Title

The Hospital Communication Disability Screener: Detecting patients with communication activity limitation in the acute hospital setting

Abstract

Many people with language and /or cognitive impairments experience difficulty communicating their healthcare needs when they are patients in hospital. That is, they have a communication activity limitation. The Inpatient Functional Communication Interview (IFCI) is a tool to assess communication activity limitation in the hospital setting, however it takes too long to administer to all inpatients. A screening tool is needed. The IFCI assessments of 71 patients were analysed to develop a screening tool, called the Hospital Communication Disability Screener to detect patients with a communication activity limitation in the hospital setting.

Background

Many people with language and/or cognitive impairments experience difficulty communicating their healthcare needs when they are patients in hospital (Parr, Byng, Gilpin, & Ireland, 1997). The Inpatient Functional Communication Interview (IFCI; O'Halloran, Worrall, Toffolo, Code, & Hickson, 2004) was developed to identify those hospital inpatients who experience difficulty communicating their healthcare needs in hospital. The IFCI can be considered a measure of a person's communication activity limitation in the World Health Organization's International Classification of Functioning, Disability and Health (ICF; World Health Organization, 2001).

The IFCI's main strength is that it is a patient centred assessment. That is, the clinician interviews the patient on his or her ability to communicate about his or her own healthcare needs across 15 typical hospital communication situations and when indicated, explores communication strategies that facilitate optimal communication with the patient. Despite this, a recent survey of 174 Australian speech pathologists indicated that only 11% used the IFCI in their clinical practice (Vogel, Maruff, & Morgan, 2010). One of the main criticisms of all communication assessments surveyed in this study was that they were too

time consuming. This criticism may be applicable to the IFCI as it takes between 30-45 minutes to administer (O'Halloran, et al., 2004).

Therefore a screening tool is needed that provides clinicians with a quick way to identify hospital inpatients who have a communication activity limitation in the hospital setting and need further support. This screening tool needed to have four features. First, it needed to be easy for the clinician to administer and score. Secondly, it had to be administered within a short period of time, approximately 15 minutes or less. Thirdly, it needed to consist of items that measure the patient's ability to communicate healthcare needs. Finally, it had to consist of items that are sensitive to difficulty communicating about healthcare needs. The IFCI had been administered on 71 patients for a previous study (O'Halloran, Worrall, & Hickson, in press) and this provided an available data set with which to develop a screening tool.

Aim

To develop a screening tool to detect patients with a communication activity limitation in the hospital setting.

Method

Each of the four criteria listed above were applied to the data set of 71 IFCI assessments to assist the selection of items for a screening tool.

Criterion 1: the screening tool needs to be easy for the clinician to administer and score. During administration of the IFCI, if the speech pathologist can elicit a patient response to a communication situation it can then be scored as 'successful', 'partially successful' or 'unsuccessful'. If the speech pathologist can not elicit a patient response for any reason, it can not be scored. Therefore in analysing the data set of 71 patients, the number of times each communication situation was scored would provide a measure of how easy each communication situation was to administer and score. The 15 IFCI communication situations were ranked according to how many times they were scored.

Criterion 2: the screening tool needs to be quick to administer. The length of time taken to administer the screening tool would largely depend on the total number of items in the screening tool. This criterion could only be applied once the IFCI items were ranked according to the other criteria.

Criterion 3: the screening tool needs to consist of items that measure the patient's ability to communicate healthcare needs. All 15 communication situations measure patients' ability to communicate healthcare needs, therefore this criterion could not be used to select particular communication situations for the screening tool.

Criterion 4: the screening tool needs to consist of items that are sensitive enough to detect those patients who have difficulty communicating about healthcare needs. Some of the communication situations on the IFCI are more difficult to communicate successfully in than others, for example, it is easier for a patient to communicate successfully on IFCI item 1 'gaining the patient's attention', which requires the patient to attend, than it is for a patient to communicate successfully on IFCI item 4 'understanding the implications of the current medical condition' which requires the patient to respond to questions and/or describe the consequences of his or her medical condition. In reviewing the dataset of 71 patients, those IFCI items that were scored more often as 'partially successful' or 'unsuccessful' communication could be considered more difficult than communication situations that were scored as 'successful' communication. The IFCI items could were ranked according to how often they were scored as 'successful', 'partially successful' and 'unsuccessful'.

The IFCI items from the data set of 71 inpatients were ranked according to the first, then the fourth and then the second criteria described above. Those IFCI items that were ranked as most difficult to administer and score were then removed from the list. The remaining IFCI items were ranked according to the fourth criterion 'items are sensitive enough to detect those patients who have difficulty communicating about healthcare needs'. Then the final criterion that the screening tool could be administered within 15 minutes was applied.

Results

Table 1

IFCI situations ranked in terms of how easy item is to administer and score

IFCI situation	Frequency of missing data	Ranked

1	0	Very easy to administer and score
3	0	
4	0	
5	1	
8	1	
12	2	Moderately easy to administer and score
15	2	
2	3	
7	4	
13	5	
14	9	Difficult to administer and score
6	13	
9	17	
11	18	
10	19	

Table 2

Remaining IFCI items ranked according to the number of times they were rated a 'partially unsuccessful' or 'unsuccessful communication'

IFCI item	Number of times IFCI item scored as 'partially successful' or 'unsuccessful' communication
15	36
8	36
5	34
4	32
2	28
3	24
7	24

13	17
12	16
1	11

Table 3

The items need to be administered in less than 15 minutes

8	Understanding descriptions of what is happening, going to happen or has happened as they relate to hospital procedures (immediate recall)
15	Understanding descriptions of what is happening, going to happen or has happened as they relate to hospital procedures (delayed recall)
5	Following instructions
4	Understanding the implications of the current medical condition
2	Telling you what has happened to bring them into hospital
3	Understanding the medical diagnosis or reason for admission
7	Telling you about preadmission medical history

Discussion

The seven IFCI items listed in Table 3 will form the basis of a new screening tool called the Communication Disability Screener (CDS). Current research is investigating the reliability, validity, sensitivity and specificity of the CDS in detecting patients with communication activity limitation in the acute hospital setting.

References

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