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Verbal Expression Disruption of Thai Aphasic Persons Perceived by Their Families

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Abstract : This study reports the verbal expression disruption of Thai aphasic persons as perceived by their family members as the most salient to their mutual communication and the most disruptive to their daily communication. The family members were first interviewed and then asked to complete a questionnaire. It was found that "aphasic persons" word-finding difficulties' was the specific verbal expressive characteristics which families perceived as the most salient and disruptive. Identifying the perceptions of the families through both interview and questionnaire procedures appeared to have advantages in tapping information about communication disability and handicaps that could lend valuable insights in planning ecological valid treatment.

Key words : Aphasia, verbal expression, communication disruption

เรื่องย่อ : การพูดของผู้ป่วยอะเฟเซียที่รบกวนการสื่อสารของครอบครัว

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รายงานการวิจัยการพูดของผู้ป่วยอะเฟเซียที่รบกวนการสื่อสารในชีวิตประจำวันตามความรู้สึกของครอบครัว ทำการศึกษาโดยวิธีการสัมภาษณ์และใช้แบบสอบถาม พบว่า "การนึกคำที่ต้องการพูดไม่ได้" เป็นลักษณะการพูดผิดปกติ ที่รบกวนการสื่อสารระหว่างครอบครัวกับผู้ป่วยอะเฟเซียในชีวิตประจำวันมากที่สุด การศึกษาความรู้สึกของครอบครัวโดยวิธีนี้ได้ข้อมูลเกี่ยวกับความบกพร่องในการสื่อความหมายและความเข้าใจในการวางแผนการรักษาที่ดี

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INTRODUCTION

Aphasic persons may have priorities, needs, and wants different from those which speech pathologists perceive them to have[1], and families may also have different insight into aphasic persons than do speech pathologists[2-5]. By considering relatives' perspectives of aphasic persons' communication problems, speech-language pathologists may be better able to differentiate between the disability and its resulting to be handicap that are associated with aphasia.

Because a handicap relates to the experience of a disability by the client and others close to the client, there is a need to attend to the perspective of significant others[6-8] . Consequently, individualized and valid treatment planning should incorporate consideration not only of the disability but also of the handicap as experienced by the stakeholders[3,8-11]. It is the notion of handicap that this study seeks mainly to address, as it is this that speech-language pathologists as clinicians may more frequently tend to ignore in the assessment and treatment of the clients.

The researcher was particularly interested in the perceptions of families of Thai aphasic persons. As Thai culture includes extended family units and expects families to be care givers of aphasic persons, perceptions of health, disability and handicap may be culturally influenced[12]. Therefore, this study investigated the perceptions of family members of aphasic persons about the communication difficulties they experience with their aphasic partners. The following research question guided this study is: "Which aspects of verbal expression disabilities are perceived by family member of aphasic persons to be the most salient to their mutual communication?"

MATERIALS AND METHODS

This report was a survey study conducted at Siriraj Hospital from January to June 2004. It consisted of two parts: a personal interview and a questionnaire on the same topic which was administered immediately after the interview. It was conducted by the researcher with family members of aphasic persons who were mentioned as significant others (SOs) in this study.

The interview

An open-ended question was used to elicit the SOs' responses, i.e., "Can you tell me what you see as the main communication problems between you and your relative (aphasic person)?" If further prompting was necessary, a question such as "What are the communication problems that affect your everyday life?" was asked, or else the interviewer used the critical incident technique[13-14] to assist the SOs in recalling particular situations. Their responses were transcribed and the SOs confirmed the accuracy of the researcher's record of their intended meaning. It was intended that, in the use of this open-ended interview procedure, the SOs would identify the communication difficulties most salient to them and, therefore, those which they perceived as being the greatest handicap to communication. Each interview took 5-15 minutes.

The questionnaire

The questionnaire consisted of 10 items that dealt with verbal expression problems. These items were based on communication characteristics commonly described in relation to aphasia[15-21].

SOs were asked to rate how disruptive each item was to communication. A five-point interval scale with end descriptors of "minimal disruption to communication" (1) and "maximal disruption to communication (5) was used. It was intended that the SOs" ratings would indicate their perception of the handicap resulting from each communication disability. It took approximately 15 minutes for the SOs to complete the questionnaire.

The internal consistency of the questionnaire was demonstrated by alpha coefficients of 0.82.

Both the interview and questionnaire format were used to validate and assist in the interpretation of the results. It was felt that the use of a questionnaire alone may have less validity in reflecting handicaps, as the descriptions of communication problems might be expected to precipitate recognition of disabilities rather than to elicit recognition of the handicap resulting from them. Consequently, the questionnaire required the SOs not only to identify problems but also to rate how disruptive each problem was.

