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# Family caregivers' conceptions of usage of and information on products, technology and Web-based services

Caroline Edlund<sup>a</sup> and Anita Björklund<sup>b,\*</sup>

<sup>a</sup>*Department of Occupational Therapy, Academic Hospital of Uppsala, Uppsala, Sweden*

<sup>b</sup>*School of Health Sciences, Department of Rehabilitation, Jönköping, Sweden*

**Abstract.** The aim of this study was to identify and characterize family caregivers' conceptions of usage of and information on products, technology, and Web-based services when caring at home for next of kin aged over 65 years. A phenomenographic method with semi-structured interviews with ten family caregivers was used. The results show that the family caregivers considered products and technology to be essential for an active life, and they stressed both facilitators for and hindrances to their optimal usage. The family caregivers apprehended a lack of information regarding products, technology and Web-based services, and additionally showed limited interest in using Web-based services. There is a need for better information about the existing availability and for improvement in follow-up regarding prescriptions given. Therefore, it is necessary to involve family caregivers in the prescription and decision process in line with their wishes, since this to a highly degree influences their possibility to take care of their next of kin at home.

**Keywords:** Information, phenomenography, qualitative analysis

## 1. Introduction

Sweden has one of the world's highest average life expectancies, and the share of elderly in the country's population is constantly increasing [1]. There is also a societal intention that the elderly should be given opportunities to stay in ordinary housing as long as they wish. This intention is to be put into practice with support from the community by means of home help services, security alarms and assistive devices [3]. It also implies that the period when elderly people need help from family caregivers to manage their daily activities is longer than in the past. It has been shown that 85% of people aged 75 years or older receive help with their everyday activities from relatives, friends or neighbors,

in some cases combined with home help services or home nursing [4]. But persons helping next of kin at home tend to have poorer quality of life than others [6]. Further on, Borg and Hallberg [6] showed that it is rare that these family caregivers receive support from the community, and that only 11% had been in contact with a district nurse. The most common support they receive is through conversations with a relative or friend about their situation.

Family caregivers often need to perform many and complex tasks in caring for their next of kin. They have to deal with medicines as well as daily care, for example transfers and personal care. In order to improve functionality and security at home the physical environment often has to be changed, requiring products and technology [2]. Several studies highlight a great need for information about available help and to learn methods for transferring and adapting everyday activities [2,16,17]. It has been proven that family caregivers who receive necessary information and knowledge, and who develop their skills feel better, psychologically and

\* Address for correspondence: Anita Björklund, School of Health Sciences, Department of Rehabilitation, Box 1026, SE-551 11 Jönköping, Sweden. Tel.: +46 36 101265, Mob: +46 708 261250, Fax: +46 33 269706, E-mail: Anita.Bjorklund@hhj.hj.se.

physically and worry less about their next of kin [2, 17]. Products and technology can be regarded not only as a way to support persons with functional limitations but also as a way to decrease the level of effort by the family caregiver [10,11]. Steultjens et al. [13] have shown that the prescription of and support from assistive devices for elderly people living in ordinary housing entails increased functional ability.

Another kind of support is to retrieve information about the next of kin's state of illness and about products and technology through Web-based services. An example of this is the ACTION (Assisting Carers using Telematics Interventions to meet Older persons' Needs) program, implying that information technology is used to improve quality of life for family caregivers and their next of kin. The family caregiver is given education and access to the Internet to get in touch with others in the same situation. However, it could be hard for elderly people to manage Web-based services; adapted education is often helpful. But most elderly people who have learned to use a computer and the Internet experience the services as useful in their daily life [18–21].

In this study, *products and technology* mean items, without or with electronic components that support activity or compensate for reduced functions such as memory, eyesight, hearing, speech or mobility. Examples are a memory clock, a simplified remote control for the TV, toilet raising, a stove guard, housing adaptation or a security alarm for the bed or outer door [22, 23]. *Web-based services* refer to services on the Internet supplying information on products and technology, education or contact with health services or other family caregivers [18–21]. A *family caregiver* is a relative, friend or neighbor who helps a *next of kin* perform daily activities at home [24].

