Making decisions about simple interventions: older people’s use of walking aids

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Abstract

Background walking difficulty is common in old age. Simple and inexpensive interventions, such as walking aids, provide considerable assistance. However, older people’s views on walking aids are likely to affect their uptake, and we have little knowledge about older people’s motivations for using walking aids.

Aim to explore older people’s views on their use of walking aids.

Methods longitudinal qualitative study comprising in-depth interviews with a purposive sample of 24 men and women recruited from a UK national cross-sectional population survey of older people. Participants were 69–90 years old at the first interview, 15 were followed up a year later, and 12 were followed up again a year after that. Analysis was conducted using constant comparison methods.

Results of the 24 people interviewed at the start of the study, 12 used walking aids, mainly walking sticks. These aids came from a range of sources, including informal ones. Over the course of the study, some participants adopted walking aids or changed the types of aids that they used. As time passed, participants’ initial misgivings about the use of aids subsided, and walking aids were described as improving confidence and facilitating activity and participation. Decisions to start using walking aids were influenced by both gradual and sudden changes in ability and by culturally informed views about ageing. Views on ageing initially acted as barriers to the use of aids but then acted as facilitators to use.

Conclusions walking aids enable continued activity and participation and it is likely that they provide benefits of health and well being. Health care providers can draw on the knowledge about the impact of beliefs about ageing to help them reach shared decisions with older patients about the use of walking aids.

Keywords: disability older people, walking aids, qualitative research, UK, elderly.

Introduction

Walking difficulty is common in older age. As with other functional limitations, it is associated with poor mental health [1], and shares risk factors for general functional decline including disease burden (comorbidity), lifestyle, low levels of activity, low social contact and cognitive impairment [2]. With over 23% of people aged 65–74 and 68% of people aged 85 and over reporting walking limitations [3], timely and appropriate intervention may help prevent further decline. However, older people do not always bring their walking limitations or other health problems to the attention of health care providers [4, 5].

Although underlying conditions—such as musculoskeletal conditions and stroke—warrant condition-specific treatment and medications, assistive technology to enable continued mobility is invaluable. Appropriate assistive technology may be simple and inexpensive, including walking sticks, tripod or quadruped sticks, elbow crutches, walking frames and wheeled frames and walkers [6, 7].
People with progressive, disabling conditions adopt walking aids for practical reasons, to minimise pain, to compensate for neurological impairment and to improve confidence. However, while health care providers focus on aids as sources of improved functional performance and safety, they do not necessarily consider the other meanings of aids [8]. Aids may be interpreted in multifarious ways. The meanings that people attribute to aids are important because they affect whether aids will be used or not [9].

Despite the ubiquity of stereotypes associating walking aids with older people [10], little is known about how older people themselves feel about using aids. This study explored older people’s own decision-making processes about their use of walking aids. Understanding how and why older people obtain and use walking aids can help health care providers to come to shared decisions with older patients about assistive technology and referrals to occupational therapy or other forms of care.

### Methods

The study consisted of in-depth qualitative interviews with participants selected from a national survey of older people [11]. In 2001, 24 people (11 men, 13 women) aged 69–90 years (mean age: 80) were interviewed. All participants were white; 12 lived alone. Fifteen people were followed up in 2002, and 12 were followed up again in 2003. The total number of interviews was 51. Participants for the qualitative interviews were purposively sampled to include people with a range of mobility levels and health statuses. Thirty-seven people were approached to take part in in-depth interviews, and 24 agreed to participate. Not all interviewees were followed up because some had died, others were too ill for interview, and some were not available or were not contactable (Table 1).

Interviews took place in participants’ homes lasting from 30 min to 3 h. Participants were drawn from those respondents who had agreed at the time of the survey to further contact with the study. Prior to each interview, participants were asked to give their informed consent, which

