

ORIGINAL REPORT

A NATIONAL SURVEY OF OCCUPATIONAL THERAPISTS' PRACTICES RELATED TO PARTICIPATION POST-STROKE

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Objectives: First, to identify occupational therapists' stroke rehabilitation practices related to leisure and social aspects of participation and potential explanatory variables associated with these practices. Secondly, to identify occupational therapists' desired assessment and treatment practices related to participation.

Design: A Canada-wide telephone survey.

Subjects: A random sample of 480 occupational therapists providing stroke rehabilitation.

Methods: Two case studies were created: one representing a patient receiving inpatient stroke rehabilitation; the other receiving community-based rehabilitation. A standardized questionnaire was used to elicit information on: (i) clinician and environmental variables; (ii) management of the patient depicted; (iii) desired assessment and intervention use.

Results: 60.2% identified a problem relating to leisure or social aspects of participation, 23.1% would use an assessment and 36.5% would offer an intervention focusing on leisure or social participation. Desired assessment use was low (1%), as was desired intervention use (15.2%). Regression analyses using numerous potential explanatory variables explained little regarding clinician practices.

Conclusion: Less than half of the occupational therapists focused interventions on leisure and social aspects of participation, suggesting a gap between what could be done to enhance successful community reintegration post-stroke and what is currently done.

Key words: stroke, leisure participation, social integration, descriptive cohort study.

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INTRODUCTION

Approximately 4,800,000 Americans (1) and 300,000 Canadians (2) are living with stroke. Compared with healthy older individu-

als, those with stroke have poorer quality of life (3) and higher rates of depression and fatigue (4). It is probable that a reduction in post-stroke participation contributes to these rates.

While rehabilitation professionals traditionally focus on basic activities of daily living (ADL) and instrumental ADLs (IADL), less attention has been placed on leisure and social activity. Yet, as stroke is a condition that primarily affects those who are retired, resumption of leisure activities is particularly important. Indeed, McKinnon (5) found that older Canadians spend about 7.5 hours daily on leisure.

Leisure has been defined as an "activity chosen primarily for its own sake after the practical necessities of life have been attended to" (6). Participation has been defined as: "to take part" (7) or "the act of sharing activities of a group" (8) or, involvement in life situations (9). In the rehabilitation sciences, participation can be viewed as the latest term for community reintegration. Yet, if leisure is de-emphasized post-stroke, patients and families may feel that resumption of these activities holds little importance (10).

The effect of stroke on social and leisure activities is substantial (10–18). Sjögren (14) showed a cessation or decrease in leisure activities: Sjögren & Fugl-Meyer (15) reported a reduction early post-stroke, but found less pronounced reduction at one year. Widén-Holmqvist and colleagues (18) found that 1–3 years post-stroke, most reported no participation in activities in which they had had a strong interest before the stroke. From the Framingham Study, 121 stroke survivors were compared with 141 age- and sex- matched controls (12): stroke survivors had a functional status similar to controls, but a reduction in socialization and hobbies. Similarly, when the association between motor/cognitive impairments and leisure was investigated one year post-stroke (16) changes in participation could not be explained by motor/cognitive impairments.

Numerous tools exist to measure participation including global measures with sub-sections such as the Reintegration to Normal Living (RNL) Index (19), the Craig Handicap Assessment & Reporting Technique (CHART) (20), the Sickness Impact Profile (SIP) (21), the London Handicap Scale (22), the Impact of Participation and Autonomy Questionnaire (IPAQ) (23) and the Assessment of Life Habits (LIFE-H) (24). Also, tools assess aspects of leisure, including motivation (25), par-

ticipation (26), attitude (27) or satisfaction (28). The Canadian Occupational Performance Measure (29) (COPM) potentially includes participation, if the client chooses this domain as important. Finally, there is a stroke-specific scale, the Nottingham Leisure Questionnaire (30) (NLQ).

When it comes to interventions, a systematic review revealed 5 randomized clinical trials (RCTs) (31–36). Three indicated improvement in mood or depressive symptoms, leisure participation and satisfaction in leisure (31–33, 35), and 2 did not (34, 36). Interestingly, a meta-analysis (37) that included a number of these RCTs (32, 34, 36), found a modest benefit.