Family caregivers are part of what Fisher calls “the client constellation” [15] and few studies focus on their opinions on the usage of and information on products/technology and Web-based services. Therefore, the aim of this study was to identify and characterize family caregivers' conceptions of usage of and information on products, technology, and Web-based services when caring at home for next of kin aged over 65 years.

## 2. Method

The study design is qualitative with a phenomenographic approach. The main purpose in phenomenography is to discern people's different conceptions,

meanings and aspects of a phenomenon [26]. The results often represent conceptions of something implicit that has not been articulated or reflected upon before [27]. Within phenomenography it is important to separate the first- and second-order perspectives of a phenomenon. *First-order perspective* means that the researcher himself expresses how aspects of reality are apprehended, and in the *second-order perspective* it is described how people themselves apprehend aspects of reality [26].

### 2.1. Selection of informants

With help from relative counselors and district occupational therapists, the informants were selected through strategic sampling [27], in order to capture differences regarding sex, age and relationship to next of kin. The first author contacted ten presumptive informants by phone to give them information on the study, and also sent them a letter with additional information. After this they were contacted again by phone by the first author and asked if they would like to participate in the study. All ten agreed to participate, and times for interviews were set. Seven women and three men, with an age distribution of 53–83 years, were interviewed. One informant was a son and the others were married to or cohabitating with their next of kin, and everyone lived with their next of kin to different extents. Four of the family caregivers received regular assistance through alternative care, i.e. their next of kin stayed at home two weeks and lived at a nursing home two weeks. Three of the family caregivers lived in a small community and seven in a large city. Three received help from home help service to care for their next of kin. The next of kin had two or more prescribed products and technology, and the family caregivers consequently had experience from the use of items like a shower chair on wheels, stocking application helper, manual wheelchair, alarm, walking frame on wheels, door alarm and stair elevator. No one had access to a Web-based service like the ACTION program [18–21].

### 2.2. Interview guide

The interview guide contained demographic questions and three open-ended main questions:

- How do you apprehend the use of your next of kin's prescribed assistive devices?
- How do you apprehend the information of existing products and technology?

– *How do you view searching for information on the Internet?*

One pilot interview was carried out in line with the recommendations of Lantz [28], and as everything worked out well no alterations were made. Consequently, this interview was included in the study.

### 2.3. Data collection

Six of the interviews were conducted at the informants' homes, two at nursing homes and two at the first author's workplace. Before the interview, the informants had to sign their name for informed consent. The main questions were then asked, in the same way to every informant [27]. The interviews lasted between 30 and 90 minutes and were tape recorded with permission from the informants.

### 2.4. Data analysis

The first author transcribed the tapes verbatim using different colors for each interview, with the aim of being able to discern who said what later in the analysis. The first and second authors conducted the analysis in collaboration, in line with Dahlberg and Fallsberg's [29] recommendations for the analysis of phenomenographic studies in seven steps:

**1. Familiarization:** All interviews were listened through once to check the transcription and get an overview of the material. Then each interview was listened through five times to get a sense of its uniqueness.

**2. Condensation:** Each interview was read in detail and specific statements related to the aim were searched for and marked, i.e. statements describing conceptions about the topic.

**3. Comparison:** The specific statements from all interviews were compared to each other regarding similarities and differences, and patterns were searched for. Statements not related to the aim were excluded and statements related to the aim were kept.

**4. Grouping:** The selected statements were grouped in relation to common characteristics.

**5. Articulation:** The meaning of similarities within the groups was described, and the groups were related to each other since they contained different conceptions of the same topic. At Steps 4 and 5 the authors went backwards and forwards several times, regrouping the statements, until the analysis was considered satisfactory.

