Unmet Needs for Help and Community-Based Services for the Elderly Aged 75 Years and Over

June 2004

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Final Report
Unmet Needs for Help and Community-Based Services for the Elderly Aged 75 Years and Over

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Acknowledgements

This research project could not have been conducted without research support from the CHSRF, FRSQ, and in-kind support from L’Institut universitaire de gériatrie de Montréal. The investigators and research staff also thank the study participants who gave generously of their time and who were a constant motivation to us all. Finally, we would like to thank Carole Bohbot and Linda Carfagnini of the Centre for Clinical Epidemiology and Community Studies who provided support, guidance, and administrative help throughout the conduct of this work.
Key Implications for Decision Makers

- One in four seniors older than 75 has at least one unmet need for help with respect to activities of daily living (such as housekeeping, meal preparation, bathing, and eating). Most unmet needs related to housekeeping and transportation.

- Seniors with an unmet need were more likely to have lower self-reported health, higher levels of psychological distress, feelings of decreased control, and smaller social networks. They were also at greater risk of having poor nutrition.

- Seniors with an unmet need were more likely to visit the emergency room.

- As most unmet needs relate to housekeeping and transportation, governments and other organizations should be particularly concerned with providing assistance for seniors in these domains.

- It is possible that seniors view housekeeping and transportation as non-essential services, and that many seniors learn to cope with the consequences when they are no longer able to do for themselves. Seniors may be reluctant to ask for assistance for something they view as frivolous. However, given the association between living with an unmet need and poor mental and physical well-being, it may be necessary to educate seniors regarding the importance of seeking assistance.
Executive Summary

This study examines the availability and use of community-based services for seniors aged 75 years and older. Seniors in this age group are more likely than younger seniors to have multiple health problems and thus are more likely to require services to help them cope. Previous research in this area has indicated that there exists an association between unmet needs for community services and several negative health outcomes, such as poor mental and physical health. As such, the current study also examined the type of needs for help that are unmet, as well as the factors associated with experiencing an unmet need. Finally, this study examined the association between unmet needs and increased use of medical services, such as emergency room visits and hospitalization.

This research project has several unique features. First, the 551 study participants were randomly selected, without knowledge of whether or not they were receiving community services at the time of the study. As well, while subjects experiencing cognitive impairment were excluded, all other subjects were invited to participate, regardless of their level of physical disability. In addition, all information was gathered from the seniors’ perspective. Thus, this study addresses the issue of unmet needs in community-dwelling seniors at large from the seniors’ perspective and is not restricted based on previous service use or level of physical disability, as previous studies in this field have been.

As per previous research in this field, an unmet need for help was described in one of several ways. Participants were said to have experienced an unmet need if they reported having difficulty or being unable to perform an activity of daily living without help, or reported requiring help or more help with a particular activity. In addition, participants who reported experiencing a negative consequence attributed to insufficient or total lack of help were also said to have experienced an unmet need.

Approximately one in four seniors who participated in the study were found to have an unmet need for help relating to activities of daily living. Such activities include meal preparation, cleaning,
transportation, bathing, and eating, among others. Unmet needs were found to be more common with increasing age and among women. The two most commonly reported unmet needs pertained to transportation and housecleaning, at 11.6 percent and 15 percent, respectively. Associations between several factors and the presence of an unmet need were assessed, and it was found that being female, older age, lower self-rated health, higher levels of psychological distress, and lower levels of perceived control over one’s life were all associated with the presence of an unmet need. In addition to the assessment of unmet needs pertaining to activities of daily living, this project also investigated unmet psychosocial, recreational, and health-related needs. The psychosocial needs included, most notably, the desire for visits from a volunteer, participation in self-help or support groups, and persons outside the participant’s family with whom worries and emotions could be discussed. Unmet needs in this domain were low, ranging from 3.4 to 12.5 percent, with one exception. More than 40 percent of study respondents did not know whom to contact in case of neglect or abuse. Factors associated with an unmet psychosocial need included higher psychological distress, a lower sense of control, lower self-rated health, and a smaller social network. In addition, these participants were found to be at increased risk of poor nutrition.

Recreational and religious activities appear to play an important role in the lives of seniors. Ninety-four percent of participants reported that they had engaged in a favourite hobby over the last month, and 17 percent of these indicated they would have liked to have been able to participate more. Of those who did not participate, more than half wished to do so.

With regards to health-related needs, the most prominent unmet need was for information or more information concerning health and social services, at 47.6 percent. Even among those who received information, 25 percent reported a need for more information. In addition, one in five participants reported a need for foot and toenail care. The factors associated with unmet needs in the latter two domains were comparable to those reported for unmet psychosocial needs, with one exception; women are more likely to report health needs.

The last part of this project was to examine the use of services among those participants who reported an unmet need. With regards to bathing assistance, 18 (62.1 percent) out of
the 29 participants requiring help did not receive assistance. This figure rose to 65.1 percent (54 out of 83 participants) for services pertaining to housekeeping and to 96.9 percent (62 out of 64 participants) for transportation services. These preliminary results must be interpreted with caution as the number participants is quite low. Use of formal services, such as hospitalization and emergency room and physician visits, was also assessed in those with and without unmet needs. A significant difference in frequency of emergency room visits was detected, as 25 percent of those with an unmet need reported one or more visits after six months of follow-up, compared to 11.8 percent of those with no unmet need.

It is important to note that this report presents only preliminary analyses of the data collected for the first 551 participants enrolled in the study. Subsequent analyses will include the use of administrative databases to determine use of formal health services. As well, a 12-month in-depth follow-up questionnaire will assess unmet needs status and the effect that unmet needs have on health services use over time.

