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Perspectives on Use of Mobility Aids in a Diverse Population of Seniors: Implications for Intervention

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Abstract

Background—Many older adults who might benefit from using mobility aids do not or will not use them. Studies show that attitudes and beliefs strongly affect the decision to use mobility aids. Despite the growing diversity of the population, no prior studies have compared attitudes towards and beliefs about mobility aids by race and ethnicity.

Objective—This study aimed to explore whether and how attitudes towards and beliefs about mobility aid use vary by race and ethnicity.

Methods—We conducted 12 focus groups with 61 community dwelling persons age 65+ years from three groups: White, non-Hispanic Black, and Hispanic. Data were coded and compared across groups.

Results—For all groups, perceived benefits of mobility devices in maintaining independence and control produced positive attitudes. However, the association of mobility aid use with aging and physical decline contributed to stigmatizing attitudes. Black and Hispanic participants expressed apprehension about using unsafe or inappropriate secondhand equipment, heightened concerns about mobility aid users becoming subjects of negative biases, and a preference for fashionable aids. Hispanic participants expressed a preference for human assistance. Participants of all groups perceived physicians as influencing their decisions to use aids.

Conclusions—Social pressures and perceived stigma deter mobility aid use, particularly in minority populations. Greater physician involvement, positive peer models and affordable, safe, visually appealing devices would promote greater acceptance of mobility aids.

Keywords

mobility; assistive technology; Hispanic; African American; seniors

The benefits of mobility aids for persons with difficulty walking include reducing fall risk (1), enhancing confidence (2), and increasing autonomy(3,4), yet many who might benefit from using mobility aids do not use them(3). Mobility impairments in persons over 60 are highest amongst Blacks (43% women, 33% men), followed by Hispanics (39% women, 27% men) and lowest amongst Whites (30.2% women, 23% men) (5). Consistent with the higher

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prevalence of mobility impairment among minority populations over 60, mobility aid use (i.e., use of canes, crutches and walkers, and wheeled equipment such as manual and power wheelchairs) is also higher among minorities. Estimates of use range from 17%–24% of Blacks, 14–19.4% of Hispanics, and 10–15.3% of Whites (5–7). A recent study showed that the higher rate of cane use amongst Blacks as compared to White older adults was not explained by need (as measured by self-reported function and presence of chronic conditions) and enabling factors including income, assets, health insurance and health care utilization.(7) Interestingly, minority older adults with impaired mobility, as gauged by physical performance tests (not self-reported function), appear to underreport the presence of mobility impairments(8), suggesting that they may also be less likely to report functional impairment and thus less likely to recognize how they might benefit from mobility aids. These findings suggest that despite higher prevalence of mobility aid use, minority older adults might also have an unmet need for mobility aids.

Although beliefs about and attitudes towards mobility aids and disability are thought to be important factors in the use and non-use of devices(9–16), no prior studies have compared attitudes and beliefs about mobility limitations and mobility aid use across racially and ethnically diverse persons age 60+ years old. Research suggests that a perceived increase in safety afforded by a device may offer the strongest predictor of mobility aid use (12), whereas perceived social stigma reduces acceptance and contributes to mobility aid abandonment (17), and the desire to avoid stigma associated with device use may override desire to increase independent mobility (18). However, these factors have not been studied across racial and ethnic groups.

The prevalence of mobility impairment is likely to escalate with population aging and current trends in obesity. Given that rates of obesity are higher among minority elders than among non-Hispanic Whites, the rise in mobility impairment may be particularly prevalent among minority elders. Thus, it is important to develop interventions that will encourage and facilitate use of mobility devices to enhance quality of life and social participation among diverse community dwelling elders with mobility impairment. To do this effectively we must be sensitive to racial and ethnic variation in societal and personal attitudes and beliefs that may pose obstacles to device use. Little research is currently available to provide guidance in this area. Therefore, in this study we aimed to: 1) explore attitudes towards mobility device use among elderly persons by race and ethnicity and 2) consider the implications of our findings for the development of culturally sensitive interventions to promote use of aids among those who might benefit from them.

Methods

Recruitment

The Institutional Review Boards of Brown University and the Providence Veterans Administration Medical Center approved this study. Eligible participants were at least 60 years of age and spoke English or Spanish. We recruited participants from three senior meal sites and one elderly housing complex, serving high proportions of White, Black or Hispanic seniors. We chose these venues because of their convenience to recruit groups of minority seniors. Subjects were recruited through posters, announcements made at mealtimes and by direct referral from the professional staff at these sites.

