Behavioural change

Introduction

Disturbances of behaviour and of personality have been reported to be common after stroke. The exact aetiology may be a mixture of pathology-specific, reactive and environmental factors. These changes can lead to difficulties coming to terms with the injury or stroke i.e. acceptance and adjustment (for both the person and the family/friends), and are often associated with risks such as family disintegration, loss of accommodation, reduced access to rehabilitation or community facilities, legal charges (Kelly et al. 2008), increased carer burden and stress (Murray et al. 2007; Stone et al. 2004) and reduced participation and integration.

The most common reported changes are:

- Irritability (considered a milder form of aggression and present in up to 50% of stroke survivors: Murray et al 2007)
- Aggression (1/3 of people up to one year after stroke may experience an inability to control their anger. Unclear if aggression is due to disinhibition of impulsive control secondary to the brain lesion/s, or a triggered response to the behaviour of others and/or their stroke-related impairments: Murray et al. 2007).
- Disinhibition and impulsivity (probably related to lesion site)
- Perseverative behaviour (repetitive and ultimately purposeless behaviour – actions or speech - probably related to lesion site)
- Lack of insight (as distinct from denial, sometimes referred to anosognosia – probably related to lesion site)
- Emotional lability (see mood disturbances)
- Apathy / adynamia (as distinct from depression; passive or inert affect, lack of drive or initiation of activity or speech).

As can be seen there is considerable overlap with the mood disturbances such as depression and anxiety discussed in 7.11; and therefore difficulty with diagnosis and management. There is little research evidence to guide assessment and intervention choice for the stroke population.

Research

The extant evidence is limited and with small numbers and/or single case study design. The reports suggest that neurobehavioural approaches (e.g. functional behavioural assessment, non-aversive interventions, antecedent control, verbal feedback, establishment of a therapeutic relationship and altering staff attributions) may assist in decreasing the frequency, intensity and duration of problematic behaviours (Alderman and Burgess, 1994; Yody et al. 2000; Giles and Manchester, 2006).

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NSF Guidelines

7.12 Behavioural change

a) The impact of chronic behavioural changes (irritability, aggression, perseveration, adynamia/apathy, emotional lability, disinhibition and impulsivity) on functional activities, participation and quality of life, including the impact on relationships, employment and leisure, should be assessed and addressed as appropriate over time. (Good practice point)

b) Stroke survivors and their families/carers should be given access to individually tailored interventions for personality and behavioural changes e.g. participation in anger-management therapy and rehabilitation training and support in management of complex and challenging behaviour. (Good practice point)

Suggested Assessment

The existing behavioural change scales and assessment tools in the main have not been used in the stroke population and mostly come from the traumatic brain injury literature where aggression/disinhibition or apathy/passivity are arguably more overt.

- Clinicians are advised to monitor behaviour changes in terms of
- Nature of behaviour
- Timing and activity being undertaken and
- Environment of occurrence
- Frequency, intensity/severity, duration
- Antecedent (triggering) factors
- Staff attitudes and responses
- Consequences of behaviour for person and others (task, environment) – gives insight into impact/outcome or purpose of behaviour as well as what reinforces it.

Acronym of ABC is often used – observe or report Antecedent; Behaviour; Consequence (Yody et al. 2000).

Practice Suggestions

 Appropriately trained personnel could consider the following:

- functional behavioural assessment (see above),
- non-aversive interventions – distraction and redirection; avoidance of potentially reinforcing consequences; or addition of positive consequences for behavioural change
- antecedent control – through awareness and manipulation of activities and environment/s it may be possible to minimise the triggers for the unwanted behaviour
- establishment of a therapeutic relationship
- motivational interviewing
• verbal feedback – dependent on the above relationship
• altering staff attributions – once staff (or family) are aware that behaviours are part of the lesion and not intentional or personal, reactivity reduces and possibly also antecedents or accelerants.

Considerations

• Education and support of the stroke survivor and family/carers is necessary for short and long term management.
• The literature emphasises the importance of staff training in the management of behavioural issues.
• Untrained staff have the potential to escalate negative behaviours.
• The frustration of residual impairments must always be remembered and overt effort to help with these will have an impact on the negative behaviours.

References and readings


