

## **Submission for the APT 'excellence in risk assessment and management' award**

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### **Development and Use of Observational Recording Measures in the Assessment and Prevention of Risk Behaviours in Acquired Brain Injury**

#### **Summary**

Risk behaviours are endemic amongst survivors of acquired brain injury. There is little evidence for use of structured professional judgement tools evolved for use in forensic and secure settings in neurorehabilitation, where a significant source of risk is interaction between neurocognitive impairment and environmental variables. Dr Knight and Prof Alderman have made a significant contribution over many years to this neglected area of clinical need through developing two observational recording measures whose use enables detailed examination of the role the environment plays in mediating risk behaviours in acquired brain injury. Their work in developing and disseminating these measures has had a major impact in the assessment and prevention of risk in neurorehabilitation settings, as evidenced through uptake, publications and endorsements from colleagues, meriting worthy consideration for the honour of an APT award.

#### **Basis for Nomination for Award (under 500 words)**

Aggression and other antisocial behaviours are distressing and debilitating consequences of acquired brain injury (ABI) that can prevent people achieving their potential for recovery, and exclusion from neurorehabilitation altogether. In forensic psychiatry, structured professional judgement (SPJ) tools have been evolved that successfully predict risk through consideration of static, dynamic and protective factors. Despite the considerable risk imposed by behavioural expressions of neurobehavioural disability, little is known about the application of SPJ tools to this population. Very recent work (Alderman, Major & Brooks, submitted) suggests existing assessments do not capture the broad range of factors known to contribute to risk arising from neurobehavioural disability, and the main need is to understand how interactions between neurocognitive impairment and environmental factors underpin these behaviours.

Observational recording measures (ORMs) provide a solution to fulfil the latter requirement. Alderman, Knight and colleagues have successfully developed two ORM's acknowledged as making an outstanding contribution to assessment and prevention of risk in neurorehabilitation. The 'Overt Aggression Scale – Modified for Neurorehabilitation' (Alderman, Knight & Morgan, 1997: OAS-MNR) was created using an operant learning conceptual framework which enables detailed examination of the role environmental factors have in mediating ABI aggressive behaviour disorders. OAS-MNR incorporates operational definitions based on observable criteria to capture four categories of behaviour (verbal aggression, and physical aggression towards self, objects and others). Objective criteria are also employed to rate severity of aggression, capture relevant setting events, antecedents to aggression and interventions. The second ORM is the 'St Andrew's Sexual Behaviour Assessment' (Knight et al, 2008: SASBA), which utilises the same operant framework as the OAS-MNR, and expands the range of risk behaviours to include four categories of inappropriate sexual behaviour populated by a range of completely new items.

There are many advantages to risk assessment in utilising these tools, including capturing a range of standardised variables which might otherwise be neglected, providing objective information which can be used to test assumptions about behaviour, and having known psychometric qualities underpinned by operational definitions of the behaviours of concern. Both ORM's provide valid,

reliable shorthand means of capturing complex information contributing to risk. In conjunction with other sources of information, especially knowledge of neurocognitive impairment, the high quality of information captured by these ORM's has been demonstrated to benefit risk formulation regarding maintenance of risk behaviours. This ability to reliably inform formulation further impacts on risk prevention through identification of goals for rehabilitation, and continuous collection of data enables response to treatment and reduction in risk to be clearly evaluated. The evidence for the popularity and utility of these tools amongst clinicians includes their widespread uptake in neurorehabilitation services, nationally and internationally, as well as within non-ABI services.

OAS-MNR and SASBA have made a direct contribution to clinical audit and research, and in raising awareness regarding outcome after ABI, as demonstrated through journal publications, conferences and workshops. We advocate the longevity, popularity and usefulness of these tools in a wide range of applications, including risk assessment and prevention, meriting the honour of an APT award for excellence.

### **References**

Alderman, N., Major, G. and Brooks, J. (submitted). What can structured professional judgement tools contribute to management of neurobehavioural disability? Predictive validity of the Short-Term Assessment of Risk and Treatability (START) in acquired brain injury. Neuropsychological Rehabilitation.