Currently, what we do not know is the attention being paid to these aspects of post-stroke rehabilitation in daily clinical care. Specifically are occupational therapists (OTs), members of the interdisciplinary team trained to focus on community reintegration, identifying potential problems in participation and using assessments and interventions focused on these? It was with the goal of answering this global question that we identified stroke-related participation assessment and intervention practices of Canadian OTs providing inpatient and community-based rehabilitation to individuals with stroke. The specific objectives were to identify: (i) the prevalence of problem detection related to leisure and social aspects of participation; (ii) the prevalence of actual use and desired use of assessments and interventions related to these domains; and (iii) the relationship between the clinician practices (problem detection, assessment use, and intervention use) and various personal and organizational variables.

MATERIAL AND METHODS

Research design

A Canada-wide survey investigated stroke rehabilitation practices of 1755 stroke professionals. Prompted by a vignette depicting a typical patient, clinicians were asked to identify problems, as well as to specify assessments and interventions they would typically use for this patient. This paper focuses on the findings related to participation management by OTs providing inpatient rehabilitation and community-based rehabilitation. Ethical approval for this study was given by the Faculty of Medicine, McGill University, Montreal, Canada.

Sample size considerations

Sample size was based on the estimate that 20% of clinicians would use assessments that included a participation dimension. Using a 2-sided confidence interval of 95% and a desired precision of 5%, approximately 246 therapists per setting were required to allow stable estimates.

Study population

Licensing bodies provided lists of clinicians working in adult neurology. In smaller provinces without lists, the professional Orders provided names of sites.

Clinicians were eligible if they: were registered with the licensing body; had provided stroke rehabilitation for ≥ 3 months during the year and treated ≥ 2 adults with stroke per month; worked in a setting for ≥ 6 months in the past year; spoke English or French; and, provided consent.

Development of the case vignette

Previous work has demonstrated that vignettes are a valid form of treatment ascertainment (38). Using focus group methodology,

expert clinicians and researchers developed a vignette representing a typical patient with stroke receiving inpatient rehabilitation and a different group developed a vignette representing a patient receiving community-based rehabilitation. Specific cues were created related to leisure and social issues. Next, the vignette's contents were refined and reviewed for readability. English and French versions were created and pilot tested to verify clarity and coherence.

For the rehabilitation vignette, the cues related to participation include (in italics):

J is a 72-year-old right-handed, English speaking retired salesperson with no medical history other than hypertension. Prior to the stroke, J was living with their spouse in a 2-storey home that they own. The couple shared domestic activities and J enjoyed swimming, golfing, socializing, and driving to various activities. They have 2 adult children: the daughter lives close by and visits frequently.

J expresses a desire to get back to walking and is anxious to return home, becoming tearful during this part of the discussion.

For the community-based vignette, the specific cues include (in italics):

C is a 60-year-old individual diagnosed with a left hemisphere stroke 2 months ago. C was discharged home 2 weeks ago. C lives with a spouse in a bungalow with 5 steps outdoors. The couple is very supportive of each other and they have had an active lifestyle. C has recently retired and the couple had been looking forward to working on a few projects and planning trips for themselves.

Currently, the daughter accompanies her parents on all outings and visits daily.they do not see their friends as often as before the stroke.

When you ask, C expresses a desire to resume daily activities (outings, gardening, shopping, dancing, taking trips to visit their children).

The family is concerned that C does not interact as much with others, and can sit in front of the television for the whole day if not encouraged to move around outside.

C can climb up and down the stairs outside of the house with help, but would like to begin going down to the basement to work on hobbies.

Questionnaire content

The questionnaire used to obtain clinician responses was designed using rigorous methods. The first section elicited information on the clinician and work environment (Table I). The next focused on the potential problems noted by the clinician, as well as the assessments and interventions he or she would typically use. Finally, questions were included regarding the use of desired assessments and interventions in an ideal world. We have previously used a similar questionnaire with high participation rates.

Procedures

Data collection. Trained interviewers traced potential participants using rigorous procedures. Once contacted, the clinician was screened for eligibility. Those who agreed were scheduled for a 25-minute telephone interview. The vignette was forwarded 24–48 h before the interview. The interviewer used a standard script when asking questions and when responding to queries. To avoid contamination, respondents were asked to refrain from discussing the survey with peers.

Data coding. Two assistants coded the open-ended responses. The authors reviewed the codes for accuracy and consistency. Data were then entered into a database and each entry verified.