This study found that one in four seniors older than age 75 live with an unmet need for help in activities of daily living, a result which is somewhat surprising given the specific exclusion of those with moderate to severe cognitive impairment and the good health of the study sample (more than 40 percent of participants rated their health status as very good or excellent). As the two most commonly reported unmet needs pertain to housecleaning and transportation, it is clear that these domains need to be targeted by those working with seniors. It is possible that these areas are viewed by seniors as frivolous, and that those who are no longer able to provide these services for themselves simply learn to cope with the consequences, rather than requesting help. However, given the potential implications for mental and physical health, seniors should be encouraged to seek assistance when required. As indicated by the preliminary results, those with an unmet need in activities of daily living have increased visits to the emergency room; therefore, this is clearly an issue of great importance to the health of seniors.
Introduction
In this report we describe the methodology and preliminary results for the “Unmet Needs for help and Community-Based Services for the Elderly Aged 75 Years and Over” study (1999-2001).

Background
This study addresses the central issue of assuring the availability and use of community-based services for the elderly older than age 75. Seniors in this age group are more likely than younger elders to have multiple health problems and to need such services to help them to cope with disability. Both policy decisions (such as closing hospital beds) and demographic changes have resulted in an increasing impact on community services and highlight the question of the preparedness of the health system to respond in a timely fashion to the growing needs for such services by the elderly. Whether the expansion of community-based services will be sufficient remains a question, and decision makers need empirical data on how many seniors have unmet needs for help and services. Indeed, the magnitude of unmet needs for help as an indicator of need and/or demand for community services is now well recognized.

Objectives of the Research Project
1. To estimate the prevalence of, and to describe, self-reported unmet needs for help in basic and instrumental activities of daily living (such as meal preparation, cleaning, transportation, bathing, and eating) as well as psychosocial and health-related unmet needs in the community-dwelling elderly (75+).
2. To provide a profile of those with unmet needs.
3. To examine the link between unmet needs for help and (a) the concurrent use of community services and (b) other formal service use.

This research project is unique in several respects. First, the information on unmet needs for help is collected from the aged persons’ perspective. Second, although cognitive impairment as determined by a score of less than 14 on the Adult Lifestyles and Function Interview was an exclusion criterion, participants were recruited without regard to their level of physical disability. In addition, participants were contacted for participation without knowing whether or not they were receiving services at the time of the study. In these important aspects, our research differs markedly from others, as most investigators have assembled samples of elderly persons known to be suffering from functional disability and/or seniors who are already receiving services of some sort and are thus “known” to the system. In including only those study subjects with functional disability the results cannot be applied to those without such disability. Furthermore, by recruiting subjects from service providers, the sample consists of those seniors who are already identified as needing service. The prevalence of unmet need in the community-dwelling
elderly at large has not been addressed. Finally, our study examines unmet needs with respect to the usual functional limitations in basic and instrumental activities of daily living, but also in regard to psychosocial needs and health-related needs.

The conceptual framework
The study is based on the conceptual framework developed by Allen and Mor. (1997). The key concept of this framework (see Figure 1) is not only the determination of the difficulty the person has in accomplishing basic and instrumental activities of daily living, but also the perceived need for help and the adequacy of help received for activities the person has difficulty performing or is unable to perform alone. In addition, the framework includes an assessment of the prevalence of the negative consequences attributed to the absence of help or inadequate help. Consequences attributable to absent or inadequate help were those assumed to be relatively common, according to a group of experts in the homecare field (Allen & Mor, 1997).

Using the Allen and Mor model, a person is defined as having an unmet need for help when he/she reports that he/she has difficulty or is unable to perform an activity without help in one or more of the six basic and three instrumental activities of daily living domains, and does not have help and reports needing help (or more help). In addition, an unmet need is identified if the person reports a negative short-term consequence attributed to the absence of help or insufficient help.

Methodology
The study is a population-based prospective cohort study in which random digit dialling was used to recruit study subjects living on the island of Montreal. The recruitment process was contracted out to Léger Marketing, a market research firm based in Montreal. Using trained recruiters, Léger Marketing conducted a recruitment interview to identify potential participants who met the following eligibility criteria:

a. aged 75 years or older;

b. community-dwelling (that is, not living in an institution);

c. English or French speaking; and

d. not cognitively impaired, as determined by a score of 14 or more on the Adult Lifestyles and Function Interview telephone-administered cognitive screening test (Roccaforte et al, 1992).

Léger Marketing recruited study subjects using the following procedure: each week Léger Marketing conducts an “Omnibus Survey” in which a random sample of approximately 5,000 households in Quebec is contacted by telephone. Respondents are asked a series of questions,
including the age category to which they belong (the oldest age category used in the omnibus survey is 65 and older). Contact information for the Omnibus Survey respondents is banked, thus creating a list that is a random sample of the Quebec population. The sub-list of Montreal households was then used by Léger Marketing as a source of phone numbers of households with individuals 65 years and older for the current study. Trained recruiters, employed by Léger Marketing, phoned a random sample of seniors from this list. A total of 3,104 seniors were contacted from 3,446 households phoned. A total of 852 seniors met the study eligibility, of which 610 agreed to participate. Léger Marketing forwarded these names and phone numbers to the project co-ordinator. To assess the effectiveness of Léger Marketing at successfully recruiting study subjects, we calculated the response rates for households that were phoned* (including those calls where the recruiter received or did not receive a response) and for individuals that were contacted† (only those calls in which the recruiter contacted a person in the household), as well as the “recruitment participation” rate. The response rate of subjects phoned and contacted was 67 percent and 75 percent, respectively. Of the 852 people who met the eligibility criteria, 610 told Léger Marketing they were willing to participate‡ in the study, giving a participation rate of 71.7 percent. When contacted by our interviewers, 61 of the people initially recruited by Léger Marketing either changed their minds and refused to participate in the study (41) or were unable to be contacted (20) for various reasons (including no response to phone calls, no phone service, prolonged illness, or death). These response rates compare favourably with other studies of seniors.

Following oral agreement to participate, potential study subjects were sent an introductory letter, which was followed up by a telephone call about one week later from one of the trained study interviewers. The interviewers arranged to conduct the in-home interview and to complete the consent forms. Figure 2 presents the flow of the study subjects through the recruitment process.

The ethics committee of the Jewish General Hospital, l’Institut universitaire de gériatrie de Montréal, and the McGill University Institutional Review Board approved the final version of the protocol.

