

*Original Contribution/Clinical Investigation***Loneliness of Older Persons in Home Care In Iceland****Authors:**

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**Key points:**

While current policy emphasizes independent living of older people as long as possible, studies show that being alone, and loneliness are associated with reduced quality of life.

- One in five persons in home care express loneliness with a high prevalence among widowed persons
- Women with cognitive impairment were most likely to experience loneliness and they were more likely to have depressive symptoms
- Feeling of loneliness was significantly associated with a wish to be in a special care environment, which works against the policy of supporting people to live as long as possible independently in the community.

**ABSTRACT**

**Objective:** to explore the association between loneliness and affective, cognitive, physical and social factors for older persons in home care.

**Design:** descriptive cross sectional study.

**Setting:** random sample of home care clients in Reykjavik area.

**Subjects:** 257 individuals were assessed with the Minimum Data Set for Home Care (InterRAI- HC) instrument.

**Results:** 20.3% of home care clients expressed loneliness, 18.3% of men and 20.9% of women with widowed persons being more likely to be lonely than married persons,  $p=0.013$ , as were they who assessed their health as being poor,  $p=0.042$ . Women with cognitive impairment were more likely to be lonely,  $p=0.022$  and they were more likely to have depressive symptoms,  $p=0.025$ . Women who took more than six medications were more likely to be lonely (79.2% vs. 20.8%,  $p=0.018$ ). Lonely women took more neuroleptics ( $p=0.007$ ) but lonely males more hypnotics ( $p=0.046$ ). Lonely women agreed more with the statement that they would be better off elsewhere (43.5% vs. 12.7%,  $p<0.0001$ ). Being mostly indoors was not associated with loneliness and there was no association with use of formal care services.

**Conclusion:** Loneliness was identified in one fifth of persons in home care, more often among widowed persons and women with cognitive impairment and among those who assessed their health as being poor. Sex difference was seen with regards to affective symptoms and medication use. Further studies are needed to understand how the needs of lonely persons in home care can be best met.

**Key words:** loneliness, home care, elderly, primary, health care

## Introduction

Older persons should be able to stay at home as long as possible according to policy statements on care of older persons and should be offered places in a nursing home when needs are greater than available support at home (1). Studies show that people do well in nursing home setting when needs of the individual are met. The opposite is true when the wish of the individual is to stay at home rather than in an institution (2). Because of this it is important to explore both affective and somatic wellbeing of sick older people living at home and assess if their needs are being met and if not, whether wellbeing can be improved by modifying the service.

A study on health, nursing needs and quality of life of older people who got home care from the Primary Health Service in 1997 showed that 18% of the individuals had never been out of the house for the last 30 days previous to the examination and 24% had only been out of the house once during the week. Only 18% had gone out of the house daily. This study showed also that 21% of the individuals experienced loneliness, 18% were bored and 19% showed a depressed look. Being alone is prevalent, which is clear from the fact that 27% were alone the whole day, but 39% more than half the day (3). We cannot find any Icelandic studies on loneliness in Icelandic professional papers. Foreign studies show that being alone and loneliness are associated with reduced quality of life (6). The purpose of this paper is to explore more closely the connection between loneliness and affective, somatic and social aspects of older people in home care.

## Materials and Methods

This article is further analysis of material that was published on health, nursing needs and quality of life of older people who got services from the Primary Health Service in 1997 (3).

The purpose of this study was to document health and nursing care needs of people 65 years of age and older who use the Primary Health Service in the autumn of 1997 at primary health care centers in Fossvogur, Hlíðasvæði, Miðbær and Seltjarnarnes with the InterRAI MDS-HC assessment (4).

The term Primary Home Health Service refers to services from the primary health care service in people's homes, provided by nurses, nurse's assistants and doctors. The study includes all persons in home care service at these primary health care centers when the study started on September 1st 1997, altogether 347 persons. Participation rate was 75%. 52 refused participating, 24 were in hospital, two had entered a Nursing Home, three declined or were absent when the study was to take place and nine died before they were assessed. Altogether 257 individuals participated in the study, 31 from primary health care center A, 68 from center B, 64 from center C and 94 from center D.

Informed consent was obtained from the older persons but for those who could not consent it was obtained from nearest relatives. Information was obtained by talking to the individual him- or herself, from medical records, from people delivering services or from relatives. The study was approved by the Ethical and Data Protection Committees in Iceland. Information was transferred from a social security number to a research number that was then used in analysis.

A nurse from the respective primary health care centers collected information. Before data collection started, everyone who collected information had a one day course in the use of the InterRAI MDS-HC instrument and was taught how to assess each and every variable according to definitions, and a manual which guides the assessment. Each assessment took between one and one and a half hours.