A clinician was considered a "problem identifier" if using one or more of the terms indicated in Table II. Given the current strong emphasis from the International Classification of Functioning, Disability and Health (ICF) (9) that both personal and environmental factors contribute to participation, problems were deemed appropriate for inclusion if related to the descriptors found in the ICF sections on Activity and Participation, Environmental Factors, and Body Functions (differentiated in Table II). We used these broad criteria, as it was

Table I. Characteristics of clinicians and their work environment by vignette

	Rehabilitation inpatient (n=253) n (%)	Community-based (n=227) n (%)
<i>Clinician characteristics</i>		
Age (mean (SD))	36.7 (9.2)	38.1 (9.4)
Gender (female)	231 (91.3)	211 (93.0)
Degree of professional training		
Diploma entry-level	11 (4.3)	20 (8.9)
Bachelors	231 (91.4)	202 (89.9)
Masters	11 (4.3)	5 (2.2)
Work schedule = full-time	195 (77.1)	141 (62.1)
Years of experience		
<3	76 (30.2)	53 (23.3)
4–10	80 (31.7)	69 (30.4)
>11	96 (38.1)	105 (46.3)
Specialty certification	81 (32.0)	54 (23.8)
Involved in teaching	21 (8.3)	25 (11.0)
<i>Environmental characteristics</i>		
Location:		
Urban	173 (68.4)	156 (68.7)
Suburban	27 (10.7)	13 (5.7)
Rural	53 (20.9)	58 (25.6)
Teaching institution	166 (65.6)	131 (57.7)
Presence of a stroke team	99 (39.1)	38 (16.7)
Stroke research conducted	79 (31.2)	47 (20.7)
New stroke clients per month*		
0–10	165 (65.7)	162 (72.6)
11–20	66 (26.3)	40 (18.0)
>21	20 (8.0)	21 (9.4)
Setting receives fieldwork student placement	237 (94.0)	203 (89.4)
Setting is supportive of on-going professional learning	218 (86.2)	201 (88.5)
Access to new information is easy	182 (71.9)	161 (70.9)
Time is allocated for new learning	91 (36.0)	72 (31.7)

*n's vary slightly because of missing values.

SD: standard deviation.

likely that, for example, a clinician who mentioned mobility outdoors as a problem might be doing so because of a concern regarding the client's ability to resume participation.

A clinician was classified as an "assessment user" if indicating the use of a standardized tool (s) one or more times (initial, interim, or discharge) or, non-standardized tool or term regarding participation (Table III).

A clinician was categorized as an "intervention user" if indicating the use of any intervention related to participation as per the consensus of the research team and the effectiveness literature (Table IV). Referral to a recreational therapist or stroke club was also considered an "intervention".

Data analyses

Descriptive statistics were used to indicate the prevalence of problem identification, assessment and intervention use. Additionally, the prevalence of desired use of assessments and interventions was calculated.

To study the contribution of potential explanatory variables (Table 1) on the 3 outcomes of interest - "problem identifier", "assessment user" or "intervention user", univariate analyses were performed by vignette. Chi-square analyses were used for categorical variables and analysis of variance for continuous variables.

Table II. Prevalence of problem identification relating to leisure and social aspects of participation by vignette according to ICF descriptors

	Rehabilitation inpatient (n=253) n (%)	Community-based (n=227) n (%)
<i>Activity and participation</i>		
General tasks demands		
Activity tolerance	9 (3.6)	12 (5.3)
Life satisfaction	0	1 (0.4)
Mobility		
Mobility outdoors	0	5 (2.2)
Interpersonal interactions and relationships		
Social skills	4 (1.6)	5 (2.2)
Social interactions	11 (4.3)	47 (20.7)
Community, social and civic life		
Leisure activities	51 (20.2)	84 (37.0)
Lifestyle	7 (2.8)	8 (3.5)
Community integration	7 (2.8)	11 (4.8)
<i>Environmental factors</i>		
Products and technology		
Environmental barriers	19 (7.5)	19 (8.4)
Accessibility	20 (7.9)	36 (15.9)
Community access	0	15 (6.6)
Support and relationships		
Social support	9 (3.6)	56 (24.7)
Isolation	5 (2.0)	40 (17.6)
Service systems and policies		
Community resources	1 (0.4)	14 (6.2)
<i>Body functions</i>		
Mental functions		
Psychosocial issues	11 (4.3)	16 (7.0)
Problem identifier (any of the above)	101 (39.9)	188 (82.8)

ICF: International Classification of Functioning, Disability and Health.

Next, logistic regression analyses were performed, again by vignette, to investigate the contribution of the potential explanatory variables univariately associated at $p < 0.10$ with the 3 outcomes. Using stepwise backward elimination, along with forward model building, the most parsimonious models were identified.