**6. Labeling:** Steps 4 and 5 were integrated. Conceptions related to the aim were labeled and relabeled sev-

eral times until they referred to the aim in a proper way. Through this 17 subcategories were established, for instance: "Hopes for increased independence"; "Uninformed about how to handle devices" and "Adapted to home environment".

**7. Contrasting:** In this step differences and similarities between subcategories were compared, and categories were established when qualitative similarities were found. The main category that arose was "Necessary for an active life". Several categories were considered to have in common that they constituted hindrances to or facilitators for optimal use, and consequently became description categories. Below these, categories and subcategories were situated; See Fig. 1.

### 2.5. Ethical considerations

The study was approved in May 2008 by the Regional Committee for Research Ethics in Linköping, Sweden, and was conducted in accordance with the demands for research ethics by the Research Council for Humanistic and Social Science [30].

## 3. Results

In the presentation of the results, *products and technology* and *assistive devices* are used synonymously. *Next of kin* is the person who receives care or support in everyday life. *Family caregiver* is the person who helps or supports his/her next of kin in daily activities and is consequently the person who is the *informant* in this study. The family caregivers have been given code numbers (FG1, FG2, and FG3 . . . FG10) in connection to their quotations in order to secure confidentiality and trustworthiness. On some occasions, the authors' elucidation on the meaning of quotation is given in brackets.

The family caregivers apprehend assistive devices as "Necessary for an active life" for both themselves and their next of kin, and this is also the main category from the data analysis. Without them, their daily life would not work and their next of kin would not be able to stay at home. Many factors play an active part in making their use of prescribed products and technology optimal, and this study identifies a number of facilitators and hindrances.

### 3.1. Facilitators for optimal use

The family caregivers suggested certain prerequisites for satisfactory use of and information on products and technology.

