



HOW DOES FUNCTIONAL NEURODIAGNOSTICS INFLUENCE THE DECISIONS MADE ON BEHALF OF PATIENTS WITH DISORDERS OF CONSCIOUSNESS?

Functional neurodiagnostics could help researchers and clinicians gain more information about residual awareness in patients with disorders of consciousness. It could allow a more accurate distinction between the unresponsive wakefulness syndrome and the minimally conscious state, however how a patient's next of kin deals with it remains unclear.

Reference: Schembs, L., Ruhfass, M., Racine, E., Jox, R., Bender, A., Rosenfelder, M., & Kuehlmeier, K. (2020). How does functional neurodiagnostics inform surrogate decision-making for patients with disorders of consciousness? A qualitative interview study with patients' next of kin. *Neuroethics*. DOI: [10.1007/s12152-019-09425-4](https://doi.org/10.1007/s12152-019-09425-4)

WHO SHOULD READ THIS?

This paper is directed at neuroscientists, clinicians and bioethicists. It might also be interesting for next of kin of patients with disorders of consciousness.



WHAT IS IT ABOUT?

The objective of this study was to explore how the next of kin of patients with disorders of consciousness interpret the results of a functional neurodiagnostics measure and how/why their interpretations influence their attitudes towards medical decisions.

WHAT DID THE RESEARCHERS DO?

They conducted problem-centred interviews with next of kin of patients with disorders of consciousness who had undergone a functional HD-EEG examination at a neurological rehabilitation centre in Germany. The interview transcripts were analyzed using structuring qualitative content analysis.



WHAT DID THE RESEARCHERS FIND?

Regardless of the diagnostic results, all participants were optimistic of the patients' meaningful recovery. Based on the analysis of the interviews, the hypothesis is that participants deal with results according to their belief system and use different strategies to maintain its stabilization. This mechanism seems to moderate the influence of functional neurodiagnostic results on surrogate treatment decisions.

WHAT NOW?

Further reflection on the role of hope and of belief systems in the incorporation of information and medical decision making is needed. Strategies for information communication that are customized to the characteristics of different groups of next of kin should be developed simultaneously with the research of functional neurodiagnostics.