RESULTS

Respondents

The survey was completed in 2004–05: 1072 OTs were contacted: 290 were ineligible, 71 untraceable and 48 (7%) refused, with the remaining 663 participating. The study presented here focuses on the data from the inpatient-rehabilitation and community-based OTs. Of these, 253 worked in inpatient rehabilitation and 227 in community-based rehabilitation. Most were female, held a Bachelors degree and worked full time (Table I).

Problem identification

Table II indicates the problems identified according to vignette and mapped to the ICF (9). The term "leisure" was mentioned as a problem by 20% of those responding to the inpatient vignette and 37% responding to the community vignette. The percentage of OTs identifying a "social" problem – either

Table III. Prevalence of use of assessments with a leisure or social component and timing of use by vignette

	Rehabilitation inpatient (n=253)			Community-based (n=227)		
	Time of assessment			Time of assessment		
	Initial n (%)	Interim n (%)	Discharge n (%)	Initial n (%)	Interim n (%)	Discharge n (%)
<i>Standardized assessments</i>						
COPM	18 (7.1)	4 (1.6)	14 (5.5)	34 (15.0)	23 (10.1)	22 (9.7)
OARS-IADL	1 (0.4)	0	1 (0.4)	0	0	0
RNL Index	0	0	0	1 (0.4)	0	1 (0.4)
<i>Non-standardized assessments</i>						
Leisure	5 (2.0)	6 (2.4)	4 (1.6)	19 (8.4)	8 (3.5)	4 (1.8)
Community reintegration	1 (0.4)	4 (1.6)	3 (1.2)	4 (1.8)	3 (1.3)	0
Activity level	1 (0.4)	1 (0.4)	2 (0.9)	5 (2.2)	3 (1.3)	2 (0.9)
Social assessment	3 (1.2)	1 (0.4)	1 (0.4)	5 (2.2)	2 (0.9)	2 (0.9)
Social activity	2 (0.8)	1 (0.4)	1 (0.4)	3 (1.3)	1 (0.4)	1 (0.4)
Access to community	0	0	0	2 (0.9)	1 (0.4)	1 (0.4)
Referral to recreational therapist	1 (0.4)	0	0	0	0	0
Psycho-social adaptation	2 (0.8)	2 (0.8)	2 (0.8)	3 (1.3)	2 (0.9)	1 (0.4)
“Assessment–user” (use of any of the above)	33 (13.0)	16 (6.3)	25 (9.9)	61 (26.9)	38 (16.7)	31 (13.7)
User “at any time”		42 (16.6)			69 (30.4)	

COPM: Canadian Occupational Performance Measure; OARS-IADL: Older Americans Resource Scale for instrumental activities of daily living; RNL: Reintegration to Normal Living.

skills, interactions, support, isolation or psychosocial issues – was 13.8% and 58.6%, respectively. When grouping the terms related to environmental barriers and community access, 15% of inpatient OTs and 26.4% of community OTs reported a concern. Twice as many OTs responding to the community vignette vs the inpatient vignette were “problem identifiers” (Table II).

When we explored the variables associated univariately with being a “*problem-identifier*”, 6 variables were associated at

$p < 0.10$ for the inpatient vignette: diploma level vs Bachelors or Masters level training ($p = 0.093$), teaching at a university ($p = 0.092$), working in a teaching institution ($p = 0.018$), older age (38.4 standard deviation (SD) 9.0 vs 35.5 SD 9.2; $p = 0.013$), location – urban vs suburban or rural ($p = 0.010$) and research conducted in the setting ($p = 0.073$). No variables were related with problem identification for the community vignette.

Logistic regression analyses performed to explore the contribution of the above-mentioned variables with being an

Table IV. Prevalence of actual and desired use of interventions with a leisure or social component by vignette

Intervention	Rehabilitation inpatient (n=253)		Community-based (n=227)	
	Actual n (%)	Desired n (%)	Actual n (%)	Desired n (%)
Leisure activities	15 (5.9)	13 (5.1)	50 (22.0)	11 (4.8)
Sports activities	1 (0.4)	0	0	0
Aquatic therapy	2 (0.8)	0	1 (0.4)	0
Music therapy	1 (0.4)	0	1 (0.4)	0
Cycling	0	0	1 (0.4)	0
Computer games	0	0	0	2 (0.9)
More activities	0	1 (0.4)	4 (1.8)	1 (0.4)
Outdoor mobility	4 (1.6)	0	1 (0.4)	0
Community integration	4 (1.6)	8 (3.2)	10 (4.4)	9 (4.0)
Participation	1 (0.4)	0	1 (0.4)	0
Accessibility	4 (1.6)	1 (0.4)	25 (11.0)	2 (0.9)
Referral to recreational therapy	10 (4.0)	0	9 (4.0)	8 (3.5)
Referral to stroke club	2 (0.8)	1 (0.4)	21 (9.3)	2 (0.9)
Community resources	4 (1.6)	4 (1.6)	31 (13.7)	9 (4.0)
Social support	9 (3.6)	3 (1.2)	22 (9.7)	6 (2.6)
Volunteer support	0	0	1 (0.4)	0
Group therapy	9 (3.6)	5 (2.0)	10 (4.4)	2 (0.9)
Psycho-social	0	0	3 (1.3)	0
“Intervention–user” (use of any of the above)	51 (20.2)	32 (12.6)	124 (54.6)	41 (18.1)

