

## **NeuroRehab Evidence Database**

Target Area: Challenging Behaviour

Neurological Group: Traumatic Brain Injury

Woodhead and Edelstein (2008). Decreasing physical aggression and verbal abuse in a brain injured nursing home resident. *Clin Case Stud,* 7(4): 301-312.

RoBiNT score - 6/30

### Method / Results

# Design

- Study Type: SCD. AB design (A baseline, B intervention).
- Population: n=1, male, age 52, closed head injury post motorcycle accident at age 16 and motor vehicle accident at age 32. Also diagnosed with major depressive disorder, organic personality syndrome, dementia, chronic airway obstruction, osteoarthrosis, hemiplegia, convulsions, speech disturbance, and Parkinson's disease.
- **Setting:** Nursing home.

## Target behaviour measure/s:

- Reduction in frequency of physically aggressive behaviour, operationally defined as kicking, throwing, choking and hitting.
- Reduction in frequency of verbally abusive behaviour, operationally defined as yelling and cursing.

### Primary outcome measure/s:

• No other standardised measure.

**Results:** No statistical analytic methods used. Graphed data indicate frequency of physically aggressive behaviours remained low, although periodic instances of aggressive episodes were present. The intervention did not seem to have an effect on verbally abusive behaviour.

## Rehabilitation Program

**Aim:** To reduce frequency of aggressive behaviour through differential reinforcement of other behaviours (DRO).

**Materials:** Behaviour tracking sheet, sticker chart, stickers, rewards (e.g. music CDs, candy).

#### Treatment Plan:

- **Duration**: Total intervention time unclear from report but graph suggestive of 90 days (assuming graph is to scale).
- **Procedure**: Behaviour was monitored during the day, at a ward level.
- Content:
- The least time-consuming method was implemented first, which involved keeping the patient apart from others unless supervised by staff. This was shifted to differential reinforcement of other behaviours (DRO) method, and frequency of target behaviours was monitored through behaviour tracking sheet.
- <u>Differential reinforcement of other</u>
   <u>behaviour:</u> Reinforcement schedule
   employed where patient received stickers
   for time periods where he exhibited
   behaviours other than the target behaviour.
- The two time periods were from waking to lunchtime, and then between lunchtime and dinnertime. The participant could earn up to 2 stickers per day.
- Stickers could be exchanged for soda, candy, music CDs and baseball caps.