Each person who agreed to participate underwent an in-home baseline interview and a telephone interview six months later. A copy of the baseline interview was previously submitted to the Canadian Health Services Research Foundation.

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* Response rate= eligible + ineligible / total phoned
† Response rate= eligible + ineligible / total contacted
‡ Participation rate=Number that agreed to participate / Number meeting eligibility criteria
Results

Descriptive Statistics:

By the end of the study, Leger Marketing recruited 610 participants, of whom 551 (90 percent) agreed to participate and completed a baseline interview. The baseline interviews took on average one hour and 50 minutes to complete (ranging from 50 minutes to 4.5 hours). Two-thirds of the sample (68 percent) was women. The study subjects ranged in age from 75 to 96, and the mean age of the group was 79.5 years. Most lived alone (61.9 percent). The vast majority (86 percent) was Canadian-born, and 74 percent were French-speaking. Other demographic characteristics are presented in Table 1. In response to a question on self-rated health, more than 40 percent of participants reported that their current state of health was very good or excellent, with fewer than five percent reporting poor or very poor health. Most (60 percent) reported that there had been no change in their health status in the past year.

In addition to demographic and health-related information, the baseline interview included a number of indices and scales to assess health and psychological status. The performance of the participants on these indices is presented in Table 2. In general, participants scored at the higher ends of the scales. One finding to be pursued in subsequent analyses by the research group was that more than 50 percent of the sample was identified as being at moderate or high risk of poor nutrition, according to the nutritional status scale (Payette et al, 1995).

Objective 1: Prevalence of self-reported unmet needs for help in the community dwelling elderly (75+)

The proportion of study subjects in our sample reporting any unmet need for help regarding basic and instrumental activities of daily living (that is, either a report of needing help/more help or as defined by a reported consequence) stratified by sex and age is presented in Table 3. The proportion of subjects with unmet need increased with age and was more common among women. The overall prevalence of any unmet need in the sample was 25.95 percent (95% CI: 22.29% to 29.61%). The proportion of subjects with unmet need is displayed in Table 4. Not surprisingly, given the relatively good health of this community-dwelling sample, unmet need was more commonly reported for instrumental activities of daily living, particularly for housekeeping and transportation. Within the category of personal activities of daily living, unmet need for help with bathing was the most commonly reported, with a prevalence of 5.3 percent in the sample. Despite the fact that our sample was selected using random digit dialling and was expected to be a representative sample of the community-dwelling elderly, there were slight demographic differences between our sample and the age and sex distribution of the Quebec population older than age 75. For this reason, we computed estimated population prevalence of unmet need by applying our findings to the senior population of Quebec.
Table 5 presents the expected population prevalence. Due to the slightly younger age distribution of our sample, the observed prevalence of unmet needs is slightly lower (25.95 percent) than what would be expected in the population (27.78 percent).

In relation to psychosocial needs, as presented in Table 6, the percentage of subjects who reported an unmet need is quite low, ranging from 3.4 to 12.5 percent. One exception is for the question concerning the knowledge of whom to contact in case of neglect or abuse. For this question, 40 percent of respondents did not know whom to contact under these circumstances. Apart from this question, the most prevalent reported need was for a visit from a volunteer “for a change of pace,” which was reported by 12.5 percent of participants. A similar proportion of subjects reported a need for someone to discuss worries (seven percent), trying events (8.5 percent), and emotions (7.1 percent).

In this analysis, we are able to distinguish between a need for help and a need for more help. Among those respondents who reported already receiving help, quite a high proportion stated that they would like to have more help, the percentage varying from 20.8 percent (more help to discuss emotions, etc. with a professional) to 40 percent (more visits from a volunteer). This latter result should be interpreted with caution, since this percentage is based on only five participants who reported that they received such visits but would like more.

Turning to participation in recreational/religious activities (Table 7), 94 percent (511) of participants reported that they had engaged in a favourite hobby over the past month, but 17 percent (89/511) of these indicated that they would have liked to have been able to participate more. Of those who had not participated in such activities, more than half (55 percent) expressed a desire to do so. Most participants (58.8 percent) reported participating in religious activities, with 11.7 percent of these expressing a desire for more participation, and 16 percent who had not participated indicating a desire to do so. For the more general category of participation in organized group activities, 49.9 percent (276/551) reported that they had participated, while 24.7 percent of those who did not participate reported a desire to. Even among those who participated, 14.5 percent indicated a desire for more participation. These findings suggest that leisure activities, particularly related to participation in hobbies, are an important aspect of life of community-dwelling seniors.

When asked about health-related needs (Table 8), the most frequently expressed need was for information or more information concerning health and social services (47.6 percent); even among those who stated that they received information, 25 percent reported a need for
more information. Another important stated need was for care of the feet and toenails, with one in five indicating that they needed this kind of help. Ten percent expressed a need for help (or more help) to improve balance or mobility in arms, legs, or hands. Of 130 subjects who reported following a special diet, 11.8 percent reported needing help or more help to follow the diet.

**Objective 2: To provide a profile of those with unmet needs for help**

Table 9 provides bivariate comparisons of the characteristics of those with any unmet need for assistance with basic or instrumental activities of daily living to those with no reported unmet need. Those with reported unmet need were more likely to be female, had lower self-reported health, higher levels of psychological distress, lower control scores, and were also more likely to be classified as being at moderate or high risk for poor nutrition according to the nutritional scoring scale of Payette et al (1995). There were no differences with respect to the cognitive score, marital status, living alone, or size of social network. Although there was a statistically significant difference in the age of those with versus without unmet need, the magnitude of the difference was only 1.2 years (80.42 versus 79.2 years) and thus not likely to be of importance.

When entered into logistic regression analysis, being female remained a significant correlate with an odds ratio of 1.176 (95% CI: 1.036 to 3.019), as did age (odds ratio=1.085, 95% CI: 1.02 to 1.146) for each year of age. Lower levels of self-rated health also remained a significant correlate of reported unmet need with an odds ratio of 2.086 (95% CI: 1.597 to 2.726), indicating that for every one unit drop in self-reported health (that is, from good to fair; fair to poor; etc.) the odds of reported unmet needs increased two fold. Increasing scores on the psychological distress scale also increased the likelihood of reporting unmet needs (odds ratio=1.068, 95% CI: 1.016 to 1.123). Higher scores on the control scale were associated with a decreased likelihood of reported unmet needs. Once the above variables were in the model, the nutritional screening score was no longer retained in the model. This suggests that the scores on the nutritional assessment are correlated with one or more of the independent variables and that the score is not an independent predictor of self-reported unmet needs.

