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Exploring the Effectiveness of Talking Mats as a Communication-Supporting Tool for Dementia Patients in Discharge Discussions: A Study

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Abstract

Objective: Dementia patients' communication skills deteriorate with time, which makes it difficult for them to participate in discussions about discharge. Communication issues might be plain to see. However, patients frequently lack a structured support. The purpose of this study was to find out if Talking Mats (TM), a visual communication-supporting tool, might help patients communicate better at their discharge discussions.

Methods: Twenty patients were randomised to utilise TM prior to their discharge meeting (Talking Mats Group, TMG) or to follow the ward's routine protocol (Control Group, CG) in a pilot research. Persons attending discharge meetings (patients, personal friends, nurses, and social care staff) in a geriatric unit judged how effectively they felt the patient participated in communication on a visual analogue scale. They also assessed the extent to which using TM had aided them.

Results: Our main finding was an interaction effect in how the four groups of people who attended the meeting (patients, close acquaintances, nurses, and social care workers) rated the three different statements about communication and participation; knowing the patient before the meeting affected ratings of the patient's communicative participation. The majority of people who used TM said it was useful at the discharge talks. The comparison of groups produced the contradictory conclusion that CG communication was judged as more well-functioning than TMG communication.

Conclusion: While understanding each other is not always possible at discharge discussions, especially when a patient has cognitive impairment, the use of TM was rated as a communication facilitator by those present. Knowing a patient influenced communication ratings, and we concluded that it is preferable to have the person using the mat with the patient also attend the discharge meeting.

Keywords: Dementia; Patients; Communication; Hospitalized; Speech; Language pathologist; Cognitive abilities; Communicative limitation; Cognitive impairment; Talking mats

Introduction

Dementia is a condition marked by a deterioration in cognitive abilities. It is a primary source of reliance among the elderly because to the resultant behavioural changes and diminished capacity to engage in daily living activities [1]. Previous research has shown that worsening impaired communication makes it difficult for interlocutors to understand what people with cognitive impairment mean [2], as well as making it more difficult for patients to understand the potential risks and benefits of their various options [3]. Patients must make healthcare decisions regardless of their future communicative and/or cognitive limitations, and it is critical to involve the patient in the decision-making process in order to achieve excellent compliance and treatment results [4-6]. Decisions in health care may entail crucial and morally complex situations, such as deciding between therapies or enrolling in a scientific study, or they may involve changes in daily living, such as the need for home care services. It is ethically important for personnel to ensure that a patient's autonomy and independence are always fostered, yet this may clash with keeping the patient safe. Although communication challenges may be clear, patients might not receive structured help from employees addressing their communication difficulties. It is not always clear how to provide such assistance most effectively [7]. Talking mats (TM) are a low-tech visual framework that is used to aid conversation and decision-making when a certain issue has to be discussed. It is made up of a tiny doormat on which graphic cards with textual phrases are adjusted to represent the user's answers. This approach enables persons with various communication and/or cognitive disabilities to express themselves in a more intelligible manner by allowing them to voice their ideas on a picture-based scale. Previous study has looked at how TM improves communication efficiency, finding that people with dementia are better able to express themselves and engage in discussions [8]. TM seems to relieve cognitive load, allowing the voicing of ideas [9]. Furthermore, it increases participation in and enjoyment with talks about daily living [8,10]. A discharge conference (also known as a joint meeting or patient care planning) is held at the end of hospitalisation in geriatric wards in Sweden. The patient and a close friend (if applicable) meet with ward personnel and a social care professional from the municipality. The discharge meeting's objective is to focus on the patient's need for assistance after hospitalisation ends, and to guarantee that aid is provided by the municipality following discharge by developing a health plan [7]. Discharge meetings cover topics such as establishing daily routines (e.g., food delivery or cleaning) as well as dealing with big changes such as transferring to a residential care centre. The expressed wants and requirements of the patient should serve as guides for the assistance offered by the municipality. The goal of this pilot research was to investigate communication and the possible value of using TM to prepare individuals with cognitive

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impairment for discharge discussions. Patients utilising TM (Talking Mats Group, TMG) and a Control Group (CG) are compared in terms of assessed participation [11].