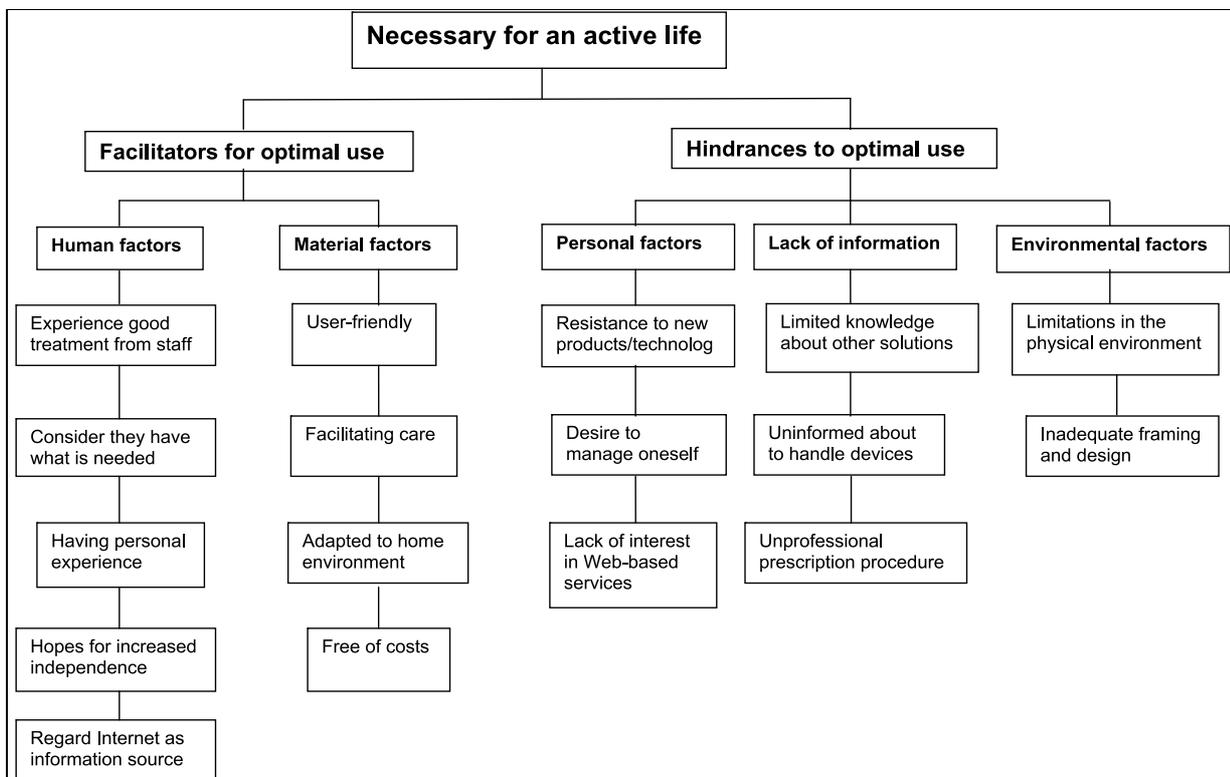


Fig. 1. Categorization schedule.

### 3.1.1. Human factors

#### 3.1.1.1. Experience good treatment from staff

The family caregivers apprehend that treatment from prescribers is good and is a prerequisite for functional use. They feel they have gotten the help with and information about the products they have asked for:

*“No, I don’t think I have anything to remark on, I think I have it all right and when I consult them I always get answers to my questions... no, I’m satisfied... you can’t ask the impossible (FG1).”*

In most cases the family caregivers have not received information about what assistive devices are available in the municipality where they live, but they have called and asked for items they need. This procedure has functioned well, and they do not wish it were different. Additionally, they are not interested in further information on the assortment of devices. One family caregiver experiences the information as meager but sufficient. She also feels that the district occupational therapist can sense the degree to which the family caregiver is able to receive information.

*“... I asked a couple of questions and then I managed by myself. That’s the way it is. I think that if*

*they see that this is a person who understands it on their own they don’t talk so much. If it’s a person who needs more help and instructions I think they get it (FG2).”*

#### 3.1.1.2. Consider they have what is needed

The family caregivers apprehend that they have to use a number of assistive devices to take good care of their next of kin. They feel they have received the devices their next of kin and they need to live as active a life as possible. They are content with their use of devices at home, but some also expressed that one should not have too many devices at home since it is good to be as active as possible. One family caregiver tells that if further products and technology would help her next of kin she would willingly accept them, but that she is content with the current situation and is conservative when it comes to new kinds of technology:

*“Yes, if it helps him, but otherwise I don’t want anything without cause. No, because I think it should not be too much, or just stand there... so that’s why we don’t have a computer either. I am also too cautious and afraid to break items (FG3).”*

### 3.1.1.3. Having personal experience

Previous experience plays an important part in the handling of and information about assistive devices. Three of the family caregivers have worked within health care before, two as assistant nurses and one as a nurse. They have the advantage of knowing what assistive devices are available, and can ask for specific items. They also express that they have knowledge about how to transfer a person and the like:

*"Then it's in the genes after all these years . . . yes, I think I have an advantage, having worked with it myself (FG4)."*

The family caregivers stress the importance of being a helping hand, or staying close, to their next of kin in their use of products and technology.

### 3.1.1.4. Hopes for increased independence

The family caregivers expect their next of kin to improve their activity ability. Some prescribed assistive devices are not in use for the moment because their next of kin's condition has worsened. The family caregivers keep the devices since they express hope for their next of kin to become better, thus making the care easier, for instance making transfers go more smoothly:

*"It's definitely so that the walking frame on wheels isn't used so much nowadays since he can't walk anymore . . . But we've kept it anyway since I don't want to get rid of it. The hope is there for him to get a little bit better (FG5)."*

### 3.1.1.5. Regard Internet as information source

Some of the family caregivers regard the Internet as a possibility and perhaps as complement to the information provided by the district occupational therapist, and has used the Internet to search for contact information and information about assistive devices. The youngest of the family caregivers has Internet experience, but at the same time he puts forward that older people are perhaps not in the habit of searching for information like the younger generations are:

*". . . and an older person, they don't know certain stuff exists at all. Like me for instance, searching via the Net or chatting around to find out what there is to get (FG6)."*

One family caregiver expresses her discontent or disappointment at not having a computer at home, as she would gladly use the Internet, but her husband will not buy a computer. She sees the Internet as a possibility for participation in society.