in-patient clinician “*problem-identifier*”, found that the most parsimonious model (see Table V) explained only 12% of the variance in the outcome.

Assessment use

When we investigated the prevalence of assessment use by clinicians specific to participation, we found no use of standardized tools. When we broadened the definition to include IADL assessments, the only tool used with a prevalence greater than 1% was the COPM (Table III).

When clinicians were asked about desired assessment use in an ideal world, the COPM was the only standardized assessment that had a desired use greater than 1%: 1.6% inpatient clinicians, and 4.4% community clinicians wished to use it. Overall, 11 (4.3%) of inpatient clinicians and 21 (9.3%) of community clinicians indicated a desire to use an assessment that might include a leisure/social component.

When we explored the variables associated univariately with being an “*assessment user*”, the variables differed for the 2 groups. For the inpatient vignette, the only variable that was associated at $p < 0.10$ with being an “*assessment user*” was hosting student fieldwork placements ($p = 0.074$). For the community vignette, working full time ($p = 0.068$), specialty certification ($p = 0.058$), working in a teaching institution ($p = 0.017$), presence of a stroke team ($p = 0.035$), research in the setting ($p = 0.093$), supportive working environment ($p = 0.011$) and time allocated for learning ($p = 0.005$) were associated with being an “*assessment user*”. Logistic regression analyses performed for the group responding to the community vignette indicated that the most parsimonious model included: working in a teaching hospital, perception of a supportive environment, and time allocated for learning (Table V).

Intervention use

When examining interventions, the term “leisure activities” was the one mentioned most often, specifically by 5.9% of OTs providing inpatient and 22% providing community rehabilitation (Table IV). This term was also the one most frequently used to describe desired use of interventions (5.1% and 4.8%, respectively). Overall, 20.2% of inpatient OTs were identified as “*leisure/social participation intervention-users*”, as were 54.6% of community OTs.

When we explored the variables associated univariately with being an “*intervention user*”, the variables differed slightly for the 2 groups. For the rehabilitation vignette, location—urban vs suburban or rural ($p = 0.056$), older age (38.9 SD 9.8 vs 36.1 SD 9.0; $p = 0.051$), working part time ($p = 0.019$), presence of a stroke team ($p = 0.052$), and research in the setting ($p = 0.017$), were associated at $p < 0.10$ with being an “*intervention user*”. The logistic model that best explained being an “*intervention user*” included the last 3. For the community vignette, univariate analyses indicated that working full time ($p = 0.10$), less than 10 years experience ($p = 0.074$), and, location – again urban ($p = 0.080$), were associated with being an “*intervention user*”: logistic regression analyses (Table V) failed to reveal a parsimonious model.

DISCUSSION

This study investigated OTs’ focus on social and leisure aspects of participation post-stroke in 2 typical groups of patients. The prevalence of problem detection relating to leisure was quite low in both groups, but in relative terms, higher in the community-based vignette. This finding is logical and likely justified. The patient depicted in the inpatient vignette had

Table V. Multivariate analyses of association of clinician and environmental factors with the outcomes: *problem identifier, assessment user, and intervention user, by vignette*

Models	Rehabilitation inpatient ($n = 252^*$)			Community-based ($n = 227$)		
	OR	95% CI	Nagelkerke R^2	OR	95% CI	Nagelkerke R^2
<i>Problem identifier</i>						
Location – rural vs						
urban	2.20	1.08–4.49	0.124			NA
suburban	0.89	0.30–2.64				
Teaching institution = Yes	1.91	1.05–3.48			NA	
Age < 29.9 vs:						
30–39.9	2.14	1.05–4.33				
40–49.9	3.64	1.68–7.88				
≥ 50	2.81	1.04–7.57				
<i>Assessment user</i>						
Teaching institution = Yes			NA			0.113
Supportive environment = Yes		NA		1.91	1.02–3.57	
Time allocated for learning = Yes				4.95	1.18–21.92	
				2.06	1.12–3.81	
<i>Intervention user</i>						
Work schedule = Part-time	2.84	1.39–5.80	0.099			NA
Research in setting = Yes	2.26	1.13–4.49			NA	
Stroke team = Yes	1.75	0.90–3.42				

[†]1 missing.