Methods

Study design

Patients were drawn from the Karolinska University Hospital's geriatric ward. This ward prioritises patients who require a multidimensional assessment of the causes impacting their memory but are unable to do so in an open memory ward, as well as patients with dementia and behavioural issues. The project's patient recruitment was continuous and took place over the course of one year, from June 2013 to June 2014. The three inclusion criteria were: (1) a clinical dementia diagnosis or proven cognitive impairment, (2) the ability to speak Swedish (including acceptable hearing), and (3) the capacity to utilise TM (including sufficient eyesight to view the pictures used). The capacity to utilise TM was assured by providing a training session based on the TM framework.

During the study's recruiting period, around 300 patients were hospitalised at the ward. The inclusion criteria were met by 40 patients, who were scheduled for a discharge meeting. Twenty of them agreed to take part and were randomly allocated to one of two groups: the TMG (n=12) or the CG (n=8). Regarding the consenting strategy utilised for the study, please read Ethical Considerations below. Because prior studies compared interviews using TM to structuralized interviews and non-structuralized interviews [11], we decided to employ solely TM and a control group. The two groups were compared in terms of median age and median Mini-Mental State Examination (MMSE) score. The Mini Mental State Examination (MMSE) is a cognitive screening test with a maximum score of 30 (showing that cognitive skills are well functioning) that provides an approximate assessment of dementia severity when the result is less than maximum [12]. The TMG's mean age was 76.8 (range 58-86, n=12), and their MMSE scores (obtained from medical records) were 21.4 (range 13-27, n=9). The CG had a mean age of 70.8 (range 63-84, n=8) and an average MMSE score of 20.3 (range 8-27, n=8). The Mann-Whitney U test revealed no statistically significant differences in the groups' median ages ($p>0.05$) or MMSE scores ($p>0.05$). There were additional calculations to see whether there were any correlations between the MMSE and the VAS ratings, but no significant correlations were detected using Spearman's correlation coefficient (two-tailed). At each discharge meeting, the patient was asked to self-evaluate, and the other attendees were asked to rate the patient's communication and involvement using statements with VAS. This resulted in assessments from four types of attendees: patients, close friends, nurses, and social care staff.

Intervention

Boardmaker (a Mayer-Johnson software programme) was used to create a standard deck of cards, each having an image and a corresponding statement. The cards were 6.2 6.2 cm in size and included a little Velcro tape piece on the back. Apart from the top scale's cards (functioning, sometimes functioning/sometimes not, and malfunctioning') and the topic card (you, there were 26 cards covering topics often mentioned at discharge talks. 5 considered more abstract concepts (for example, 'feeling secure') and 21 treated more specific topics (for example, 'cleaning'). Patients were also given the option of writing messages or drawing drawings on blank cards. The card pattern was similar to those described in prior investigations on TM and dementia [10]. The chosen cards were arranged on a 38 57 cm textured mat.

Prior to their discharge meeting, TMG patients attended a TM session to talk about themselves and their skills (subject 'you'). Each talk lasted no more than half an hour. The finished mats were delivered at the discharge meetings. The CG held their discharge meeting in line with the ward's regular norms; no formalised communication about prospective subjects occurred prior to the discharge meeting. The nurse often offered a summary of the patient's hospitalisation (regarding diagnosis, treatment, observed behaviours and skills), and the social care professional supplied information about any previously granted help. They also included a conversation about what support the patient need, which resulted in the patient submitting an application to the town for home care services.

Following the discharge meetings, all attendees (patients, close friends, nurses, and social care professionals) were asked to score three statements (on a 100 mm VAS) regarding perceived engagement and communication on a scale of 0 to 100, where 0 means I disagree completely and 100 means I completely agree. Everyone in attendance heard the same comments, with the only difference being their perspective on the patient: 1) I understood what we were discussing/I believe my close acquaintance/the patient understood what we were discussing; 2) My opinions were clearly expressed/I understood what my close acquaintance/the patient's opinions were; 3) I believed the conversation went well. The questions utilised were clinically best practise for assessing cognitively impaired adults' communication ability and engagement in daily life activities. Statements two and three are a slightly modified Swedish version of the English 'Involvement Measure Questions' that had previously been used in studies on communication and engagement in adults with cognitive impairment. At each end point of the patients' scales, an image was inserted. The two images were the same as those used in the TM session to signify acceptance or displeasure. There were 12 missing replies on statements 1 and 3, and 11 missing responses on statement 2 out of a total of 74 ratings.

