ORIGINAL RESEARCH

Differences in Waiting List Prioritization Preferences of Occupational Therapists, Elderly People, and Persons With Disabilities: A Discrete Choice Experiment

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Abstract

Objective: To compare the preferences of occupational therapists, elderly people, and adults with disabilities regarding prioritization criteria for occupational therapy waiting lists in home care.

Design: Discrete choice experiment survey.

Setting: Survey mailed to occupational therapists working in home care and community-dwelling elderly or disabled persons.

Participants: A sample (N=714) of home-based occupational therapists (n=241), elderly persons from a bank of research participants (n=226), and adults with physical disabilities recruited through community organizations (n=247).

Interventions: Not applicable.

Main Outcome Measures: The dependent variable was whether the referral scenario was prioritized or not in each question. The results were analyzed through logistic regression using conditional logit models.

Results: Prioritization preferences differed between groups (*P*<.001). Occupational therapists most strongly prioritized people who had a few falls (odds ratio vs no falls, 48.7), whereas elderly people and adults with disabilities most strongly prioritized people who were unable to enter and exit the home (odds ratio vs no difficulty entering and exiting the home, 30.8 for elderly people and 16.8 for persons with disabilities.)

Conclusions: Our results highlight the gap between the priorities of home-based occupational therapists and their target clientele. Although further inquiry is needed to inform priority setting, the findings emphasize the importance of public or patient involvement in decisions on waiting list prioritization.

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Home-based occupational therapy is effective in improving functional ability, home safety, and quality of life for community-living adults with disabilities.[1-4] In the province of Quebec, Canada, home-based occupational therapy is publicly funded. However, long waiting lists compromise access to these services.[5-7] Referrals are prioritized as a means of protecting clients with urgent needs from the potential consequences of delayed services.[8-10] However, referral prioritization tools in rehabilitation have significant limitations,[11-14] notably a lack of predictive validity[15] and content validity. A survey of prioritization tools used in home-based occupational therapy services in Quebec[16] revealed that each

service uses their own homemade tool. None of the 55 services in this study had consulted the scientific literature or sought the opinions of their clientele when establishing prioritization criteria. Priority is generally given to physical health and home safety issues such as pressure ulcers and falls, whereas problems with functional independence, quality of life, or participation outside the home receive low to moderate priority. In practice, prioritization tools have a strong effect on wait times. Although urgent referrals are generally seen within 2 days, lowest priority clients wait a median of 18 months and, in some cases, are indefinitely pushed back on the waiting list by higher priority clients.[17]

According to Daniels' theory of "accountability for reasonableness,"[18,19] the establishment of limits and priorities for health care should follow a fair process that includes transparent decisions that are relevant to all stakeholders, including the public. Public or patient involvement can be an effective way of influencing health care priority decisions[20-22] and can enhance the public's trust in the health care system.[23] Involving members of the public can improve content validity of referral prioritization tools by ensuring that prioritization criteria correspond to their priorities. The main objective of the study was to compare the opinions of home-based occupational therapists and their target clientele, elderly persons and adults with physical disabilities, on the relative importance of the main criteria used to prioritize referrals. Because elderly people and adults with disabilities receive differential access to home-based rehabilitation services in Quebec,[24] our secondary objective was to compare the opinions of these 2 subgroups on those prioritization criteria.

Methods

We conducted a discrete choice experiment, a method for evaluating preferences by asking respondents to select their preferred choice from a set (see supplemental appendix S1, note 1, available online only at http://www.archives-pmr.org/). In this study, we asked respondents to select which client should be seen first by the occupational therapist. Each choice was defined by a group of attributes (eg, presence of falls and wait time) that can adopt different values (eg, a few falls, 1 fall, and no falls) in such a way that respondents must make trade-offs between different attributes when making their choice. Statistical analysis was then used to quantify the relative importance of each attribute in the respondents' decisions.

The study methodology comprised 5 steps, guided by the International Society for Pharmacoeconomics and Outcomes Research's[25] recommendations for discrete choice experiments. All methodological choices were geared toward minimizing the cognitive burden on respondents, considering that many were elderly or disabled, and were confirmed by a pilot test (see step 4). The study was approved by the research ethics board of the Institut universitaire de gériatrie de Montréal Research Center.

Step 1: Identifying and selecting attributes

The pool of potential attributes came from a detailed content analysis of 55 home-based occupational therapy referral

List of abbreviations:

CI	confidence interval
OR	odds ratio

prioritization tools.[16] In consultation with a convenience sample of 3 occupational therapists and 1 physically disabled person, we selected 4 prioritization criteria that were highly prevalent among the 55 tools, but for which there was a lack of consensus regarding priority level (urgent, high, moderate, low). The selected criteria were also chosen to represent competing values such as home safety, participation in the community, quality of life, and right to access services. The 4 selected attributes were falls inside the home, ability to enter and exit the home, ability to shower, and time already spent on the waiting list.

Step 2: Defining levels for each attribute

We assigned 3 levels of severity to each attribute (table 1). They are representative of the clinical realities of home-based occupational therapy services in Quebec, based on previous research[16,17] and corroborated by 1 clinical expert external to the research team.

Step 3: Construction of choice tasks and experimental design

We devised short case scenarios composed of combinations of the levels presented in table 1. Mathematically, there is a possibility of 81 case scenarios (3 levels[4 attributes]), of which 33 were retained. These were selected according to a D-optimal design obtained with the OPTEX procedure in SAS version 9.3,[a] allowing to test the effect of each attribute separately and their 2-way interaction effects. Pairwise combinations of the 33 scenarios resulted in 528 choice tasks (fig 1). We randomly grouped these tasks in 264 questionnaires containing 8 choice tasks each. This experimental design ensured optimal level balance and efficiency while minimizing cognitive difficulty.

Step 4: Data collection

Survey instrument

We assembled paper questionnaires containing an invitation letter, instruction sheet, qualifying question, 8 choice tasks, a sociodemographic information sheet, and a prepaid reply envelope (see supplemental appendix S1, note 2). In the qualifying question, 1 scenario had higher levels of severity for all attributes. This served to verify respondents' comprehension of the choice tasks, but was not identified as such. If the respondent did not choose this scenario, their questionnaire was excluded from the analysis. Sociodemographic information for occupational therapists included sex, age, years of experience in home care, and experience prioritizing referrals. For elderly and physically disabled respondents, we sought sex, age, education level, functional difficulties in specific activities of daily living, past experience as occupational therapy clients, and perception of health status (categories based on the Quebec health survey).[26]

The questionnaire was pilot tested with a convenience sample of 7 respondents spanning the 3 respondent groups.[27] Minor wording adjustments were made, but overall the pilot test confirmed the feasibility and relevance of the questionnaire format and content.

Participants and recruitment

The survey was administered to 3 groups of respondents: occupational therapists working in home care, elderly persons, and adults of any age with a physical disability related to a