OR: odds ratio; CI: confidence interval; NA: not applicable.

experienced a serious stroke that affected ADLs, cognition and mobility and thus, it is likely that when respondents reviewed this case they reported on the problems that they would focus on first and foremost. In contrast, the community vignette was replete with cues related to participation in an individual who was retired, had been very active, had an active spouse, and had made sufficient recovery to enable active participation. Thus, we anticipated that participation would have been seen as a key area on which to focus. Clearly, many OTs working in community care are not yet identifying or focusing on these problems. It may be that some are given specific mandates that do not include a focus on participation but rather target more traditional assessments and interventions aimed at the provision of aids and adaptations, ADLs, and the like. We are currently analyzing the remaining data from this study to determine whether this is indeed the case.

When it came to assessment use, many OTs evaluated the broad areas that encompass participation, but no clinician reported the use of a participation-specific standardized tool. While the rehabilitation inpatient vignette is likely to have prompted clinicians regarding more urgent assessment priorities early on, we did request information on assessment use across the entire rehabilitation period including prior to discharge. This should have given clinicians an opportunity to describe the assessments they would use as community reintegration was approaching. This lack of use is disconcerting given the proliferation of tools in this domain. While those working in the research world might find these tools valuable for measuring participation in randomized trials, it is apparent that OTs working in stroke rehabilitation either do not find them useful or have not attempted their use. It will be important to explore this finding further, using qualitative methods to identify clinicians' reasoning for exclusion of this entire domain from their assessment repertoire. In addition, it will be important to identify potential facilitators that would enhance use of standardized tools in daily practice. Unfortunately, our extensive investigation of numerous potential explanatory variables associated with being an assessment user found little to explain use in the inpatient rehabilitation group. In contrast, for the community group, environmental variables such as working in a teaching institution, and support and time for learning, were associated with being an assessment user, with the caveat that these variables explained only a small portion of the outcome and we defined "assessment user" loosely to include non-standardized assessments.

When it came to interventions, roughly one in 5 OTs working with an inpatient clientele and half of those working in the community indicated an intervention, using the broadest sense of the construct. It could be argued that the scientific evidence for the usefulness of specific forms of leisure related interventions is equivocal, and as such does not lend much support for the benefit of spending valuable and limited OT resources on this aspect of stroke recovery. However, the strong evidence that stroke impacts on leisure, and that reduced socialization and lack of meaningful leisure influences quality of life and mood, lends strong support to the value of rehabilitation focused on these aspects of life post-stroke.

Again for interventions, as for assessments, studying the effect of a large number of potential explanatory variables failed to reveal a clear and strong association to differentiate users from non-users. Yet, interestingly, for the inpatient clinicians, being a part-timer, working in a research environment and to a lesser extent, working in a stroke team, was associated with being an intervention user. It is plausible that those who worked part time placed more value on their own "non-work" activities and this affected their intervention practices.

Surprisingly, when clinicians were asked about their desired practices in an ideal world few mentioned a desired assessment or intervention related to participation. This suggests that it would be simplistic to put all of the blame on commonly cited system barriers such as time and money. Rather, it may be that many just do not include these aspects of rehabilitation in their clinical repertoire, unless participation is rated high in their own personal value system.

This study included a large random sample of OTs from Canada only. As such, it could be that the findings are not representative of practices elsewhere where leisure and social aspects of participation may be seen as being of greater or lesser importance. Also there is the question of validity when using a vignette to ascertain clinical practices. However, mounting evidence (38) suggests that this is the preferred method of ascertaining clinician variations in treatment practices.

In conclusion, while this study found some focus on leisure and social aspects of participation by OTs working in stroke rehabilitation, it also provides evidence of a gap between what could be done to enhance community reintegration and what is done. Given the strong ICF focus on participation, especially in those living with chronic diseases, it behooves OTs to evaluate this aspect of their stroke practice. Otherwise, all of the ICF preoccupation with participation is merely an academic exercise with minimal, if any, impact on clinical practice.

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