Table 1. Demographic characteristics of aphasic persons (N=70) and their significant others (N=70).

Demographic characteristics	Aphasic person	Significant other
Sex		
Male	45	5
Female	25	65
Age (year)		
Range	13 - 86	18 - 70
Mean	55.93	43.64
SD	15.41	12.54
Aetiology		
Cerebrovascular accident	64	
Trauma	6	
Time post-onset (year)		
Range	1/2 - 15	
Mean	2.14	
SD	2.58	
Severity		
Normal	0	
Mild	17	
Moderate	47	
Severe	6	

By doing this the researcher attempted to highlight those disabilities that were perceived as causing the greatest handicaps to communication. If the questionnaire showed significant discrepancies between the items identified and their degree of disruption, the researcher could then validate whether handicap and/or disability were being addressed by the subjects.

Subjects

Seventy subjects were recruited from the Division of Speech-Language Therapy, Department of Rehabilitation Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University. They were either family members or caregivers of aphasic persons who had enrolled in the speech-language clinic from January to June 2004. All lived in the same household with their aphasic partners for over 6 months. The aphasic persons were at least 6 months post-onset. There were eligibility criteria with regard to gender, age and education of SOs, and no limitation on gender, age, education, etiology and severity of aphasia for the aphasic persons.

For descriptive purposes, the researcher evaluated each aphasic speaker's level of severity of aphasia by using the Aphasia Language Performance Scale (Thai version)[22]. Then each aphasic speaker was classified into one of four categories based on the achieved scores: "normal" (1), "minimally impaired" (2), "moderately impaired" (3), and "severely impaired" (4).

Demographic information for the SOs and their aphasic persons is presented in Table 1. Table 2 shows the number and percentage of SO's perceptions of verbal expression difficulties from the interview and the questionnaire. Medians and ranges of degree of

Table 2. SOs' perception of verbal expression difficulties from interview and questionnaire (N=70).

Aspects of verbal expression problems	Number (percentage) of SOs who perceived difficulties		Median (and range) of degree of disruption rated on the questionnaire
	Interview	Questionnaire	(1 = mild to 5 = max)
Uses single words or phrases to get a message across	3 (4.29%)	5 (7.14%)	3 (1 - 4)
Speaks unintelligibly	11 (15.71%)	18 (25.71%)	5 (1 - 5)
Cannot provide the relevant content in conversation	-	10 (14.29%)	3 (1 - 5)
Says the wrong words	2 (2.86%)	7 (10%)	3 (1 - 4)
Makes errors in speech sounds	-	14 (20%)	4 (1 - 5)
Tends to get stuck on the same words, phrases or meaningless sounds when trying to talk	4 (5.71%)	12 (17.14%)	4 (1 - 5)
Cannot find the words s / he wants to say	18 (25.71%)	48 (68.57%)	5 (1 - 5)
Talks around the subject when unable to find the word	3 (4.29%)	15 (21.43%)	4 (1 - 5)
Talks in incomplete sentences or in telegram-like speech	-	8 (11.43%)	3 (1 - 5)
Repeats words after the speaker	-	2 (2.86%)	2 (2 - 5)

disruption rated on the questionnaire are also presented in Table 2.

Statistical analysis

Descriptive analysis was applied to the data. Results were expressed as percentage, mean value, standard deviation, median and range of degree of disruption rated on the questionnaire. Spearman rank correlation analysis was used to indicate the association between variables measured at the ordinal level. A p value < 0.05 was considered to be a significant difference. Internal consistency of the questionnaire was demonstrated by alpha coefficients.

RESULTS

Interview

From the interview, the researcher categorized and tallied the SOs' responses under the aspects of verbal expression difficulty. An indication of the reliability of this categorization and tally was verified on a 10% random selection of the SOs' responses by a speech pathologist who was aware of the purpose of this study but had not participated in interviews with the SOs. Item-by-item agreement between the researcher and the second speech pathologist ranged from 92% to 100%.

In the interview the SOs identified 6 of the 10 communication problems listed in the questionnaire. When specific descriptions of problems that were identified in each category were examined, it was found that the most frequently described difficulty was "word finding difficulty", which was identified by 25.71% (18/70) of SOs.

Questionnaire

The results from the questionnaire (Table 2) show the number and percentage of SOs whose responses fell into the 10 specific aspects of communication. All aspects of verbal expression problems were identified by 100% of the SOs. Each item was rated as being disruptive to communication by at least 2 of the 70 SOs.