### 3.1.2. Material factors

#### 3.1.2.1. User-friendly

The family caregivers feel it is important that the assistive devices they have at home work well in situations in which their next of kin need help. Additionally, the devices should be easy to use. One family caregiver tells about a stair elevator they have at home:

*"... my wife rides it without hindrance. It was absolutely the best item we could have received; otherwise we would have had to move. We are very content with that (FG1)."*

Sometimes the next of kin need strong support, and it is therefore imperative that the devices are flexible and easy to handle. One family caregiver has just started to use a shower chair on wheels, and says:

*"I think I'm lucky to have this . . . being able to turn him around and such when we shower (FG2)."*

Those of the family caregivers who have an alarm at home feel it works well, that the technology is easy to understand, and that it brings security in case something should happen when they are not home or if they become ill themselves.

#### 3.1.2.2. Facilitating care

The family caregivers describe physically strenuous care situations and stress, and say that prescribed assistive devices are of great help in diminishing their efforts. They are grateful when they are offered products and technology that facilitate caring for their next of kin:

*"... Because I had to pull him, the pain in my shoulders and neck was extreme, and my back you know, since you stand all wrong . . . so it's principally gone away since we got the bed . . . No, I didn't have the slightest idea it could work out so well. . . (FG2)."*

The family caregivers have found different strategies and solutions for optimal use of prescribed assistive devices, for both themselves and their next of kin. One family caregiver says it is hard to turn her husband in bed, and that they have figured out how to put an incontinence sheet in place without him having to turn so many times.

#### 3.1.2.3. Adapted to home environment

A prerequisite for optimal use of prescribed products and technology is the possibility to use them in the

actual home environment. All family caregivers have received some kind of home equipment to facilitate the accessibility in their home for their next of kin. These adaptations are also for the benefit of the family caregivers, as it becomes easier to help their next of kin to move around inside and outside:

*"Thus they've taken away all the thresholds and we've gotten that ramp outside [to terrace] so you can get out with a wheelchair and the like (FG5)."*

One family caregiver tells that since her next of kin has gotten a wheelchair through prescription they have the possibility to get out for longer walks and are free to make spontaneous excursions in their immediate surroundings.

#### 3.1.2.4. Free of costs

Another prerequisite for the use of products and technology is that they do not entail costs to the individual, and gratefulness to society for this opportunity is expressed. The family caregivers put forward that it is of great importance that they receive allowances for home equipment and assistive devices, as their financial position is strained:

*"I usually think I'm lucky we're not being charged for this. I believe that would've been troublesome. It can be expensive and so . . . I am grateful for that (FG2)."*

### 3.2. Hindrances to optimal use

There are many hindrances to optimal use of products and technology. Even if each hindrance is not overwhelming, taken together they cause needless stress in the family caregivers' everyday activities.

#### 3.2.1. Personal factors

##### 3.2.1.1. Resistance to new products/technology

One of the identified hindrances is resistance to try new forms of products and technology. This resistance may be by the family caregiver but also by the next of kin, and this influences the function of assistive devices at home. The family caregivers mostly assist their next of kin in the use of products and technology, and if the family caregivers are not sufficiently motivated this is an obstacle to optimal use. One of the family caregivers tried a door alarm, which she feels was forced on her, when her husband started going out at night. She declares that it was not her choice to install the alarm, and that she felt it was unpleasant and did not want to use it:

*"I couldn't sleep . . . I just lay down and waited for it to go off and if it would have I think that would have been even worse . . . it had the opposite effect. I couldn't, no: we couldn't keep it (FG7)."*

In some situations the family caregivers have tried different assistive devices but their next of kin could not handle them. This mostly concerns cognitive devices or devices for diminishing the family caregiver's anxiety or making everyday life easier:

*"It would've been pretty good if he could've used that magnifying glass for his vision, but I don't think he can manage, it's too hard for him (FG8)."*

##### 3.2.1.2. Desire to manage oneself

An additional obstacle to optimal use is the explicit desire to manage oneself and not ask for too much from the social resources. Another cause, can be the family caregiver's fear of not getting along with the prescriber or the home help personnel:

*"You should try to manage yourself all the time you know . . . it works anyway, yes it does and if it doesn't I'll probably grumble. But I'm not much for grumbling. It's also the case that you want to be very good friends with those who come, because if you aren't that isn't good either (FG3)."*

In some cases the next of kin want to manage by themselves and feel there is no need for assistive devices, contrary to the family caregiver. This is a dilemma since a prescription would make the care easier. One of the family caregivers whose next of kin refused to receive any devices still calls the district occupational therapist to get what she needs:

*"Because you know how it is, all the time; you shouldn't ask for help because we can manage ourselves. . . I think the opposite, I think you should. . . 'take advantage of' sounds so bad, but I'll express it like: You should use the system (FG6)."*

##### 3.2.1.3. Lack of interest in Web-based services

During several interviews the family caregivers stress they have no interest in Web-based services, and that they do not use computers because they feel they lack technical knowledge:

*"I'm so completely without technical knowledge that I find it gruesome. Nowadays computers are more or less necessary and I cannot handle such items. It doesn't work (FG9)."*

Additionally, the family caregivers do not want to find information about assistive devices via the Internet, as they prefer to use the phone if they need something:

*"Yes, but we don't have a computer or the Internet. . . I call the municipality as simple as that (FG3)."*

One of the family caregivers uses the Internet to handle his finances, but has no interest in using it to keep in touch with other family caregivers or search for information about assistive devices. He prefers personal contact by phone.

### 3.2.2. Lack of information

#### 3.2.2.1. Limited knowledge about other solutions

Despite activity limitations with their next of kin, most of the family caregivers do not feel there are additional products that could improve their situation. In most cases they have phoned the district occupational therapist and asked for specific assistive devices they already know exist:

*"We haven't gotten information about what assistive devices there are; these are just items I have anyway; I've called the district occupational therapist and then we've talked and she's delivered the things to me (FG9)."*

The family caregivers are content with their knowledge of items they already know about, but this entails that there are products they are unfamiliar with or that other products are unknown because they are new on the market. One family caregiver tells that her next of kin had a rehabilitation period in outpatient care, where someone proposed additional assistive devices that improved the next of kin's independence and consequently diminished his need for care:

*". . . then he got this knife, fork and spoon set and the glide sheet. This is something I wouldn't have thought about if we hadn't been there. I hadn't reflected on that, actually (FG9)."*

#### 3.2.2.2. Uninformed about how to handle devices

Among the family caregivers there is unawareness about how assistive devices at home are to be handled. It can be the next of kin who has not received information about how to use a walking frame on wheels, or the family caregiver who does not know how to collapse a wheelchair. This constitutes a risk that someone will get hurt:

*". . . and the bed started to go there and back and I wondered what was wrong. So, I called them and then it was just to do like this; they pulled and pressed their foot. You don't get information; no, perhaps they forget because there are so many other items to take care of (FG9)."*

In some cases the family caregivers have avoided to ask the prescribers of assistive devices for further information; instead they have watched how the home help personnel have done and in this way they have learned about handling the devices:

*"Yes, I learned by myself actually, when I watched how they [home help personnel] did it. Nobody showed me (FG7)."*