### Table 1. Participant characteristics and use of walking aids

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Mrs A</td>
<td>F</td>
<td>72</td>
<td>2</td>
<td>No aids used</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mr B</td>
<td>M</td>
<td>88</td>
<td>1</td>
<td>Walking sticks, tripod, frame</td>
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<td>Walking sticks</td>
</tr>
<tr>
<td>Mrs C</td>
<td>F</td>
<td>85</td>
<td>1</td>
<td>Walking sticks</td>
<td>Walking sticks</td>
<td>Walking sticks; walking frame in past</td>
</tr>
<tr>
<td>Mr D</td>
<td>M</td>
<td>71</td>
<td>1</td>
<td>No aids used</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mr E</td>
<td>M</td>
<td>87</td>
<td>1</td>
<td>No aids used</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mrs F</td>
<td>F</td>
<td>81</td>
<td>1</td>
<td>Walking stick</td>
<td>Walking stick</td>
<td>Walking stick</td>
</tr>
<tr>
<td>Mrs G</td>
<td>F</td>
<td>78</td>
<td>2</td>
<td>Walking stick; crutches in past</td>
<td>Walking stick</td>
<td>Walking stick and walking frame</td>
</tr>
<tr>
<td>Mr H</td>
<td>M</td>
<td>69</td>
<td>2</td>
<td>Walking stick</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mr I</td>
<td>M</td>
<td>79</td>
<td>2</td>
<td>No aids used</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mr J</td>
<td>M</td>
<td>82</td>
<td>1</td>
<td>No aids used</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mr K</td>
<td>M</td>
<td>88</td>
<td>2</td>
<td>Walking stick</td>
<td>Walking frame</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mrs L</td>
<td>F</td>
<td>82</td>
<td>2</td>
<td>No aids used</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mrs M</td>
<td>F</td>
<td>84</td>
<td>1</td>
<td>Two frames and walking stick</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mrs N</td>
<td>F</td>
<td>84</td>
<td>1</td>
<td>Walking sticks</td>
<td>Walking sticks</td>
<td>Walking sticks</td>
</tr>
<tr>
<td>Mrs O</td>
<td>F</td>
<td>78</td>
<td>2</td>
<td>Wheelchair (unable to use sticks)</td>
<td>No aids used</td>
<td>Wheelchair (unable to use sticks)</td>
</tr>
<tr>
<td>Mrs P</td>
<td>F</td>
<td>78</td>
<td>2</td>
<td>No aids used</td>
<td>Uses walking stick</td>
<td>Uses walking stick</td>
</tr>
<tr>
<td>Mrs Q</td>
<td>F</td>
<td>72</td>
<td>2</td>
<td>No aids used; sticks in past</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mrs R</td>
<td>F</td>
<td>80</td>
<td>2</td>
<td>No aids used</td>
<td>Walking stick, umbrella occasionally</td>
<td>Walking stick</td>
</tr>
<tr>
<td>Mr S</td>
<td>M</td>
<td>82</td>
<td>2</td>
<td>No aids used</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
<tr>
<td>Mr T</td>
<td>M</td>
<td>73</td>
<td>1</td>
<td>Walking sticks</td>
<td>Walking sticks and crutches</td>
<td>Walking sticks and crutches</td>
</tr>
<tr>
<td>Mr U</td>
<td>M</td>
<td>84</td>
<td>2</td>
<td>Umbrella and walking sticks</td>
<td>Walking stick</td>
<td>Walking stick</td>
</tr>
<tr>
<td>Mrs V</td>
<td>F</td>
<td>74</td>
<td>1</td>
<td>No aids used (owns walking stick)</td>
<td>No aids used</td>
<td>Walking stick</td>
</tr>
<tr>
<td>Mrs W</td>
<td>F</td>
<td>83</td>
<td>1</td>
<td>Walking stick</td>
<td>Walking stick</td>
<td>Walking stick</td>
</tr>
<tr>
<td>Mr Y</td>
<td>M</td>
<td>50</td>
<td>1</td>
<td>Walking stick</td>
<td>No aids used</td>
<td>No aids used</td>
</tr>
</tbody>
</table>

**—no interview conducted in this year.**
followed a discussion with the researcher of the study's aims and methods. All except one of the interviews were conducted by a single researcher. In the first interview, in 2001, participants were asked about any changes in health since the survey, social and familial support; engagement with health and social services; and their interpretation of a standard-issue survey question about long-standing illness [12]. Discussions about walking ability and walking aids took place in the context of questions related to health and engagement of services. In subsequent interviews, participants were asked to describe changes in previous years. With the consent of the participants, all interviews were audio-recorded, except one in which notes were taken at the participant's request. All initials in this article refer to pseudonyms.

