 Rosenthal C. Long-term care reform and "family" care: A worrisome combination [Editorial]. *Canadian Journal on Aging* 1994; 13(4): 419-27.

3 Havens B. Long-term care diversity within the care continuum. *Canadian Journal on Aging* 1995; 14(2): 245-62.

4 Havens B, Bray D. International comparisons of long-term care: Canada, with specific reference to Manitoba. *Canadian Journal on Aging* 1996; 15 (suppl.1): 31-45.

5 Havens B, Béland F, Van Nostrand J. Long-term care in five countries [Editorial]. *Canadian Journal on Aging* 1996; 15 (suppl.1): 1-8.

6 Béland F, Arweiler D. Conceptual framework for development of long-term care policy. 1. Constitutive elements. *Canadian Journal on Aging* 1996; 15(4): 649-97.

7 Moore EG, Rosenberg M, McGuinness D. *Growing Old in Canada: Demographic and Geographic Perspectives.* Census monograph series. Toronto: ITP Nelson, 1997.

8 Organisation for Economic Co-operation and Development. *Caring for Frail Elderly People: New Directions in Care.* OECD Social Policy Studies, No. 14. Paris: OECD, 1994.

9 Manton KG, Corder L, Stallard E. Changes in the use of personal assistance and special equipment from 1982 to 1989: Results from the 1982 and 1989 NLTCS. *The Gerontologist* 1993; 33(2): 168-76.

10 Daatland SO. Formal and informal care: New approaches. In: Caselli G, Lopez AD (editors). *Health and Mortality among Elderly Populations.* Oxford: Clarendon Press, 1996: 315-30.

11 Golini A, Vivio R. Strategies for the provision of social and health care services for the elderly. In: Caselli G, Lopez AD (editors). *Health and Mortality among Elderly Populations.* Oxford: Clarendon Press, 1996: 331-49.

12 Health and Welfare Canada. National Long-term Care: Classification Reporting System. *Report of the Working Group on the National Long-term Care Classification Reporting System to the Federal/Provincial Territorial Subcommittee on Continuing Care.* (Catalogue H39/187-1990E) Ottawa: Health and Welfare Canada, 1990.

13 Health and Welfare Canada, Federal/Provincial Territorial Subcommittee on Continuing Care. *Description of Long-term Care Services in Provinces and Territories of Canada.* Ottawa: Health and Welfare Canada, 1993.

14 Hollander MJ. The continuum of care: An integrated system of service delivery. In: Sawyer E, Stephenson M (editors). *Continuing the Care: The Issues and Challenges for Long-term Care.* Ottawa: CHA Press, 1996: 97-113.

15 Hollander MJ. *Report of the Project to Review the Need for, and Feasibility of, a National Data Base on Continuing Care* (Reference No. 82F0012E) Ottawa: Statistics Canada, 1994.

16 Statistics Canada. *Health and Activity Limitation Survey – 1991 User's Guide* (Reference No. 82-602SE) Ottawa: Statistics Canada.

17 Statistics Canada. *HALS Interviewer's Manual – 1991 Adult* (uncatalogued) Ottawa: Statistics Canada, 1991.

18 Desjardins B, Dumas J. *Population Ageing and the Elderly* (Statistics Canada, Catalogue 91-533E) Ottawa: Minister of Industry, Science and Technology, 1993.

19 Gentleman JF, Park E. Age differences of married and divorcing couples. *Health Reports* (Statistics Canada, Catalogue 82-003) 1994; 6(2): 225-40.

20 Stone LO. *Family and Friendship Ties among Canadian Seniors: An Introductory Report of Findings from the General Social Survey* (Statistics Canada, Catalogue 89-508) Ottawa: Minister of Supply and Services Canada, 1988.

21 Hagey J. Help around the house: Support for older Canadians. *Canadian Social Trends* (Statistics Canada, Catalogue 11-008) 1989; 14: 22-4.

22 Health and Welfare Canada. *Ageing and Independence: Overview of a National Survey* (Catalogue H88-3/13-1993E) Ottawa: Health and Welfare Canada, 1993.

23 Wilkins R, Rochon M, Lafontaine P. Autonomie fonctionnelle et espérance de vie en santé. In: Bellerose C, Lavallée C, Chénard L, et al (editors). *Et la santé, ça va en 1992-1993? Rapport de l'Enquête sociale et de la santé 1992-1993*. Volume 1. Montreal: Santé Québec, 1995: 279-311.

24 Chappell N. *Social Support and Aging*. Toronto: Butterworths Canada Ltd., 1992.

25 Sundström G. Care by families: An overview of trends. *Caring for Frail Elderly People: New Directions in Care.* OECD Policy Studies. No. 14. Paris: Organisation for Economic Co-operation and Development, 1994: 15-55.

26 Kenny N, Dickinson R, Stout MD, et al. Values working group synthesis report. In: National Forum on Health (editor). *Canada Health Action: Building on the Legacy.* Volume II - Synthesis Reports and Issues Papers (Catalogue H21-126/5-2-1997E) Ottawa: Minister of Public Works and Government Services, 1997.

27 McAllister NL, Hollander MJ. Seniors' perceptions of and attitudes toward the British Columbia continuing care system. *Health Reports* (Statistics Canada, Catalogue 82-003) 1993; 5(4): 409-18.

28 Chipperfield JG. The support source mix: A comparison of elderly men and women from two decades. *Canadian Journal on Aging* 1994; 13(4): 434-53.

29 Tennstedt SL, Crawford SL, McKinlay JB. Is family care on the decline? A longitudinal investigation of the substitution of formal long-term care services for informal care. *The Milbank Quarterly* 1993; 71(4): 601-24.

30 Silverstein M, Litwak E. A task-specific typology of intergenerational family structure in later life. *The Gerontologist* 1993; 33(2): 258-64.

31 Chappell N, Blandford A. Informal and formal care: Exploring the complementarity. *Ageing and Society* 1991; 10: 299-317.

32 Margaret JP, Chappell N. Self-care in relationship to informal and formal care. *Ageing and Society* 1990; 10: 41-59.