We held separate focus groups of seniors stratified by self-reported race and ethnicity (White, Black, and Hispanic seniors). Within each group, we had two separate sessions for device users and two for non-users. We believed creating these fairly homogeneous groups would enhance participants' comfort in expressing sensitive or critical viewpoints. Sixty-one individuals participated in a total of 12 groups of 4–7 people each, held at 4 locations in Rhode Island.

Data Collection

To assist in designing the moderator's guide (see below), we interviewed 12 key informants who provided services to elderly Rhode Island residents. Key informants included professionals from senior centers, state agencies serving elderly populations, and home health-care. Three informants worked primarily with Hispanics, 5 worked mostly with non-Hispanic White, and 3 worked primarily with non-Hispanic Black seniors. One professional had experience with both Black and Hispanic clients.

Key informants discussed social norms regarding mobility impairments and aging, use of mobility devices and barriers and facilitators of use. We used insights from these interviews to shape the moderator's guide and increase the face validity of study content. Two of the authors who were trained facilitators moderated the focus groups: Both moderators were women. The English-speaking moderator, who was in her forties conducted 8 English-speaking groups, and a Spanish-speaking moderator, who was in her thirties, led 4 Hispanic groups. Moderators used open-ended questions following the semi-structured guide (available upon request). Sequencing and wording of questions were flexible, allowing additional probing to clarify specific responses, and stimulating discussion of topics deemed important by key informants, but which did not naturally arise in group conversation. All sessions were audiotaped.

We asked participants to describe their walking and how their mobility had changed in the past few years, strategies they use for getting around, attitudes towards using mobility devices, and their use or abandonment of mobility devices. Participants also discussed their perceptions and those of others in their family and community regarding aging, difficulty walking, use of devices, and need for assistance. Table 2 provides examples of questions from the focus group moderator guide.

We used visual prompts to invite open expression while maintaining concrete and explicit reference points for discussion. This methodological approach is particularly useful when study participants and researchers come from different cultural backgrounds (19). We showed participants photocopied images of mobility aids and of elderly persons of various races using them, and asked for their opinion about the devices, and/or a story about the persons in the photos and how they were feeling about themselves and their device use. Pictures were held up in front of the group and then circulated around the table for participants to view more closely.

Finally, the group discussed motivators and barriers to acquiring and using mobility aids, touching upon logistical, health insurance and financial considerations. We also asked participants for ideas to enhance acceptance of mobility aids.

After each group, the moderator and primary author held a debriefing session. After completing preliminary analysis of interview texts from the first 6 groups and consulting with the fifth author, we revised the moderator's guide to gain further insights into the subject area. Based on the preliminary analyses, during the last six groups, moderators added several specific questions about race, ethnicity and gender, and also demonstrated use of a variety of mobility aids including a straight cane, a quad cane, a hemi-cane, a standard walker, and a "deluxe" walker (with wheels, seat and brakes), soliciting opinions about each device.

Data Analysis

We converted verbatim focus groups transcripts into text files. The first author took the lead in categorizing and comparing information within and across participant groups using a constant comparative approach, meaning that the information gathered was coded into

emergent themes or codes, and the data was constantly revisited after initial coding, until it was clear that no new themes were emerging (20,21).

All authors read transcripts and participated in discussions regarding coding scheme. Refinement of the coding schemes emerged from discussions among participants. We checked key concepts and emerging theories against the literature and discussed them among the investigators. We enhanced accuracy of analysis through several verification strategies: use of thick description, peer reviewing and debriefing, and maintaining an audit trail of methodological and analytic decisions.

Results

Sample Characteristics

Table 1 shows characteristics of participants. Hispanic participants were youngest, and non-Hispanic White participants oldest. Consistent with senior meal site demographics, 85% of participants were women. Among mobility aid users, canes were the most frequently used device (72%), followed by walkers (16%) and wheelchairs (7%). Some participants reported using more than one type of device.

All device users reported walking difficulties, while among non-users, 50% of Hispanic, 40% of non-Hispanic White, and 75% of non-Hispanic Black participants reported at least some difficulty walking including pain, loss of balance, or weakness. No participant in the non-device user group was currently using a device, although a number had used mobility aids in the past while recovering from surgery or illnesses.