The audio recordings were transcribed and imported into the qualitative analysis package Atlas ti. Data were analysed using methods of constant comparison [13]: codes arising from the data were assigned to the transcripts. The codes were then grouped into categories and material relating to the codes was compared between cases. Categories relating to walking and walking aids are described here and the material presented relates to the data from all the interviews, comprising both cross-sectional and longitudinal components [14]. While the cross-sectional data provides information about initial acquisition of walking aids, the longitudinal data enables exploration of change over time.

Results
Changes in walking ability over time and use of walking aids
In 2001, 20 out of 24 participants described difficulty walking and 12 used walking aids, including walking sticks, umbrellas, frames and a tripod. One participant used a wheelchair. By the following year, three participants who had not used walking aids during the previous year had started to do so. By 2003, all 12 participants said that their walking ability had declined since 2002, and 9 people used walking aids (Table 1).

Participants described a variety of ways in which they obtained their aids. Less than half of aids came from formal service providers, most were obtained from family, friends or were purchased. Aids obtained from family and friends were inherited, borrowed or received as gifts:

'I've got some of my granddad's and people have given me one or two, you know. Three are in the car in case I lose one (Mr T, 2001)

Encouragement from significant others often played a key role in decisions to use aids. Walking aids found to be inappropriate were sometimes adapted to suit the new owner:

'Actually it was [my wife's] cousin who lives at the top of the road. She had a couple of sticks, three, and I had one of them but it had a spike on the end so... my son took it to a place in London and they put a rubber stopper on the end (Mr U, 2001)

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Others fell into disuse:

'I have got one [walking stick] but I bought the wrong sort and I don't use it, but I ought to get it changed just in case my knees are bad again... but I bought one with a handle like that because it looked pretty... Well it was stupid, I should have bought one like that with a round handle... Because I've got some (arthritis) in my hands you see and I found that if I use the crooked handle... it's very painful so... I've just got it sitting in the back of the car (Mrs V, 2001)

Although people were aware that they might be able to obtain aids from formal service providers, some found it more convenient or necessary to obtain aids themselves:

'I was... with my daughter and I fell and I went out then and bought it [walking stick] myself and I could've had one I expect from the hospital but I haven't bothered (Mrs V, 2001)

Walking sticks were the most popular aids, but all the other types of aids used by participants had been obtained from formal service providers. This was usually on discharge from a hospital stay.

While decisions about where to obtain aids from were partly based on of availability, reasons as to why people started to use aids were more complex. Decisions to use aids were influenced by personal responses to changed ability alongside ideas about the meaning of walking aids. These are discussed in the following sections.

Personal responses to changed ability
Walking aids were used as personal responses to both sudden or gradual changes in walking ability. Many participants said that they initially obtained aids after crises, including falls or illnesses. As time passed after these events, use of aids sometimes receded or stopped entirely. Others kept their walking sticks in case of changes in circumstances or ‘emergencies’:

'Originally it [walking stick] was given to me from the NHS when... I had two, but somehow I mislaid one... Will I found it eventually but they said, don't bother to bring it back... I only keep it for emergencies really, I don't actually need it (Mr H, 2001)

Some people described how they had used walking aids (usually frames) provided by the health services following acute events, but then chose to obtain walking sticks themselves, although not necessarily with ease:

'I can walk about a bit now with the stick. I've just started doing that. But I'm more steady with the frame (Mrs M, 2001)

Conversely, fear of becoming dependent on walking aids acted as a deterrent to their use:

'Once you start using them you get used to them (Mr J, 2001)
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**Aids as enablers**

Participants who took part in follow-up interviews described a shift towards acceptance of aids. Those who had used walking aids for some time spoke of them in positive terms. In part, this was related to the physical support provided by aids:

> Otherwise, well my legs would give away if I didn't have some support. . . . But I hang onto these things [handles on walking frame] and I'm alright . . . goes I don't know what I'd do without my two-wheeler [frame] (Mr K, 2003)

In addition, participants described how walking aids improved their confidence:

> I find that the stick helps me, and it gives me that little bit of confidence that I need occasionally (Mrs P, 2003)

Walking aids helped participants to maintain involvement in outings and social activities and everyday tasks including shopping. They were also seen as a means of exercising and halting further decline:

> If I walk and exercise regularly then I have less arthritis (Mrs V, 2003)

**Views about ageing**

The participants all expressed strong associations between walking limitation, the use of walking aids and the ageing process:

> I've got to have a walking stick, because I'm doddery. Well, old age doesn't come by itself does it? (Mrs Y, 2001)

> And he was old, he was walking with a stick (Mrs C, 2003)

Doctors reinforced this connection; participants reported conversations with doctors who offered old age as an explanation for pain and walking difficulties:

> [I asked] 'Why doctor do I still get pain in that place where I was operated on'—'Old age' (Mr Y, 2001)

Initial use of walking aids made participants feel self-conscious about appearing old. These feelings were so strong that some described how they had initially avoided using aids at first, and two had preferred to use long umbrellas. One said that his umbrella was ‘as good as a walking stick really’ (Mr U). Those who were unable to avoid using walking aids still felt an initial negativity towards them because they represented ageing:

> [not using a walking stick] is due to . . . it's pride I suppose you could call it . . . Well I don't really know, it would be hard to explain. Uh, perhaps it makes me look too old, I don't know (Mr U, 2001)

> However, participants began to accept the use of walking aids as time passed. As this acceptance grew, the association of limitations and walking aids with older age began to serve as a rationale for using aids:

> I felt a bit of an idiot, you know, walking round with a stick, but I don't bother with all that you know (Why did you feel like an idiot?) Well I don't know, a normal person doesn't use one, do they? Well, I just put it down to age. We all come to it the same, I say, we all do (Mr T, 2001)

> So I've tried it, and now sometimes I've been out, and I'm going along to the shop—'Oh I haven't got my stick'—and I've come back for it. So I always use it now. But I think to myself sometimes, 'Oh I think I'll manage without it,' but then I get half way down there and think, 'No I'd better go back for it' (Mrs R, 2003)

Both initial misgivings and eventual acceptance of walking aids were rooted in the association of walking limitations and aids with older age. Crucial to the shift to acceptance was the acceptance of ageing alongside the acceptance of aids as enabling and therefore as positive additions to everyday life.

**Discussion**

This study confirms that older people obtain their aids from a wide variety of sources, and that informal sources play an important role in the provision of walking aids. We found that older people’s decisions to use aids were only partly related to practical benefits, and were also related to the meanings ascribed to walking aids.

It has been suggested that the onset of disability in old age may have less impact than onset in youth [15]. However, there is evidence that older people feel significant stigma related to walking limitations and associated walking aids, precisely because they represent ageing [4]. Our study echoes this finding, but by exploring the emergence of walking limitations over time, we also found that older people’s feelings of stigma can subside over time. Recent studies on the experience of stigma show that stigma is a social and moral process that is part of everyday experience [16, 17]. As such, feelings of stigma are liable to change when there are alterations in societal or individual values and conditions. This does not mean that living with a walking limitation is easy, but participants expressed the emergence of positive sentiments about the use of walking aids. This shift was itself underpinned by the association of ageing with walking limitations, which was based on feelings about ageing rather than on chronological age.
Although walking limitation in later life is neither inevitable nor irreversible [18, 19], the sense that a decline in walking ability was normal meant that a script was in place for dealing with change.

A strength of this study was its longitudinal design and in-depth interviews. Although we could follow up only 12 of the 24 participants, the material was rich, including reflections about change over time. The study did not intend to represent the general population, but the consistency of the participants’ views indicates that the findings should resonate with other contexts [20].

To enable appropriate discussions on walking ability, use of aids and other possible interventions, health care providers should be aware that older people have access to their own sources of aids, and choose to use them according to complex decision-making processes that include views about ageing. Given the propensity of older people for obtaining aids from informal sources, there is scope for service providers to take active roles in encouraging the correct use of aids or modifying them. In particular, review of walking aids (correct length, adequate ferrule, comfortable handgrip) as part of health checks may be useful [6]. Furthermore, product quality and sensitive design affect the acceptability of assistive technology [21]. To improve acceptability, the design of walking aids should therefore reflect older people’s feelings about aids as well as their practical needs. Attempts to reach shared decisions with patients about the use of walking aids, whether for clinical or social reasons, may be most effective if based on awareness of the factors that might influence a patient’s choice to use aids.

Key points
- Many older people obtain their own walking aids from informal sources.
- Although older people express an initial stigma about using walking aids, as time passes attitudes become more positive.
- Decisions to use walking aids are based on beliefs about ageing as well as physical need.

Conflicts of Interest
None.

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