#### 3.2.2.3. Unprofessional prescription procedure

How the prescription of products and technology is accomplished also plays a great part. One of the family caregivers apprehended that she was not expected to participate in the prescription situation; others were deciding over her home, and she felt like they insulted her integrity. The prescription occasion was experienced as messy, with everything done in a hurry because her husband had suddenly been discharged from the hospital:

*"There were nobody who could think of showing me all those items then; it was too much at one time. There were so many people here. And I had nothing to say about it, they dragged and pulled, everything should come out and then go in here . . . yes it was tough (FG7)."*

### 3.2.3. Environmental factors

#### 3.2.3.1. Limitations in the physical environment

The design of the physical environment could be a hindrance to optimal use of assistive devices. The family caregivers state that there are prescriptions for devices for which there is no room at home, and these are considered unnecessary. Some family caregivers have rather limited space, and stress the importance for prescribers to know about their home environment when prescribing assistive devices:

*"I know he got a walking frame on wheels from. . . [Nursing home] when he was there for relief and why that item came home with him I don't know, so to say. Because it doesn't work, he can't stand and turn around because it's too tight. . . Yes, it's like that everywhere. . . too tight (FG4)."*

According to the family caregivers, inaccessibility in society influences how much help their next of kin need with different activities. One example is managing a wheelchair over curbs and such. The family caregivers also stress the influence of weather. From October to March, most of them stay indoors because it is so hard to move the wheelchair or the walking frame on wheels outdoors due to snow and ice. This implies that the family caregivers exclude activities on account of inaccessibility in public places, and as a consequence they feel excluded from society.

### 3.2.3.2. Inadequate framing and design

Even if the family caregivers apprehend some of their next of kin's assistive devices as well designed . . . :

*"The electric moped is very shapely. . . yes it looks delicious (FG6)."*

. . . many of the products could be improved in their form or design for more satisfactory use.

Since products and technology are not designed in relation to the family caregivers' desires, this causes anxiety and diminished security. Several examples of improvements are proposed by the family caregivers:

*" . . . the indoor wheelchair, there they have to re-think items, because it does great damage. Items stick out and you drive into doorposts . . . quite unnecessary . . . you should be able to produce a smart, round, chubby item that doesn't bounce along (FG6)."*

*"An alarm that goes to my mobile phone would feel considerably safer. Then I can be in town without feeling anxious. I've searched for one in stores and on the Internet, but haven't found anything that works in that way (FG10)."*

The family caregivers also made several proposals for improvements concerning products that they know exists on the market, but is not included in the assortment in their municipality, for instance a caregiver-driven wheelchair:

*" . . . gladly, if there's something that has, yes, just a little battery you could push on so it went by itself. That's the way I think it should be (FG7)."*

## 4. Discussion

### 4.1. Results

An overarching theme emanating from the results is that the use of products and technology is necessary for

an active life for the family caregivers and their next of kin. With reference to the interviews, there are factors that both facilitate and hinder optimal use of assistive devices among the informants. The informants apprehend that they have the devices they need, and are apparently content with their lives as they are. Despite this, several obstacles to optimal use of products and technology appear in their statements, of which lack of information is one of the most important, in line with several other studies [2,16,17,25]. It is urgent that the whole client constellation is involved in decision making for the sake of participation and that they are informed [15].

Another obstacle could be that the occupational therapist has provided information but the family caregiver has not understood it due to communication problems. Especially if several assistive devices are prescribed at the same time, it is urgent to have recurrent follow-ups. Even information on additional or alternative products is insufficient, according to the family caregivers apprehensions, which is extremely unsatisfactory as most of them apprehend that there are no other products that could be of help. Naturally, this could be the case, since everyday life often functions quite well according to ordinary conditions in society. Additionally, different products and technology may have been tried and an acceptable solution has been found, even if it is not optimal.