Overview of Key Themes

Across all ethnic groups, positive attitudes supporting mobility aid use related primarily to perceived benefits in maintaining independence and control over activities. However, participants felt that mobility aid use was stigmatizing because of a strong association with aging and physical decline. We also found that device type influenced attitudes toward use with participants viewing fashionable and sporty devices more positively and those associated with greater disability more negatively. Some held negative views of people who use mobility aids. Most participants agreed that physicians strongly influence the decision to use an aid.

Overall, we found few differences between minority and non-minority participants. Both Black and Hispanic participants expressed concern about using unsafe or inappropriate equipment. They also expressed heightened awareness of discrimination against persons who use mobility devices, and felt that “fashionable” aids would increase the likelihood that they would use them. Hispanic participants voiced a more fatalistic view of age-related functional decline, and heightened concerns about mobility aid users becoming subjects of negative biases. They also expressed a preference for human assistance rather than mobility aid use. We elaborate on these themes below.

Mobility Aids vs. Human Help to Facilitate Independence and Autonomy

In all racial and ethnic groups, interviewees’ desire for independence and control over their lives was a major theme that supported use of mobility aids. Persons wanted to choose when and where they go and to “do things on their own,” “get where they want to go without waiting,” and “not be a burden”. One Black woman who used a mobility aid reacted to a picture of a woman using a walker.

Participant: “[It’s] like it’s helping her.”

Moderator: “Helping her to do what or be what?”

Participant: “Independent. Get where she wants to go, yeah, without waiting.”

Some non-device users stated that they felt that use of mobility aids would increase their autonomy and control in the event of a mobility impairment. Non-device users viewed mobility aids particularly positively as a tool for rehabilitation or recovery, “just for you to get back on your feet.”

In non-Hispanic groups, most participants preferred using an aid to walk rather than receiving personal assistance because then they would be “able to do it (walk) independently.” For example, one participant responded to two pictures, one of a man walking with a cane and another of a man walking while holding on to another person, saying that she would prefer to be the person walking with a cane because she’d “rather be able to move on my own.”

Several participants in White and Black senior groups expressed preferences for mobility aids over personal assistance because such assistance, they felt, would put them in a dependent position and diminish their sense of autonomy and control. Having others help them made them feel that they were being “treated like a baby,” didn’t “feel right,” made them feel “terrible,” and disturbed their “own way of moving.”

Although some worried that they would become “dependent” on aids, others felt that this was an area they could control:

“I’ve always been very independent, make my decisions, do what I want...I’ve been doing it on my own now for quite some time. So I just feel it’s also a dependency thing in that I’d rather depend on something I can control and I can do anytime I want to do it as opposed to depending on, relying on somebody else to supply me with that security.”

(Non-device user, White woman)

In contrast to the attitudes of most non-Hispanic White and Black participants, Hispanic participants expressed mainly positive views of personal assistance. Several Hispanic participants explained that ideally, they would have “two helpers” – the equipment and a person to help them. However, as one participant stated, “you don’t always find that compassionate hand to lead you.”

Additionally, some Black and Hispanic participants perceived that having human assistance rather than a mobility device was a “less noticeable” and “younger” look.

“Then I get dressed and think I’m pretty. I’d rather have someone hold my arm and help me up the church steps (than use a cane)...I guess it’s we’re aging and you know, who needs to look like it...You want the men to think you’ve still got it.”

(Device user, Black Woman)

Mobility Aids and Stigma

A number of participants across all ethnic groups believed that mobility aids stigmatized their users. They felt ashamed of needing help and felt that people with mobility problems were not seen “as normal.”

Concern about discrimination was particularly strong among non-Hispanic Blacks and Hispanics. Several device users described experiences ranging from negative attention and embarrassment to outright discrimination when in public places with a mobility aid. Using a device, they said, caused others to feel sorry for them and drew unwanted attention. These participants felt that devices evoked feelings of “inferiority.” As one participant stated, “There’s always a little group that laughs.”

Participant 1: ...”people will say, oh what happened to you? why do you have a cane?”

Interviewer: “What does it mean when they ask you that? “

Participant 1: ...”she is dying ...sometimes I feel bad, I feel embarrassed” (Device user, Hispanic woman)

One Black non-device user wanted a handicapped placard for her car because she was having difficulty walking distances. However, she changed her mind when she learned that to qualify she must use a mobility aid. Some reported that they would rather “stay home” than go out and be seen using a device.