Alderman, N., Knight, C. and Morgan, C. (1997). Use of a modified version of the Overt Aggression Scale in the measurement and assessment of aggressive behaviours following brain injury. Brain Injury, 11, 503-523.

Knight, C., Alderman, N., Johnson, C., Green, S., Birkett-Swan, L. and Yorston, G. (2008). The St Andrew's Sexual Behaviour assessment (SASBA): development of a standardised recording instrument for the measurement and assessment of challenging sexual behaviour in people with progressive and acquired neurological impairment. Neuropsychological Rehabilitation, 18, 129–159.

## Appendix – Endorsements

“Both OAS-MNR and SASBA are used throughout BIRT, the largest provider of neurorehabilitation services in Europe. They were adopted by the Trust because they are published measures with known psychometric qualities and a proven track record in clinical work, including risk management and prevention, and research.”

Professor Mike Oddy, Director of Clinical Services

“Within populations with Progressive Neurological Conditions and Acquired Brain Injury, the OAS-MNR and SASBA form a key part of risk assessment, management and ultimately prevention. They enable an objective, accurate and consistent method of recording challenging behaviours, which can be coded for frequency, severity and type. Presentation can be compared to medical and social circumstance to help clinicians to identify and address factors contributing to increased likelihood of risk behaviours. These can then be systematically addressed and subsequent patient presentation can continue to be monitored. The longitudinal aspect of these tools is especially helpful for this. I would certainly endorse these tools and have encouraged their use in other services, where there has been a stark, negative contrast in the utility of more ad hoc and subjective reporting of risk-related behaviours.”

Dr Lorraine Childs, Consultant Clinical Psychologist

“MOAS/SASBA provides a way of recording key behaviours to inform risk assessment, management and treatment with a rich vein of information gathered at minimal demand upon staff. Training and encouragement of staff to maintain recording is fundamental, as is the case with all other less efficient methods of behaviour monitoring”.

Dr Keith Jenkins, Consultant Clinical Neuropsychologist

“Use of OAS-MNR and SASBA in Secure services for women with an LD, psychiatric and forensic care needs: OAS-MNR and SASBA have been in use since October 2012. During this time the tools have become integral part of our risk assessment and monitoring processes, in particular to support positive risk taking.

Since the introduction of the tool the following positive changes have been noted

1. Shared and common language to define and rate the different types and severity of risk related behaviours, which has led to a better communication of risk
2. OAS-MNR and SASBA analysis are presented in each ward round for each patient and used directly to inform decisions about leave, the success of different interventions and future care planning and moves up and down the different levels of security
3. OAS-MNR and SASBA data are used in HCR-20 reports and are especially useful in the female version of the HCR-20, which takes into account the role of ‘self-destructive’ / self-harming behaviours. It is used to report on recent and historical behaviours and ideation (verbal aggression)
4. The tools offer ‘hard data’ rather than subjective opinion about risk – leading to more accurate assessments.
5. Increased understanding of what constitutes “Risk” due to the detailed taxonomy of behaviours and their intensity
6. The tools have contributed to the functional analyses of complex challenging behaviours and interventions to reduce the risk of violence.

7. The management strategy sections of OAS-MNR and SASBA have also been used as a part of safeguarding monitoring processes on the unit (to monitor the use of different interventions, e.g. restraint, seclusion etc.)
8. The data has been used successfully to challenge Ministry of Justice decisions about community leave (evidencing positive risk taking) and to support moves to lower levels of security (and to form the basis or requests to moves to higher levels of security)
9. Service Users find the OAS-MNR and SASBA breakdown risk behaviours useful and easy to understand (especially the simple line graphs).

SASBA has played a significant role in increasing awareness sexual offending in females and future risks in this area. The 'behavioural' and unemotional definitions used in SASBA have had a significant impact on staff awareness and behaviour, with sexually inappropriate behaviour no longer being minimised. Prior to this only one patient was recognised as having forensic needs in this area. Now the wards are aware that at least 25% have needs in this area! – leading directly to the use of tools such as the RSVP for more detailed assessments of the risk of sexual violence.”

Dr Deborah Morris, Consultant Clinical Psychologist