Table 10 presents a comparison of those with and without psychosocial need. Those reporting any unmet psychosocial need, on average, had higher levels of psychosocial distress, scored lower on the control scale, and reported slightly (although statistically significant) lower self-rated health (2.28 versus 2.46). The social network was also smaller for those reporting unmet psychosocial need. Finally, participants with any unmet psychosocial need were more likely to be classified as being at moderate or high risk of poor nutrition.
In comparing the characteristics of those with and without an unmet need for participating in recreational/religious activities (Table 11), the findings are similar. Specifically, those with unmet need reported higher levels of psychological distress, lower control, had lower self-rated health, smaller social networks, and were more likely to be classified as being at moderate or high nutritional risk.

Table 12 displays the results of the comparison of those subjects with and without reported unmet health-related need. Those with unmet health need were more likely to be female, more likely to be French-speaking, had higher psychological distress, lower control scores, lower self-rated health, smaller social networks, and were more likely to be classified as being at moderate or high risk of poor nutrition.

In summary: For most of the studied categories of unmet need, a relationship was found with psychological distress, control, nutritional risk, self-rated health, and size of the social network. Whether these are consequences of, or predictors for, unmet need cannot be determined from this cross sectional analysis and will be studied in more detail during the follow-up. There were no sex differences in reported unmet need, except for help in basic and instrumental activities of daily living and the need for health-related services.

**Objective 3: To examine the link between unmet needs for help and the use of community services and other services.**

The first aspect of this analysis was to examine the use of services at baseline among those subjects who reported an unmet need. These results are reported in Table 13 for unmet needs for basic and instrumental activities of daily living, the needs for which services would most likely be available in the community.

With regards to bathing assistance, 18 (62.1 percent) out of the 29 participants requiring help did not receive assistance. This figure rose to 65.1 percent (54 out of 83 participants) for services pertaining to housekeeping and to 96.9 percent (62 out of 64 participants) for transportation services. These preliminary results must be interpreted with caution as the number participants is quite low. These analyses will be elaborated in the larger sample and with the additional follow-up.

In terms of examining the use of more formal services in the six months following baseline, information from two sources is available. First, the self-reported use of more formal services obtained in the six-month telephone interview is examined in relation to unmet need. Second, data received from the Régie de l’assurance maladie du Quebec (Quebec’s health insurance
plan) will permit us to examine the association between unmet need at baseline and the use of more formal services as recorded by the Régie and in the MEDECHO administrative database. Permission has been received from the Commission d’accès à l’information du Québec for access to regie and MEDECHO data for all subjects that consented to permit these records to be used in this study. Of the 551 subjects who consented to be interviewed, 508 (92.2 percent) also agreed to allow their records to be used in this study. The data files have been submitted to the regie and MEDECHO for linkage, and it is anticipated that these data will be received by the end of April 2003.

Only self-reported uses of formal services are thus used in this analysis. Of the original 551 study subjects, 534 completed the six-month telephone interview. The telephone interview took on average 13 minutes to complete (five to 48 minutes). Table 14 gives the frequency of hospitalizations, emergency department visits, and physician visits as reported by the subjects during the telephone interview. Very few of the subjects reported any hospitalizations over the six months (six percent), while 14.7 percent reported having visited an emergency department, and 87 percent reported having seen a physician at least once in the past six months. Of the participants who identified having unmet needs at baseline, 25 percent reported having one or more visits to an emergency department by the time of the six-month follow-up. This was significantly higher than what was reported by those with no unmet need (11.8 percent, p=0.0002). There was no difference in hospitalizations.

**Summary:**
This report presents only preliminary analyses of the data collected for the first 551 study subjects in the study. Approximately one in four seniors older than age 75 and living in the community reported at least one unmet need for help in basic and instrumental activities of daily living. This figure is remarkable given the relatively good health status (as indicated by self-rated health) of this group and the specific exclusion of those with moderate/severe cognitive impairment. Additional analyses on the full cohort (n=839) will be conducted to verify these finding. The addition of a 12-month in-depth follow-up of these subjects will enable us to examine the stability of unmet needs, as well as the possible impact of neglected unmet needs on the use of more formal services (such as visits to emergency departments, hospitalizations, and medication use).
References


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<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>474</td>
<td>86.0</td>
</tr>
<tr>
<td>Other</td>
<td>77</td>
<td>14.0</td>
</tr>
</tbody>
</table>
### Table 2. Performance on indices of health and psychosocial status (N=551)

<table>
<thead>
<tr>
<th>Ordinal Scales</th>
<th></th>
<th></th>
<th>Range of possible scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Mean</td>
<td>Median</td>
<td></td>
</tr>
<tr>
<td>ALFI</td>
<td>20.42</td>
<td>21</td>
<td>0 (worst) – 22 (best)</td>
</tr>
<tr>
<td>Health status (self-rated)</td>
<td>2.70</td>
<td>3</td>
<td>1 (excellent) - 6 (very poor)</td>
</tr>
<tr>
<td>Co-morbid conditions (number)</td>
<td>4.37</td>
<td>4</td>
<td>0 -17</td>
</tr>
<tr>
<td>Psychological distress</td>
<td>19.81</td>
<td>19</td>
<td>14 (best) - 56 (worst)</td>
</tr>
<tr>
<td>Control</td>
<td>23.74</td>
<td>24</td>
<td>8 (worst) - 32 (best)</td>
</tr>
<tr>
<td>Social network</td>
<td>2.85</td>
<td>3</td>
<td>1 (worst) - 4 (best)</td>
</tr>
<tr>
<td>Social support (emotional)</td>
<td>10.51</td>
<td>10</td>
<td>4 (worst) - 16 (best)</td>
</tr>
<tr>
<td>Social support (conflicts)</td>
<td>5.17</td>
<td>4</td>
<td>4 (best) – 16 (worst)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Categorical Scales</th>
<th>Frequency (percentage)</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Social support (satisfaction)</td>
<td>2 (0.4)</td>
<td>455 (82.6)</td>
</tr>
<tr>
<td>Nutritional screening</td>
<td>219 (39.8)</td>
<td>256 (46.5)</td>
</tr>
</tbody>
</table>
Table 3. Proportion of subjects reporting an unmet ADL or IADL need, stratified by sex and age *(percentage in parentheses).*