“On Sunday, the children were going to the park...but just knowing that I had to use the cane.. I said: “No, I will stay home ...” When they were there, they were all thinking: “Mom did not come to the park because of the cane ...and they even said to me that they had this cart that handicapped people use to get around. We could have gotten in one of them and be riding it ...I rather abstain from going places than use a cane.” (Device-user, Hispanic woman)

For all participants, the perceived stigma of mobility aid use was due to fear of aging and physical decline. Some said they did not want to use a device because they feared being seen as “crippled,” “an old lady,” “very sick”, or even as “dying”. Some feared that, after accepting a device, further decline would be inevitable.

“Where do you go from here? There’s not many places you’re gonna go. ...That’s the thing that kind of scares you. And then you look at this (the cane), like I said, I’m sure it’s good for you and I’m sure one day I’m going to have to have it. And if I needed it tomorrow for my back, I would use it if I had to because my back really is in pain. But it’s like you’re at the last stage. This is it. There’s no place else to go from here but 6-feet under.” (Non-device user, Black woman)

Several non-device users stated that they would rather be dead or “not be here” if they needed a device. For many, use of mobility aids is associated with feelings of sadness and depression. Some Black and Hispanic participants expressed a strong sense of “fatalism,” and voiced an acceptance of diminishing mobility and function as part of aging, noting that you have to “adjust to what God does with you.”

However, while fear of stigma associated with device use was normative, it was not a universal sentiment. Some device users from each group expressed appreciation for mobility aids and denied self-consciousness or embarrassment about using an aid.

“So if you need a little assistance, you take it. I don’t care what other people think about me with a cane. I mean it’s me. I’m doing things for myself.”

(Device User, Black woman)

Negative Attitudes Toward Device Users

In addition to perceived stigmatization of mobility aid use by others, focus group participants themselves expressed negative attitudes toward persons who use mobility aids whom they perceived “didn’t really need them.” They saw such persons as “posers,” possibly intent on “taking advantage of others” by trying to get preferential treatment, or get attention from family members or spouses. Some stated that they did not want to be viewed as one of those types of people.

One participant related this story of her sister who did not use a device at home but used a wheelchair while on a family vacation:

“They get my sister a wheelchair because they think she needs a wheelchair and my sister plays it to the hilt. And they wheel her here and take her to the slot machine, wheel her to do this and that. And she sits back and I said listen honey, don’t think I’m going to wheel you because when we get back to [HOME TOWN], you’ve got to leave it. You don’t need no wheelchair. She walks where she wants to go. But because they’re willing to do it, she’s willing to sit back and be Miss Princess riding those wheels.”

(Non-device user, Black woman)

Device users in Black and Hispanic groups reported that they had personally experienced others’ resentment for getting to the head of the line while traveling or waiting.

“If I walk up to a line using my cane, people in the line will let me go because I have a cane, because they think I am handicapped. But at the same time, there are other people who might think that because I do not “look” handicapped, I might just be faking it, and they might even think that there is nothing wrong with me.”

(Device user, Hispanic woman).

Device Functionality

Some device users said that they sometimes went without using their device because they were concerned that they were becoming or could become “dependent” on it, and therefore lose the ability (and choice) to ambulate without it.

“One becomes a slave of the cane, and perhaps one can walk without this cane, but by getting used to using it...you use it and use it until you can’t live without it!” (Device user, Hispanic woman).

Some reported that the special effort required to incorporate devices into daily life posed obstacles to use. Cane users in all groups spoke about inconvenience, particularly when going from place to place and needing to find somewhere to put the cane without it falling. Device users also mentioned forgetting their equipment, either at home or at stores. Furthermore, some said that holding a cane limited them “to only one hand.” Some reported that standard walkers or crutches presented even greater challenges, making it difficult or impossible to perform ordinary tasks like carrying objects. A non-device user described her brief walker use after an injury:

“I’m very independent and I always did everything and all of a sudden you can’t do nothing ... you can’t even carry your supper over, you know. I used to put my cup of coffee in a paper bag and hold it onto the walker to get to the couch to sit down so it wouldn’t spill, ‘cause you don’t have a hand free to carry anything. It’s terrible.” (Non-device user, White woman)

Because of the awkwardness of performing daily activities with “standard” canes and walkers, device users and non-users were particularly positive about devices that could assist them in doing more than one activity, facilitating function in areas of their lives beyond mobility. Thus, they preferred walkers with seats and baskets to standard walkers.

