

Factors influencing patients and family members' decision-making around severe hypoglycaemic events: A grounded theory study

Anita Keller-Senn (PhD student, MScN, RN)^{1,2,3}, Lorenz Imhof (PhD, RN)⁴, Gerry Lee (PhD, RN)¹, Jackie Sturt (PhD, RN)¹

¹King's College London, Florence Nightingale Faculty of Nursing, Midwifery and Palliative Care, London, United Kingdom; ²Zurich University of Applied Sciences, Institute of Nursing, Winterthur, Switzerland; ³Cantonal Hospital Winterthur, Department of Medicine, Winterthur, Switzerland; ⁴Nursing Science & Care GmbH, Winterthur, Switzerland

Background

Hypoglycaemia is the most common complication associated with diabetic medication and represents the greatest barrier in achieving and maintaining recommended glycaemic ranges⁽¹⁾. Severe hypoglycaemic events (SHE) are the most frequent reason for people with diabetes to require emergency treatment⁽²⁾.

Aim

The purpose of the study was (1) to understand patients and family caregivers' experiences in managing severe hypoglycaemic events, and (2) to determine factors influencing their management.

Method

A constructivist informed grounded theory design was used. Twelve patients, who experienced SHE and were treated by Swiss emergency medical services or the emergency department, and six spouses participated in the study. In-depth interviews were undertaken and lasted between 27-122 Minutes.

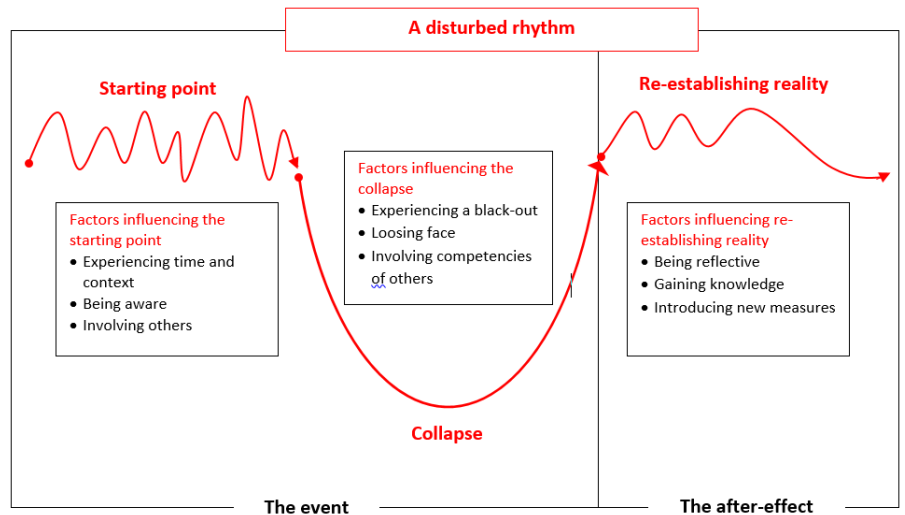


Figure 1 Conceptual model: the social construction of a disturbed rhythm.

Results

"And then there was this change and thereafter, I somewhat fell out of rhythm" (Marco, patient 008).

A conceptual model (Figure 1) was constructed to illustrate the theory and its inter-related processes including the factors influencing patients and spouses decisions-making.

Two main phases were identified which patients and their spouses transitioned through while acquiring and developing skills on the prevention and management of a SHE: the **event** and the **after-effect**.

The **event** is characterized by a starting point and a breakdown:

- The **starting point** is the first stage of the SHE. Every SHE had a history with an individual beginning perceived by the patients and their spouses.
- The second stage is the actual **collapse**. Patients and spouses described what they experienced in this exceptional situation and how important the involvement of spouses and health care professionals was.

The **after-effect** is characterized by patients and spouses reflecting and **re-establishing** their **reality**. This phase could only be initiated, when patients had medically fully recovered and were back in their everyday life.

"I feared for him. I said you did not see yourself lying there on the floor" (Linda, wife 1007)

Discussion

This study does not only describe the actual medical collapse and its standardized medical care of a SHE, but also important factors influencing patients and family caregivers' decision-making. Especially, the stages *collapse* and *re-establishing reality* present opportunities for brief interventions by health care professionals during the emergency care encounter. Aligned with brief interventions for other emergency care encounters⁽³⁾, brief interventions delivered in emergency settings may be the most appropriate point to prevent future SHE. These brief interventions currently do not exist in diabetes⁽⁴⁾.

References

- (1) Brod, M., Christensen, T., Thomsen, T. L., & Bushnell, D. M. (2011). The impact of non-severe hypoglycemic events on work productivity and diabetes management. *Value Health, 14*(5), 665-671.
- (2) Brackenridge, A., Wallbank, H., Lawrenson, R. A., & Russell-Jones, D. (2006). Emergency management of diabetes and hypoglycaemia. *Emergency Medicine Journal, 23*(3), 183-185.
- (3) Katz, D. A., Graber, M., Lounsbury, P., Vander Weg, M. W., Phillips, E. K., Clair, C., . . . Christensen, A. J. (2017). Multiple Risk Factor Counseling to Promote Heart-healthy Lifestyles in the Chest Pain Observation Unit: Pilot Randomized Controlled Trial. *Academic Emergency Medicine, 24*(8), 968-982.
- (4) Keller-Senn A., Lee G., Imhof L., Sturt J. (2017). Hypoglycaemia and brief interventions in the emergency department - A systematic review. *International Emergency Nursing, 34*, 43-50.



Contact

anita.keller-senn@kcl.ac.uk