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unmet Need</td>
<td>No Unmet Need</td>
</tr>
<tr>
<td>74-79</td>
<td>12 (12.0)</td>
<td>88 (88.0)</td>
</tr>
<tr>
<td>80-84</td>
<td>8 (14.3)</td>
<td>48 (85.7)</td>
</tr>
<tr>
<td>85-89</td>
<td>6 (40.0)</td>
<td>9 (60.0)</td>
</tr>
<tr>
<td>&gt; 90</td>
<td>0 (0.0)</td>
<td>2 (100.0)</td>
</tr>
</tbody>
</table>
### Table 4. Proportion of the sample with reported unmet ADL or IADL need in particular domains (*N* = 55, *percentages in parentheses*).

<table>
<thead>
<tr>
<th>Domain</th>
<th>Unmet Need</th>
<th>No Unmet Need</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activities of Daily Living (ADL)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Dressing</em></td>
<td>8 (1.5)</td>
<td>543 (98.5)</td>
</tr>
<tr>
<td><em>Bathing</em></td>
<td>29 (5.3)</td>
<td>522 (94.7)</td>
</tr>
<tr>
<td><em>Eating</em></td>
<td>3 (0.5)</td>
<td>548 (99.5)</td>
</tr>
<tr>
<td><em>Toileting</em></td>
<td>5 (0.9)</td>
<td>545 (99.1)</td>
</tr>
<tr>
<td><em>Transfer</em></td>
<td>7 (1.3)</td>
<td>544 (98.7)</td>
</tr>
<tr>
<td><em>Moving</em></td>
<td>16 (2.9)</td>
<td>535 (97.1)</td>
</tr>
<tr>
<td><strong>Instrumental Activities of Daily Living (IADL)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Meals</em></td>
<td>16 (2.7)</td>
<td>535 (97.3)</td>
</tr>
<tr>
<td><em>Transportation</em></td>
<td>64 (11.6)</td>
<td>487 (88.4)</td>
</tr>
<tr>
<td><em>Housekeeping</em></td>
<td>83 (15.0)</td>
<td>468 (85.0)</td>
</tr>
</tbody>
</table>
Table 5. Estimated prevalence of unmet needs in the Quebec population stratified by age and sex.

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Unmet Needs in the sample (per thousand)</th>
<th>Quebec Population (N)</th>
<th>Quebec Prevalence (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sample</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-79</td>
<td>71 (228)</td>
<td>144664</td>
<td>32983</td>
</tr>
<tr>
<td>80-84</td>
<td>47 (267)</td>
<td>86793</td>
<td>23174</td>
</tr>
<tr>
<td>85-89</td>
<td>21 (375)</td>
<td>41487</td>
<td>15558</td>
</tr>
<tr>
<td>90+</td>
<td>4 (500)</td>
<td>18471</td>
<td>9236</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>291415</td>
<td>80950</td>
</tr>
</tbody>
</table>

Prevalence per thousand 259.53 277.78

Males

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Unmet Needs in the sample (per thousand)</th>
<th>Quebec Population (N)</th>
<th>Quebec Prevalence (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-79</td>
<td>12 (120)</td>
<td>55978</td>
<td>6717</td>
</tr>
<tr>
<td>80-84</td>
<td>8 (143)</td>
<td>29875</td>
<td>4272</td>
</tr>
<tr>
<td>85-89</td>
<td>6 (400)</td>
<td>12324</td>
<td>4930</td>
</tr>
<tr>
<td>90+</td>
<td>0 (0)</td>
<td>4796</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>102973</td>
<td>15919</td>
</tr>
</tbody>
</table>

Prevalence per thousand 150.29 154.59

Females

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Unmet Needs in the sample (per thousand)</th>
<th>Quebec Population (N)</th>
<th>Quebec Prevalence (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-79</td>
<td>59 (280)</td>
<td>88686</td>
<td>24832</td>
</tr>
<tr>
<td>80-84</td>
<td>39 (325)</td>
<td>56918</td>
<td>18498</td>
</tr>
<tr>
<td>85-89</td>
<td>15 (366)</td>
<td>29163</td>
<td>10674</td>
</tr>
<tr>
<td>90+</td>
<td>4 (668)</td>
<td>13675</td>
<td>9135</td>
</tr>
<tr>
<td>Total</td>
<td>117</td>
<td>188442</td>
<td>63139</td>
</tr>
</tbody>
</table>

Prevalence per thousand 309.52 335.06
<table>
<thead>
<tr>
<th>Need Description</th>
<th>No Unmet Need</th>
<th>Unmet Need</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Visit of a volunteer for change of pace</td>
<td>482 (87.5)</td>
<td>69 (12.5)</td>
</tr>
<tr>
<td>Q2 Self help / support group</td>
<td>513 (93.1)</td>
<td>38 (6.9)</td>
</tr>
<tr>
<td>Q3 Person with whom to discuss worries about future (outside the family)</td>
<td>512 (92.9)</td>
<td>39 (7.1)</td>
</tr>
<tr>
<td>Q4 Person with whom to discuss trying events (outside the family)</td>
<td>504 (91.5)</td>
<td>47 (8.5)</td>
</tr>
<tr>
<td>Q5 Person with whom to discuss treatment by others (outside the family)</td>
<td>532 (96.6)</td>
<td>19 (3.4)</td>
</tr>
<tr>
<td>Q6 Knowledge of who to contact in case of neglect or abuse</td>
<td></td>
<td>222 (40.3)</td>
</tr>
<tr>
<td>Q7 To discuss emotions (i.e. depression, sadness, stress) with a professional</td>
<td>512 (92.9)</td>
<td>39 (7.1)</td>
</tr>
<tr>
<td>Need Description</td>
<td>Participates (N=551)</td>
<td>Needs/Wants More (participates)</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>----------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Q9 Participation in organized group leisure activities</td>
<td>276 (49.9)</td>
<td>40 / 276 (14.5)</td>
</tr>
<tr>
<td>Q10 Attendance or participation in religious activities</td>
<td>324 (58.8)</td>
<td>38 / 324 (11.7)</td>
</tr>
<tr>
<td>Q11 Practicing a favourite hobby</td>
<td>511 (94.0)</td>
<td>89 / 511 (17.4)</td>
</tr>
</tbody>
</table>
Table 8. Health-related needs (percentage in parentheses).