“You go out to a buffet, no problem, you put your tray right in that seat and push it wherever you want to go. It folds up when you put your tray on there it folds up out of the way. It does everything.”

(Non-device user, Black woman)

Participants also recognized that their immediate physical safety would be enhanced through use of devices, which in turn would enhance confidence and sense of independence.

Participants from all groups felt that mobility aids could prevent them from falling and “breaking bones.” As one cane user stated:

“It keeps me confident. I have the fear of falling. So when I have the cane, I have something I can lean on if I’m all alone.”

(Device User, White woman)

While most agreed that devices enhance personal safety, some Hispanic and Black participants expressed concern about the safety of mobility devices themselves, reporting that they or others that they knew had made do with broken or inappropriate secondhand equipment due to costs. They felt that canes might cause falls and had varying opinions about which kinds of canes are safest. Further, while most Hispanic participants also saw motorized scooters as more desirable than other devices, some stated that they would be too scared to use one, because it would be as dangerous as driving a car.

Device Appearance and Symbolism

The appearance and design of devices clearly resonated with Blacks and Hispanics, who suggested that using canes could be fashionable, and had a heightened preference for and acceptance of “good looking” canes.

Participant: “I have a Black one. I think if I could change, I like color. I probably would get something brighter.” (Device user, Black woman)

Interviewer: “Would you want it to change colors for your outfit?”

Participant: “Now you’re asking a lot, but the answer is, yes.” (Device user, Black woman)

Overall, participants preferred equipment with a sporty appearance over standard medical-appearing devices. When we demonstrated a colorful walker with wheels and a seat, several participants remarked that they “needed one of those,” despite having previously denied any difficulty walking or need of an aid. Participants noted that they “would feel cool” or “snazzy” or more independent with the sporty one, but “old” with the standard walker. Using the analogy of automobiles, participants compared the sporty walker to a “Camry” and the standard walker to a “Pinto” or a “Corvair.”

Attitudes towards devices related to the severity of mobility impairments requiring their use. For example, some were open to using a cane as it is recommended for those with only mild impairment, but less open to the possibility of using a walker or wheelchair, symbolizing more impairment. Many were vocal in their distaste for standard walkers, which they saw as a symbol of frailty, most appropriate for those who were sick, recovering from surgery or illness or homebound.

“...a walker to me is “giving up”. I can’t drive if I’m on a walker ...Even when I go to the store ... I would lean on a carriage. I do it now because I’m old. ...A walker to me just takes away an awful lot of your independence.” (Non-device user, White woman,)

Participants viewed manual wheelchairs most negatively of all the devices discussed, associating them with the greatest loss of function and therefore viewing them as a particularly strong symbol of decline, loss of independence and power. Participants also indicated that managing manual wheelchairs independently requires considerable effort for older and/or weaker people. Many considered manual wheelchair use indicative of complete dependence, believing that users would not self-propel. Lastly, participants noted that manual wheelchairs tend to look very medical, not stylish or sporty.

Participants viewed power wheelchairs as much more acceptable than manual wheelchairs; some preferred power wheelchairs to using a walker because “they would have more independence.”

“[I would chose a power chair because] it would go faster. You could get around the way you wanted to, you’re not walking, using the arm pushing, which is better...I wouldn’t have to depend on nobody... If you’re sitting on a mobilized, that takes the toll off the body.”(Non-device user, Black woman)

Some felt that motorized equipment offered not only convenience and ease of use but also – in some ways – aspects of youth, experienced more “like a ride” and less like a mobility aid. As one participant said, “they make you feel young.”

Role of Physicians

The majority of participants in all racial and ethnic groups indicated that a doctor’s recommendation to use a device would strongly motivate their decision to adopt one.

“I do not want any device. I want to do it on my own. So I don’t feel I’d be comfortable with a device. I have no intention of going to one unless the doctor says I have to.” (Non-device user, White male)

Physicians’ advice to use a device might offer an important justification that shields device users from the negative opinions of others. “If it comes from the doctor’s mouth,” than the need must be “real.” This sentiment held true across race and ethnic groups.

“I’ve heard that some people use a cane to make believe something that isn’t true ... it’s much better if the doctor tells you [that you need a cane], rather than for you to say so yourself ...A doctor is not going to tell a sick person to walk with a cane if they don’t need it.” (Non-device user, Hispanic woman).