Results

On average, the patients discussed (i.e., used) 16 prepared cards and 1 optional blank card. Abstract topics (such as spirit and feeling safe) were less frequently addressed than tangible ones (such as washing and going out). In their discharge sessions, the majority of TMG assessed the mat as beneficial; twenty-eight (of forty) comments indicated a favourable experience with TM. Participation and communication during discharge meetings- The major study objective was to see if the assessments of patients' engagement and communication changed amongst the four categories of people who attended discharge meetings (patients, close friends, nurses, and social care professionals). Mean values were calculated from ratings on the first three statements (see Measures). A one way (4 groups) ANOVA on mean ratings failed to reach significance ($F=1.25$, $df=3$, $p>0.05$, $2=0.06$), despite the fact that mean values varied significantly across groups (M SD; 88.0 15.0, 76.2 20.9, 76.1 25.5, and 75.0 23.4; patients, close acquaintances, nurses, and social care workers, respectively). This data suggests that the groups of people who attended the sessions did not assess the comments about patients' communication differently.

Discussion and conclusion

The purpose of this study was to investigate communication and the possible value of using TM to prepare patients with cognitive impairment for discharge discussions. According to the ratings, TM was viewed as a communication facilitator during the sessions. However, as compared to CG, there were no benefits for TM. Our key result was

that mean evaluations on the statements were similar among the four categories of people who attended the discharge discussions (patients, close friends, nurses, and social care staff). A comparison of these groups revealed that the reported levels of communicative functioning and involvement varied depending on who attended the meeting. The patients' evaluations were found to be greater when compared to other groups, which might indicate a lack of understanding of one's own talents or an indication of the patients' reliance. It is noteworthy to note that close friends and nurses who knew and had seen the patients previously had similar trends in their assessments, although social care staff did not. People in these two groups may have had a better knowledge of the patients' communication abilities since they knew them. The statements, which attempted to capture the patients' communicative functioning and the influence on participation (see Measures), were purposefully written in simple, clear grammar and short words, which might have led to bias and confounders. The fact that each of these statements had 11-12 missing replies may have impacted the results. Our findings also revealed that the majority of people in TMG saw TM as a beneficial tool. According to prior study, older patients with cognitive impairment were able to apply the TM framework, despite the fact that some patients had significant cognitive impairment as evidenced by low MMSE scores [10-16]. Abstract topics were discussed less, which is likely due to the fact that more difficult concerns may be beyond the skills of those with cognitive impairments [17].

The finding that TM aided communication was partially countered by the fact that people in the CG assessed patients' engagement and communication in discharge meetings on average somewhat higher than people in the TMG. The introduction of a communication-supporting gadget may have drawn attention to the fact that communication skills may be compromised, so encouraging awareness and critical thinking. This leads us to assume that evaluations given by meeting attendees may not be the most accurate approach of capturing patients' real communication and engagement during discharge discussions. Recorded observations of how the completed mats were used during the meetings (e.g., through video recordings and an objective analysis of the communication) could provide valuable information for investigating how patients are able to communicate their views and how this affects their participation. Another possibility is that the speech and language pathologist who was using TM with the patient was not present during the meeting. Even if a prepared mat is provided, the patient may lack the ability to express his/her ideas because participation in a discharge meeting is not a guarantee for any senior patient [18-20]. We recommend that the persons (for example, a nurse) who use the mat with the patient have prior knowledge of her/him and be present during the discharge conference to guarantee that the patient's ideas are transmitted optimally in clinical practise [21-25]. As a result, workers may actively promote the patient's viewpoints. Finding techniques to facilitate communication and decision-making in order to increase involvement and autonomy among hospitalised geriatric patients with cognitive impairment is an essential job for speech and language pathologists. This may not always be best performed by direct involvement, but rather by training other workers on how to improve communication. Making choices and feeling powerful are significant parts of happiness [13-15]. Decreases in one's ability to understand, express oneself, and make sound judgements occur as dementia progresses [3]. Communication becomes increasingly difficult, making aid in this area even more important. It is critical that patients transitioning to life outside of the hospital have the ability to affect the result, and personnel may play a significant role in helping the patients' communication abilities. When people with cognitive impairment are involved, making health care decisions may raise ethical concerns [25-30]. Attendees at discharge meetings viewed the use of TM as helpful in enabling conversation. It is preferable for the person preparing the mat with the patient to attend the discharge meeting as well, in order to enable the patient attain his or her full participation capability.

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Not applicable.

Conflict of Interest

Author declares no conflict of interest.

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