<table>
<thead>
<tr>
<th>Need Description</th>
<th>Receives Help (N=551)</th>
<th>Needs/Wants More Help (receives)</th>
<th>Needs/Wants Help (does not receive)</th>
<th>Primary Source of Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Supervision of meals (for those with a special diet)</td>
<td>27 / 130 (20.8)</td>
<td>2 / 27 (7.41)</td>
<td>12 / 102 (11.8)</td>
<td>Other = 17 (63.0)</td>
</tr>
<tr>
<td>Q2 Help to care for feet or toenails</td>
<td>157 (28.5)</td>
<td>12 / 157 (7.6)</td>
<td>94 / 394 (23.9)</td>
<td>Private resource = 123 (78.3)</td>
</tr>
<tr>
<td>Q3 Regular check on state of health (e.g. person who phones regularly)</td>
<td>160 (29.0)</td>
<td>1 / 160 (0.63)</td>
<td>17 / 391 (4.35)</td>
<td>Family = 116 (72.5)</td>
</tr>
<tr>
<td>Q4 Help to improve balance or mobility in arms, legs or hands</td>
<td>22 (3.99)</td>
<td>2 / 22 (9.10)</td>
<td>57 / 529 (10.8)</td>
<td>Private resource = 13 (59.1)</td>
</tr>
<tr>
<td>Q5 Information on health and social services</td>
<td>133 (24.1)</td>
<td>33 /133 (24.8)</td>
<td>199 / 418 (47.6)</td>
<td>Other = 99 (74.4)</td>
</tr>
<tr>
<td>Q6 Person responsible for organizing health/social services who can answer questions</td>
<td>128 (23.2)</td>
<td>N/A</td>
<td>36 / 423 (8.51)</td>
<td>CLSC = 45 (35.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Family = 31 (24.2)</td>
</tr>
<tr>
<td>Q7 Other needs related to health state for which no help received</td>
<td>N/A</td>
<td>N/A</td>
<td>45 (8.17)</td>
<td>N/A</td>
</tr>
<tr>
<td>Q8 Special equipment for bath, shower or toilet (that you do not currently have)</td>
<td>N/A</td>
<td>N/A</td>
<td>55 / 551 (9.98)</td>
<td>N/A</td>
</tr>
<tr>
<td>Q9 Emergency or call system for greater safety in the home (in case of need)</td>
<td>N/A</td>
<td>N/A</td>
<td>46 (8.35)</td>
<td>N/A</td>
</tr>
<tr>
<td>Q10 Modifications of home to make ADL easier to accomplish</td>
<td>N/A</td>
<td>N/A</td>
<td>29 (5.26)</td>
<td>N/A</td>
</tr>
<tr>
<td>Characteristic</td>
<td>Unmet Need (N = 143)</td>
<td>No Unmet Need (N = 408)</td>
<td>P-value</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------</td>
<td>-------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>26 (18.2)</td>
<td>147 (36.0)</td>
<td>&lt; .0001</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>117 (81.8)</td>
<td>261 (64.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>80.42</td>
<td>79.20</td>
<td>.0013</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>80</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>39 (27.3)</td>
<td>127 (31.1)</td>
<td>.3873</td>
<td></td>
</tr>
<tr>
<td>No partner</td>
<td>104 (72.7)</td>
<td>281 (68.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohabitant Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives alone</td>
<td>92 (64.3)</td>
<td>249 (61.0)</td>
<td>.4836</td>
<td></td>
</tr>
<tr>
<td>1 or more cohabitants</td>
<td>51 (35.7)</td>
<td>159 (39.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother tongue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>106 (74.1)</td>
<td>303 (74.3)</td>
<td>.7118</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>23 (16.1)</td>
<td>73 (17.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>14 (9.8)</td>
<td>32 (7.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Status (self-rated)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.385</td>
<td>2.466</td>
<td>&lt; .0001</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological distress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>22.59</td>
<td>18.83</td>
<td>&lt; .0001</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>22</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>21.29</td>
<td>24.60</td>
<td>&lt; .0001</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>22</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social network</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.846</td>
<td>2.850</td>
<td>.2731</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutritional screening</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low risk</td>
<td>33 (23.1)</td>
<td>186 (45.6)</td>
<td>&lt; .0001</td>
<td></td>
</tr>
<tr>
<td>Moderate risk</td>
<td>70 (49.0)</td>
<td>186 (45.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High risk</td>
<td>40 (28.0)</td>
<td>36 (8.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALFI score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>20.29</td>
<td>20.46</td>
<td>.3091</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>21</td>
<td>21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 10. Characteristics of subjects with and without an unmet psychosocial need. (Unless indicated, frequencies given with column percentages in parentheses; P-values derived using t-, Wilcoxon- or χ²-tests.)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Unmet Need (N = 142)</th>
<th>No Unmet Need (N = 408)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>50 (35.2)</td>
<td>123 (30.1)</td>
<td>.2630</td>
</tr>
<tr>
<td>Female</td>
<td>92 (64.8)</td>
<td>285 (69.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>79.66</td>
<td>79.41</td>
<td>.5100</td>
</tr>
<tr>
<td>Median</td>
<td>79.0</td>
<td>79.0</td>
<td></td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>46 (32.4)</td>
<td>120 (29.4)</td>
<td>.5049</td>
</tr>
<tr>
<td>No partner</td>
<td>96 (67.6)</td>
<td>288 (70.6)</td>
<td></td>
</tr>
<tr>
<td><strong>Cohabitant status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives alone</td>
<td>82 (57.7)</td>
<td>258 (63.2)</td>
<td>.2462</td>
</tr>
<tr>
<td>1 or more cohabitants</td>
<td>60 (42.3)</td>
<td>150 (36.8)</td>
<td></td>
</tr>
<tr>
<td><strong>Mother tongue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>29 (20.4)</td>
<td>67 (16.4)</td>
<td>.4785</td>
</tr>
<tr>
<td>English</td>
<td>100 (70.4)</td>
<td>308 (75.5)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>13 (9.2)</td>
<td>33 (8.1)</td>
<td></td>
</tr>
<tr>
<td><strong>Health status (self-rated)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.28</td>
<td>2.46</td>
<td>.0014</td>
</tr>
<tr>
<td><strong>Psychological distress</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>22.01</td>
<td>19.03</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Median</td>
<td>21.0</td>
<td>18.0</td>
<td></td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>22.14</td>
<td>24.31</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Median</td>
<td>22.0</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td><strong>Social network</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.32</td>
<td>3.93</td>
<td>.0004</td>
</tr>
<tr>
<td>Median</td>
<td>3.0</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td><strong>Nutritional screening</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low risk</td>
<td>42 (29.6)</td>
<td>176 (43.1)</td>
<td>.0018</td>
</tr>
<tr>
<td>Moderate risk</td>
<td>70 (49.3)</td>
<td>186 (45.6)</td>
<td></td>
</tr>
<tr>
<td>High risk</td>
<td>30 (21.1)</td>
<td>46 (11.3)</td>
<td></td>
</tr>
<tr>
<td><strong>ALFI score</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>20.20</td>
<td>20.48</td>
<td>.0857</td>
</tr>
<tr>
<td>Median</td>
<td>21.0</td>
<td>21.0</td>
<td></td>
</tr>
</tbody>
</table>