Despite widespread belief in the doctor’s authority, many participants had not initiated discussion of need for an aid, sometimes for fear of having the doctor acquiesce. These persons would wait for their physician to take the lead.

“Until today I wasn’t to that point where I even wanted to ask, you know because I was afraid she might say, yeah you need one.” (Non-device user, Black woman)

While some may have avoided discussing mobility with their physicians, focus group discussions suggested that physicians rarely observed participants’ walking, inquired about mobility difficulties, or discussed mobility aids.

“I’ve never used a cane or a walker, not to say that I never will. My doctor just hasn’t [suggested it], you know I go to the doctor’s for my yearly checkups and all that good stuff and she’s given me all kinds of pills but she has never suggested a walker or a cane yet.” (Non-device user, Black woman)

Although physicians’ advice to use a device appeared to be a strong influence, a few participants in every racial and ethnic group indicated that they would refuse or had refused to use mobility aids, even with their doctor’s recommendation. As one Black non-device user said, “He don’t tell me nothing because I tell him.” One Hispanic device-user who often went without her cane remarked,

“Doctors are the ones who tell us when we need these tools. It is us who are the obstinate ones, the stubborn ones “... (Device-user, Hispanic woman).

Discussion

While our results suggest certain commonalities in attitudes toward device and ethnicity across race and ethnic groups, important differences did appear. Several Hispanic participants voiced a preference for having personal assistance instead of using a mobility aid, and both Black and Hispanic participants thought that canes could have fashion appeal. Members of both minority groups had experienced broken or unsafe equipment, leading them to express safety concerns over improper equipment. They also expressed a heightened sensitivity to discrimination because of device use.

Across all groups, some noted the important value of mobility aids, especially for maximizing safety and fostering independence. However, as in other studies, many participants reported ambivalent feelings towards mobility aid use, acknowledging social stigma and the sense of loss and debility that can accompany use. Others have also reported that seniors think of mobility device use as activity specific (16), have clear preferences for colorful devices, and want to have choice in device selection (13).

We identified attitudes towards device style and type that were consistent with previous research(16), with devices like canes, associated with milder disability, more readily accepted than devices associated with more severe disability, such as walkers and wheelchairs. Thus acceptance of mobility aids seems to be largely hierarchical. Cane users, for example, may feel negatively about the prospect of adopting a walker, and walker users may feel negatively about manual wheelchair use. Attitudes towards power chairs and scooters are an exception to this attitudinal hierarchy as they were viewed as more appealing than walkers or manual wheelchairs. This finding contrasts to previous reports that stigma of using a device was highest with the very first mobility device and lessened with the introduction of subsequent devices (13).

Our finding that non-device users are sometimes suspicious of mobility aid users because they feel that they may be trying to take advantage was discussed by Iezzoni (17). This perception may present an additional deterrent to device adoption, particularly when an elderly person is not sure about “really needing” a device and worries about becoming the subject of others’ negative biases. Black and Hispanic participants voiced this concern more strongly than did White interviewees, possibly because of greater sensitivity to discrimination in general.

Our study has important clinical implications. Health care providers should be aware that elderly patients may not always report mobility problems and may not use a device even when recommended. Although physicians should be aware that some patients will resist their doctor’s recommendation to use a mobility device, our findings suggest that physicians can strongly influence the decision to start using an aid and could play an expanded role by discussing and observing mobility, recommending mobility aids or referring patients to other clinicians (e.g., physical therapists) to prescribe appropriate equipment and train patients in use. This may be particularly important for minority seniors for whom a doctor’s orders may offer some sense of protection from discrimination. Referral to allied health professionals who can ensure proper fit and technique of device use may alleviate concerns of poor fit and function expressed by minority participants.

Framing mobility-aids as a means to enhance patients’ independence and autonomy may enhance patients’ acceptance of mobility-aids. Because elderly individuals value autonomy and choice, clinicians should emphasize situational, rather than mandatory and permanent device use (17). They might suggest that mobility aids would be especially valuable to enhance safety and comfort in crowded places, on dark nights out, or during slippery weather, emphasizing the device’s multiple functions within the person’s needs, living environment and lifestyle, and engaging patients in problem-solving.