Univariate analysis of the variables in the MDS-HC assessment was done with respect to loneliness. Variables that were significantly associated with loneliness in that analysis were then put in to multi-variant analysis to find independent associations with loneliness. Significance level was  $P < 0.05$ . SPSS statistical package (version 11) was used for data analysis.

## Results

Of the total group who got home health service, 20.3% experienced loneliness, 18.3% of men and 20.9% of women. Key information is shown in Table 1. Widows and widowers were significantly more likely to be lonely than people in marriage,  $p=0.013$ . Table 2 shows functional, cognitive and affective well being with respect to loneliness. Persons with cognitive impairment were significantly more likely to be lonely,  $p=0.022$ . Women with loneliness were also more likely to have associated depressive symptoms,  $p=0.025$ , but such an association was not seen with men. Women with more than six medications were significantly more likely to be lonely (79.2% vs. 20.8%,  $p=0.018$ ). Lonely women were more likely to take neuroleptic medications ( $p=0.007$ ) but lonely men more likely to take hypnotics ( $p=0.046$ ). Of 48 lonely women, 60.4% assessed their own health as being poor compared to 44.5% of those who were not lonely, which was close to being significant,  $p=0.053$ . Similar numbers for 11 lonely men were 54.5% vs. 38.8% which is not a significant difference. The difference is significant for the total group,  $p=0.042$ , and points in the same direction for both sexes. There was no association between getting out doors and being lonely. Thus those who even never went out of the house for a month were not more likely to be lonely. The number of hours from formal services was no different with respect to loneliness. For the variable "better off elsewhere", 43.5% of women with loneliness were in that group, compared to 12.7% of women without loneliness,  $p<0.0001$ . Similar numbers for males were not significant, 18.2% vs. 14.3%.

## Discussion

One out of five persons in home nursing care experiences the feeling of loneliness. Similar to other studies, widowers and widows are significantly more likely to be lonely than married people and so are women with cognitive impairment (6). Lonely women are more likely to express symptoms of depression, take more than six medications, assess their health as being poor and feel that they would be better placed elsewhere than at home. The clinical picture of the lonely women is much clearer than for men. Lonely men are less functional in instrumental activities of daily living and take more sleeping medications but don't show other characteristics. Other studies have shown strong association between age and loneliness which was not seen in this study but in fact everyone was already old and of similar age. Conflicting information about association with sex is seen in studies but the current study did not show difference between sexes. Health related factors that are significantly associated with loneliness in more than one study include somatic functional loss, poor health assessed by the individual, depression, anxiety, sensory loss

	Loneliness	Without loneliness
<b>Sex</b>		
Total group	59(20,3%)	231(79,7%)
Female	48(20,9%)	182(79,1%)
Male	11(18,3%)	49(81,7%)
<b>Age</b>		
No sex difference	83,4(*6,3)	82,7(*6,5)
Female	83,6(*6,2)	82,6(*6,2)
Male	82,6(*6,8)	83,1(*7,6)
<b>Marital status</b>		
<b>Male</b>		
Married	2(6,9%)	27(93,1%)
Widower	5(27,8%)	13(72,2%)
Divorced	3	3
Unmarried	4	6
<b>Female</b>		
Married	5(11,6%)	38(88,4%)
Widow	37(26,4%)	103(73,6%)
Divorced	3	7
Unmarried	3	33

\* Standard deviation

No difference between sexes  $p=0,786$

No difference between ages with respect to loneliness  $p=0,48$

No difference between sexes with respect to loneliness, but widowed persons were significantly more likely to be lonely than married  $p=0,013$  Mantel Haenszel

**Table 1: Demographic factors**

Informed consent was obtained from the older persons but for those who could not consent it was obtained from nearest relatives. Information was obtained by talking to the individual him- or herself, from medical records, from people delivering services and cognitive impairment(6). Lonely people took more sleeping and anxiolytic medications(9) and are inclined to abuse alcohol(10). Apart from anxiety and sensory loss we identified these same factors. Our study did not look at alcohol abuse specifically. The results of this study are supported by almost the same prevalence of loneliness found in the ADOCH study 28, 18.4% compared to 20.3%.

The concepts of loneliness, social isolation and living alone are often used inter- changeably. They are specific concepts but associated and it is important to distinguish loneliness from other related concepts as loneliness seems to have independent prognostic power(11, 12). Depression is also closely related to loneliness. Individuals may suffer from loneliness even if they are among other people and an isolated person can on the other hand be satisfied with his or her position and feel well (6). Living alone is a simple concept and easy to assess and social isolation can be defined from number of interactions and from integration of the person into his or her community. The diagnosis of depression is based on diagnostic criteria. Loneliness is on the other hand a subjective feeling and the degree of loneliness can only be described by the one who experiences it.