* Wilcoxon rank-sum test, two-sided z-approximation used (halve for 1-sided).
Table 11. Characteristics of subjects with and without an unmet recreational/religious need. (Unless indicated, frequencies given with column percentages in parentheses; P-values derived using t-, 2-way Wilcoxon- or $\chi^2$-tests.)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Unmet Need (N = 223)</th>
<th>No Unmet Need (N = 328)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>69 (30.9)</td>
<td>104 (31.7)</td>
<td>.8493</td>
</tr>
<tr>
<td>Female</td>
<td>154 (69.1)</td>
<td>224 (68.3)</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>79.65</td>
<td>79.35</td>
<td>.3713</td>
</tr>
<tr>
<td>Median</td>
<td>79.0</td>
<td>79.0</td>
<td></td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>73 (32.7)</td>
<td>93 (28.4)</td>
<td>.2712</td>
</tr>
<tr>
<td>No partner</td>
<td>150 (67.3)</td>
<td>235 (71.6)</td>
<td></td>
</tr>
<tr>
<td><strong>Cohabitant status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives alone</td>
<td>133 (59.6)</td>
<td>208 (63.4)</td>
<td>.3707</td>
</tr>
<tr>
<td>1 or more cohabitants</td>
<td>90 (40.4)</td>
<td>120 (39.6)</td>
<td></td>
</tr>
<tr>
<td><strong>Mother tongue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>164 (73.5)</td>
<td>245 (74.7)</td>
<td>.7090</td>
</tr>
<tr>
<td>English</td>
<td>42 (18.8)</td>
<td>54 (16.5)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>17 (7.6)</td>
<td>29 (8.8)</td>
<td></td>
</tr>
<tr>
<td><strong>Health status (self-rated)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.32</td>
<td>2.48</td>
<td>.0009</td>
</tr>
<tr>
<td>Median</td>
<td>2.0</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td><strong>Psychological distress</strong></td>
<td></td>
<td></td>
<td>.0001</td>
</tr>
<tr>
<td>Mean</td>
<td>21.24</td>
<td>18.83</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>20.0</td>
<td>18.0</td>
<td></td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td>.0002</td>
</tr>
<tr>
<td>Mean</td>
<td>22.94</td>
<td>24.28</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>23.0</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td><strong>Social network</strong></td>
<td></td>
<td></td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Mean</td>
<td>3.42</td>
<td>4.02</td>
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</tr>
<tr>
<td>Median</td>
<td>3.0</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td><strong>Nutritional screening</strong></td>
<td></td>
<td></td>
<td>.0031</td>
</tr>
<tr>
<td>Low risk</td>
<td>70 (31.4)</td>
<td>149 (45.4)</td>
<td></td>
</tr>
<tr>
<td>Moderate risk</td>
<td>115 (51.6)</td>
<td>141 (43.0)</td>
<td></td>
</tr>
<tr>
<td>High risk</td>
<td>38 (17.0)</td>
<td>38 (11.6)</td>
<td></td>
</tr>
<tr>
<td><strong>ALFI score</strong></td>
<td></td>
<td></td>
<td>.2668</td>
</tr>
<tr>
<td>Mean</td>
<td>20.31</td>
<td>20.48</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>21.0</td>
<td>21.0</td>
<td></td>
</tr>
</tbody>
</table>

