

Communication with patients with severe brain injury and disorder of consciousness;

Developing the KOMUS procedure for assessment and rehabilitation

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Background

Assessing and developing the communicative resources of patients with brain injury and disorder of consciousness (DOC) is a challenging task. A fluctuating level of function together with physical and cognitive disabilities complicate the effort to assess the patient's level of skills. For the SLT, standardized tools for assessing communication are inadequate. Therefore, assessment must be conducted in close cooperation with the multidisciplinary team and the relatives of the patient.

Aim

The aim is to report from the development and implementation of a procedure, KOMUS, for systematically assessing the resources of patients with DOC. The assessment is to serve as the basis for making a specific communication strategy to be used with the individual patient.

Method

Two SLTs and two OTs in an inpatient sub-acute setting cooperated to develop and implement the KOMUS procedure. The following tools were used/developed:

- 1) The Coma Recovery Scale-revised (CRS-R), an internationally recognized, standardized test translated into Danish (Nordenbo, 2008).
- 2) A structured, 15 minutes long interview with the relatives of a patient regarding their perceptions of contact and communication with the patient.
- 3) Observations by the multidisciplinary team over 72 coherent hours, and descriptions of all activities related to the patient.

Results

With the CRS-R, it was found possible to establish the patients' level of consciousness and to assess the patients' auditory, visual, motor and verbal functions. The interview with the relatives of a patient was found to provide important information about the communicative competences of the patient. The descriptions of patients across daily activities make it possible to establish the conditions for optimal interaction. Based on the results of the three elements, the SLT and the OT generate a communication strategy for the multidisciplinary team to use with the individual patient. Examples of communication strategies are 1) support of a specific and potentially reproducible yes/no response, 2) ask simple questions in a given context, 3) support an appropriate body posture for production of speech

Discussion

The implementation of the KOMUS procedure was evaluated using semi structured interviews. The participating team members indicated that they perceive an improved quality in the communication strategies. However, they express a need for continuous adjustment of the communication strategy after finishing the KOMUS procedure. In general, it seems that many resources and much experience are required to establish a sound communication strategy on the basis of the KOMUS procedure. Thus, it is an ongoing process to ensure a satisfying level of reliability of the KOMUS procedure.

Conclusion and clinical implications

The KOMUS procedure was developed and implemented in a subacute setting. The aim of the procedure is to systematically assess the resources of patients with DOC after brain injury with the purpose of generating a specific communication strategy for use with the individual patient. However, many resources and much experience are required to establish a sound communication strategy. Further development is needed to strengthen the applicability of the procedure.

Reference

Nordenbo, A. (2008) CRS-R Coma Recovery Scale- revised 2004. Administrations- og scoringsmanual. Autoriseret dansk udgave, februar 2008. Hvidovre Hospital.

1) 72 hours observation in all activities

Enables insight in:

- Time and circumstances for best interaction and patient's level of function
- Stimuli and response in everyday activities over time

2) Coma Recovery Scale - revised

Enables insight in:

- Level of consciousness
- Auditory, visual, motor, and verbal function
- Scale of communication (yes/no)
- Arousal

3) Interviewing relatives

Enables insight

- Relatives' experience of contact and communication with the patient
- The patient's communication skills in a meaningful and wellknown relation.

Examples of communication strategies

- To speak to the patient as if he/she understands.
- If the patient shows ability or potential to produce a yes/no response, such one is chosen. Everybody will use the same technique in all or most situations.
- The chosen yes/no response is intended to be as natural, easy and effective as possible to challenge cognition as little as possible and to facilitate more communication. E.g. preferation of voice before gesture or headnod; stir before blink.