This study shows, in line with Pettersson et al. [25], a variation between whether or not the family caregivers are content with the information they have received. Some of them feel the prescription process took too long; others that they could not influence the outcome of which devices were prescribed and that they had to search for alternative solutions themselves. But several of them stated that they experienced good treatment from the staff who prescribed the devices. They are also content with the information they have received, and do not want further information on devices that could be useful to them since they apprehend they have what is needed. This implies that they are missing the opportunity to learn about new products on the market. Consequently, the family caregivers are responsible to stay up to date, and risk their health if there are devices they are not aware of that could help them and their next of kin. Why, then, do they not want more knowledge about the assortment of devices? Is it due to a fear of new technology or, as one informant states that she did not want too much since "you have to do a little by yourself"? Does it emanate from a fear that their next of kin's abilities will decline if they get more devices?

Kristensson, Ekwall and Rahm-Hallberg [7] stress the importance of being aware of the family caregiver's feelings, as well as individual variations, since it is vital to diminish any negative consequences.

Several family caregivers in this study express they are not interested in learning how to use Web-based services because they have no technical knowledge. The question is whether their conceptions might change if they had opportunity to participate in the ACTION program, embracing education to use a computer and the Internet. Family caregivers who have participated in the program were found to have improved their quality of life [18–21].

Facilitators for optimal use of assistive devices can be seen from the viewpoint of material factors in the surroundings of the family caregiver and next of kin. With reference to the family caregivers, it is essential that the products and technology are useful, easy and smooth to use. Messecar et al. [8] describe how family caregivers are often involved in, and support, their next of kin using assistive devices. This is confirmed by the informants in this study as necessary if their next of kin should be able to stay at home. Even the design and shape of products and technology at home were important, according to the informants. This is also in line with Seale et al. [32], who stress the importance of participation of the elderly in the process of designing new technology. This implies that companies producing these products should keep their eyes open to family caregivers' opinions.

In line with Kielhofner [14], this study shows that the physical environment may cause both possibilities for and barriers to occupational performance. Possibilities are to be found in the fact that several of the family caregivers in this study live in spacious homes, and that they all have received home equipment interventions which, according to several studies [2,8], occurs frequently. This entails better possibilities to use devices for transfers in the home using a wheelchair, for instance.

There are a number of personal factors that influence the use of and desire to receive information on assistive devices, and according to Kielhofner [14], people's occupational performance is influenced by values and norms in society. This study shows that the family caregivers desire to manage their situation and do not want to ask for help from society in the first place. But the family caregiver may also give up assistive devices to show that they are capable or because he/she does not want to bother the municipality. However, this study also shows that family caregivers want to

participate in decision making when assistive devices are to be prescribed, which is in line with Pettersson, Berndtsson, Appelros and Ahlström [25]. According to Fisher and Nyman [15], a client-centered approach is complex and entails an obligation to inform family caregivers of existing alternative interventions and to guide them and their next of kin in decision making.

#### 4.2. Conclusions

To summarize, the family caregivers are content in their use of the assistive devices they have received but there are conceptions showing hindrances to optimal use. Therefore it is necessary to involve family caregivers in the prescription and decision process in line with their wishes, since this to a highly degree influences their possibility to take care of their next of kin at home. Principally, there is a lack of information on how to handle devices, instructions for using them and alternative solutions. Information on the available assortment must be improved, and follow-up of prescriptions must be conducted regularly. It is also of great importance that elderly people without sufficient knowledge of computers and the Internet to benefit from Web-based services be offered opportunities to acquire the necessary skills.

#### 4.3. Methodological considerations

In order to secure trustworthiness, the authors tried to disregard their own conceptions and pre-understandings in the analysis procedure, and describe the analysis thoroughly, step-by-step. Additionally, each quotation is numbered and assigned to its original source. To improve the dependability of results, participant control [31] was practiced by the interviewer by summarizing some of the interviews afterwards and asking the informants if the summary corresponded to their conceptions. After the tenth interview it was decided that no further interviews were necessary as it seemed that saturation had been reached, i.e. no further information was being revealed.

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