* Wilcoxon rank-sum test, two-sided z-approximation used (halve for 1-sided).
Table 12. Characteristics of subjects with and without an unmet health-related need. (*N = 550; unless indicated, frequencies given with column percentages in parentheses; P-values derived using t-, 2-way Wilcoxon- or χ²-tests.)*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Unmet Need (N = 183)</th>
<th>No Unmet Need (N = 367)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>266 (72.5)</td>
<td>111 (60.7)</td>
<td>.0049</td>
</tr>
<tr>
<td>Male</td>
<td>101 (27.5)</td>
<td>72 (39.3)</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>79.67</td>
<td>79.07</td>
<td>.0903</td>
</tr>
<tr>
<td>Median</td>
<td>79.0</td>
<td>79.0</td>
<td></td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>109 (29.7)</td>
<td>57 (31.2)</td>
<td>.7275</td>
</tr>
<tr>
<td>No partner</td>
<td>258 (70.3)</td>
<td>126 (68.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Cohabitant status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives alone</td>
<td>230 (62.7)</td>
<td>110 (60.1)</td>
<td>.5602</td>
</tr>
<tr>
<td>1 or more cohabitants</td>
<td>137 (37.3)</td>
<td>73 (39.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Mother tongue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>285 (77.7)</td>
<td>123 (67.2)</td>
<td>.0074</td>
</tr>
<tr>
<td>English</td>
<td>51 (13.9)</td>
<td>45 (24.6)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>31 (8.4)</td>
<td>15 (8.2)</td>
<td></td>
</tr>
<tr>
<td><strong>Health status (self-rated)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.33</td>
<td>2.58</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Median</td>
<td>2.0</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td><strong>Psychological distress</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>20.57</td>
<td>18.28</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Median</td>
<td>19.0</td>
<td>17.0</td>
<td></td>
</tr>
<tr>
<td><strong>Control</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Mean</td>
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<td>25.21</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Median</td>
<td>23.0</td>
<td>26.0</td>
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</tr>
<tr>
<td><strong>Social network</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.65</td>
<td>4.05</td>
<td>.0079</td>
</tr>
<tr>
<td>Median</td>
<td>4.0</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td><strong>Nutritional screening</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low risk</td>
<td>123 (33.5)</td>
<td>96 (52.5)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Moderate risk</td>
<td>179 (48.8)</td>
<td>76 (41.5)</td>
<td></td>
</tr>
<tr>
<td>High risk</td>
<td>65 (17.7)</td>
<td>11 (6.0)</td>
<td></td>
</tr>
<tr>
<td><strong>ALFI score</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>20.31</td>
<td>20.62</td>
<td>.0398</td>
</tr>
<tr>
<td>Median</td>
<td>21.0</td>
<td>21.0</td>
<td></td>
</tr>
</tbody>
</table>

* Wilcoxon rank-sum test, two-sided z-approximation used (halve for 1-sided).
<table>
<thead>
<tr>
<th>Type of unmet need</th>
<th>Number of subjects</th>
<th>Number of subjects receiving the corresponding service</th>
<th>Number of subjects NOT receiving the corresponding service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmet need for help with dressing</td>
<td>8</td>
<td>5 (62.5%)</td>
<td>3 (37.5%)</td>
</tr>
<tr>
<td>Unmet need for help with bathing</td>
<td>29</td>
<td>11 (37.9%)</td>
<td>18 (62.1%)</td>
</tr>
<tr>
<td>Unmet need for help with dressing &amp; bathing</td>
<td>37</td>
<td>16 (43.2%)</td>
<td>21 (56.8%)</td>
</tr>
<tr>
<td>Unmet need for help with meal preparation</td>
<td>16</td>
<td>8 (50%)</td>
<td>8 (50%)</td>
</tr>
<tr>
<td>Unmet need for help in housekeeping</td>
<td>83</td>
<td>29 (34.9%)</td>
<td>54 (65.1%)</td>
</tr>
<tr>
<td>Unmet need for help in transportation</td>
<td>64</td>
<td>2 (3.1%)</td>
<td>62 (96.9%)</td>
</tr>
</tbody>
</table>
Table 14. One or more self-reported ED, hospital or physician visits at six months. (N=534)

<table>
<thead>
<tr>
<th>Visit Type</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency department</td>
<td>81</td>
<td>14.7</td>
</tr>
<tr>
<td>Hospitalization</td>
<td>33</td>
<td>6.0</td>
</tr>
<tr>
<td>Physician</td>
<td>468</td>
<td>87.6</td>
</tr>
</tbody>
</table>

Table 14. Hospital and ED visits at six months by baseline unmet need status. (N=534; frequencies given with column percentages in parentheses.)

<table>
<thead>
<tr>
<th>Visit Type</th>
<th>Unmet Need (N = 135)</th>
<th>No Unmet Need (N = 399)</th>
<th>P-value (χ²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency department</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No visits</td>
<td>101 (74.8)</td>
<td>352 (88.2)</td>
<td>.0002</td>
</tr>
<tr>
<td>One or more visits</td>
<td>34 (25.2)</td>
<td>47 (11.8)</td>
<td></td>
</tr>
<tr>
<td>Hospitalization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No visits</td>
<td>125 (92.6)</td>
<td>376 (94.2)</td>
<td>.4932</td>
</tr>
<tr>
<td>One or more visits</td>
<td>10 (7.4)</td>
<td>23 (5.8)</td>
<td></td>
</tr>
</tbody>
</table>
Figure 1. Algorithm for determination of unmet need for bathing (Allen & Mor, 1997)

- Do you take a bath, shower, sponge bath by yourself or does someone help you with this?
  - Self
    - Would you say that taking a bath, shower, sponge bath by yourself is?
      - Not at all difficult
        - NO NEED
      - Somewhat / Very difficult
  - With Help
    - Have there been times in the past month when you needed (additional) help to take a bath, shower? (sponge bath)
      - Seldom / Never
        - NO NEED
      - Occasionally / Often
        - Yes
          - UNMET NEED
  - If No, check:
    - Have there been times in the past month when you have not taken a bath, shower (when you have not taken a sponge bath) because you were afraid of falling without someone there to help you?
      - No
        - NO NEED
      - Yes
        - In the past month, would you have liked to take a bath or a shower rather than having a sponge bath, but you could not because there was nobody to help you?
Figure 2: Subject Recruitment

Random sample of Quebec households Omnibus survey

Montreal households From Omnibus survey (≥65 years)

171 No answer, busy, answering machine

460 Refusal incomplete No call back

Montreal household contacted

Eligibility criteria

1,454 Excluded (did not meet eligibility criteria)

852 Met eligibility criteria

242 Refused to participate

610 Agreed to participate