A Swedish study shows that one third of people 75 years of age and older experienced loneliness at least sometimes (13, 14). Another study from Finland showed that 36% of people older than 60 years of age experienced loneliness often or sometimes(15). Thus prevalence of loneliness among those who have home health service is not that different from people without such a service. Those who have Home Health Service are often with impaired mobility in addition to loneliness and do not have the same opportunities to get out as others. That may increase the seriousness of loneliness.

Loneliness predicts reduced survival (11, 16, 17), and increase likelihood of permanent Nursing Home placement (11, 12). A study from Iowa, USA, looked at 3,000 individuals and followed them for four years(7). Loneliness increased significantly the likelihood of Nursing Home placement and this association held when corrected for age, education, income, cognitive and physical function and social network which are factors that also link to the risk of permanent Nursing Home placement(7). Are there any studies that look at interventions towards lonely older people? Can we avert or improve loneliness? Few studies have assessed this question among older people (18). One small US randomized study assessed phone support but did not demonstrate benefit (19). Few studies have had control groups and have been unable to show benefit for various interventions such as regular phone calls (20, 21), group therapy (22), pet treatment (23, 24, 25) and bereavement therapy. It is likely that individualized interventions are needed where the persons themselves are given the

	Loneliness	Without loneliness
<b>IADL</b>		
Total group		
Adjusted for sex and age	10,4	9,8
No difference between the total group p=0.441		
male	11,0 (*,7)	
female	9,3(*,4)	
<b>ADL</b>		
Total group		
Self reliant ADL 270		
Help with ADL 27		
Male without ADL dysfunction	9(81,8%)	40(81,6%)
Male with ADL dysfunction	2(18,2%)	9(18,4%)
Female without ADL dysfunction	43(89,6%)	171(94,0%)
Female with ADL dysfunction	5(10,4%)	11(6,0%)
<b>CPS</b>		
Total group		
Without cognitive impairment 166 (55.9%)		
Cognitive impairment 130 (44.1%)		
(no information about 1)		
Males without cognitive impairment	8(72,7%)	24(50,0%)
Males with cognitive impairment	3(27,3%)	24(50,0%)
Females without cognitive impairment	29(41,7%)	110(60,4%)
Females with cognitive impairment	28(58,3%)	72(39,6%)
<b>Depression Rating Scale:</b>		
Males without depressive symptoms	6(54,5%)	34(69,4%)
Males with depressive symptoms	5(45,5%)	15(30,6%)
Females without depressive symptoms	18(37,5%)	133(73,1%)
Females with depressive symptoms	30(62,5%)	49(26,9%)

\* Standard deviation. IADL=instrumental activities of living, ADL=Activities of Daily Living, CPS=Cognitive performance scale

Significant difference between sexes p=0,024

No significance between sexes with respect to ADL dysfunction and loneliness p=0.337

Females with cognitive impairment were more likely to be lonely p=0,022

Females (but not males) who were lonely were more likely to have depressive symptoms p=0.025

## Table 2: Functional and affective well being

### ADL

possibility of choosing an intervention(27). Interventions should rather be directed towards strengthening good networks that people may already have rather than to try to establish new contacts. The quality of network and communication matters more than frequency or intensity, and what matters is that people have others to confide in and can feel close to as a human being(8).

It is the strength of this study to use an international reliable assessment tool which links to various variables that could be associated with loneliness and the study group is characteristic of the primary home health service in Reykjavik. Weakness of the study is that the study group is only moderately large

which reduces a bit the likelihood of finding potential association between loneliness and some of the factors that others have shown.

To conclude, loneliness is a significant and prevalent issue among those who get assistance from the primary health service in Reykjavik. If loneliness persists then it is linked to increased likelihood of depression (6) and if it is deep then it is a strong risk factor for permanent Nursing Home placement (10, 11). It is thus in accordance with policy making on matters relating to older people to try to find ways to deal with this issue but with as good quality of life and the approach should be personalized. Studies are needed to evaluate the value of day

care and respite care in relieving loneliness. Finally, studies are needed to explore the potential mitigating effect of permanent placement on loneliness. If that would be the case, then the policy to support people at home would have to take that information into account.

## Acknowledgement

Special thanks for the access to the research material to

Hlíf Guðmundsdóttir, Fanney Friðbjörnsdóttir, Marianna Haraldsdóttir, Þórunn Ólafsdóttir, Anna Birna Jensdóttir, Ingibjörg Hjaltadóttir, Ómar Harðarson og Hrafn Pálsson.

This study was supported by Primary Health Care, VASS and the Icelandic Gerontological Research center.

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