Our findings demonstrate the negative influence of social pressures and perceived stigma about device use. Combating these pressures might be done through community-based social marketing interventions or peer-to-peer interventions so that non-device users can experience positive role models in other elderly persons who use mobility aids and articulate their benefits.

Another strategy to increase acceptance that may be particularly salient for Black and Hispanic seniors is to offer functional but attractive products. Having patients select their own equipment based on their preferences for device appearance could improve acceptance of mobility aids. Attractive devices which can be viewed as fashion accessories may be more readily accepted. This may be true for manual wheelchairs which can also be sporty-looking with enhanced function for an active lifestyle. However, in offering such choices, providers must consider patients' resources and equipment costs.

Hispanic family members may be an untapped resource for enhancing mobility aid acceptance. Since most Latin American countries have limited social safety nets, there is a cultural expectation among Hispanics that the family will support those who experience greater need, including elders who have experienced a health problem (22). While some theorists suggest that support from Hispanic families often substitutes for formal health care, others observe that families also support their elders by linking them with needed services (23). Hispanic family members may therefore be in a position to encourage use of mobility devices, particularly if clinicians explain the benefits of mobility aids in terms of increased safety and enhanced ability to participate in family and community activities.

Our study has limitations shared by other qualitative studies. Because of limited sample size and recruitment strategy, our population may not represent fully the views of White, Black, and Hispanic elderly Americans. We used purposive sampling to recruit participants from Rhode Island senior mealsites and housing facilities; our findings may not generalize to elderly persons in other settings who may not be comfortable leaving their homes and apartments to attend meals at housing complexes and senior mealsites. Furthermore, our samples were not equivalent in terms of gender. It was particularly difficult to recruit men from the predominantly Black senior center, as few, if any men are regular attendees. It was also difficult to recruit men who were device users from any of our recruitment sites. Therefore, we cannot say whether or not our findings would have been different if the sample had included more male members. Thus, we suggest that additional research focusing on men be conducted.

Conclusions

Study results suggest the following measures to promote mobility aid acceptance among diverse groups of elders: expanding the awareness and role of physicians in assessing the need for mobility aid use and making referrals for prescriptions; exposure to peer role models (emphasizing autonomy and independence for non-Hispanics, and ability to participate in family and community events for Hispanics); providing consumers with choice of equipment style and design; and production of safe, lower cost mobility aids that are affordable or reimbursed by third party payers.

Text Box 1

Examples of Questions from Focus Group Moderator Guide

- What changes have you experienced in your ability to get around in the past few years? How does your walking compare to 2 years ago? 5 years ago? When did you first sense changes happening for you?
- Do you ever find yourself holding onto walls or furniture in your house? Have you ever fallen?
- How do you feel about having difficulty walking? Do you think about how others see you? If so, what do you imagine they are thinking?

- What do you think when you see another older person who is having difficulty walking?
- What do you think others in your community think about older people who are having difficulty walking? How about those who are using a cane? A walker? A wheelchair? A power or motorized wheelchair?
- At what point did or would you feel you would want to have some kind of device to help you? What circumstances or events might lead you to feel that way?
- Have you tried using any equipment like a cane, walker or wheelchair? What are the circumstances? How did you feel about using this kind of equipment?
- What kind of aids/s or equipment do you use now? How many of you used a cane? a walker? a wheelchair? a power or motorized wheelchair?
- What were your feelings about using the device in the beginning? What made you finally start using it? What were the benefits? What were the drawbacks?
- Where did you get the device and who recommended it to you and why?
- Who paid for your device?
- When you were younger what were the ways that the elders in your family/community coped with mobility problems?

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Table 1

Characteristics of Focus Group Participants

	Device Users (N=29)			Non-Device Users (N=32)			Total N=61
	White N=11	Black N=9	Hispanic N=9	White N=10	Black N=12	Hispanic N=10	
Age							
60–65	0	0	0	1	2	6	9
66–75	3	3	3	2	5	3	19
76–85	4	5	5	3	4	1	22
85+	4	1	1	4	1	0	11
Sex							
Men	0	0	2	4	1	2	9
Women	11	9	7	6	11	8	52
Lives alone	7	4	1	9	6	3	30
Difficulty walking	11	9	9	4	9	5	47
Device							
Cane	7	7	7	0	0	0	21
Walker	4	2	4	0	0	0	10
Wheelchair	2	2	0	0	0	0	4
Scooter	1	0	1	0	0	0	2
Uses multiple devices	3	2	3	0	0	0	8