The number and percentage of SOs who identified each of the items as disruptive from the questionnaire are presented in Table 2. Consistent with the results from the interview, "word finding difficulty" was the verbal expression item from the questionnaire which was identified most often by 68.57% of SOs (48/70) as being disruptive to communication.

Examination of the rated degree of disruption for each difficulty that was identified demonstrated the whole range of ratings[1-5] with medians of 2 to 5. Those items identified most often as causing communication difficulties were also those that usually received the highest ratings of being most disruptive. Spearman rank correlation analyses between the difficulties which SOs rated most often and their median degree of disruption resulted in significant grouped correlations for verbal expression ($r = 0.59$, $p < 0.05$). Those items that demonstrated significant correlations between the number of ratings and rated degree were as follows: "cannot find words s/he wants to say" (median = 5, range 1-5, rated by 48/70 SOs).

Comparison of interview and questionnaire findings

When the maximum number of responses given for particular items in each of the interview and questionnaire was compared, it was seen that the problems identified most frequently were the same for verbal expression difficulty. That is, "word finding" problems was the most frequently identified verbal expression in both the interview and the questionnaire conditions by 18/70 and 48/70 SOs, respectively.

Spearman rank correlation analyses comparing the number of SOs who identified the same items in communication in both the interview and the questionnaire conditions revealed that the difficulties which more SOs described in the interview also tended to be identified on the questionnaire by more SOs, as being disruptive to communication ($r = 0.71$, $p < 0.01$).

DISCUSSION

As the verbal expression difficulties identified in the interview were the aspects of communication most salient to the SOs, it might therefore be assumed that these were also the difficulties perceived to be most handicapping to their mutual communication with their aphasic partners. If this assumption is correct, verbal expression difficulties appeared to be perceived to be handicap.

Further consistent findings from the interview and questionnaire related to specific difficulties for verbal expression. The aphasic person's "word finding problems" and "says unintelligible speech" were the two difficulties in communication which more SOs identified than any others. These two difficulties also received the highest ratings for degree of disruption to communication on the questionnaire.

There may be an interaction between two specific difficulties. Conversation requires the active participation of both parties, and because the role of aphasic persons in conversation may be diminished by their word-finding problems[23], the normal conversational partners may assume a dominant role and carry much of the burden of communication and conversational repair[24], particularly when aphasic persons engage in unintelligible speech.

There were two remaining items not frequently salient in the interview, but identified on the questionnaire by more than 20% of the SOs, which also had medians of 4, suggesting that they were recog-

nized as being reasonably handicapping to communication. These were "make errors in speech sounds" and "talk around the subject when unable to find the word". Again these features of communication disorders may be particularly noticed as problematic because they impact directly (annoyingly) on the conversational partner rather than being problems that would necessarily frustrate the aphasic persons.

In general SOs identified more communication difficulties on the questionnaire than they described in the interview. The questionnaire may have triggered SOs' recognition of communication difficulties. Although it appeared that both the interview and the questionnaire tapped many of the same difficulties, with 6 items of the difficulties on the questionnaire being mentioned by at least two SOs in the interview, those difficulties elicited in free recall from the interview may be more salient, and therefore more handicapping for the SOs than those elicited by suggestion on the questionnaire.

It was assumed that both the interview and questionnaire would tap SOs' perception of communication handicaps. This assumption was partially confirmed by results of the Spearman rank correlation analyses, whose significant positive relationships between the numbers of SOs identified the same items both in the interview and on the questionnaire.

It is possible that the questionnaire tapped the presence of disability as much as tapping handicaps. In this case it may be that SOs tended to indicate presence or absence of disability for the questionnaire items rather than use the range of the interval scale to indicate clearly the degree of handicaps. It might be intrinsically difficult to specify one value to signify the degree of disruption that is caused by a particular breakdown in communication.

CONCLUSION

In summary, verbal expression difficulties of aphasic persons were perceived by the Thai SOs as being salient to communication breakdown. In particular, the results suggested that an aphasic person's word-finding problems was perceived as being most salient to communication breakdown and perhaps the most handicapping to communication. The finding that SOs were concerned most about the aphasic persons' word finding difficulties' may provide implications for selecting therapy goals perceived by SOs to be particularly valid. The advantage offered by using the questionnaire and the interview techniques appear to be in their potential to tap both disability and handicaps. Consequently, there may be valuable insights to be gained from including both questionnaire and interview of SOs' perspectives in assessment and planning for intervention.

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