The assessment and treatment of behavioural problems

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BACKGROUND While general practitioners acknowledge their responsibility for the medical management of people with intellectual disability and autism, there may be a need for more skills in the assessment and management of behavioural problems.

OBJECTIVE This article provides an overview of services for this group of patients, the role of the GP, and provides a guide to assessment and treatment of behavioural problems.

DISCUSSION While GPs have skills in medical and psychiatric assessment, the different social, cognitive and communicative context in this group of people limits their ability to apply those skills. Nonetheless, familiarity with the patient and their social environment means that GPs have an important and central role in the ongoing management of patients with an intellectual disability.

Emerson[1] defined challenging behaviours as: 'behaviours of such intensity, frequency or duration that the physical safety of the person or others is placed in serious jeopardy, or behaviour which is likely to seriously limit or deny access to the use of ordinary community facilities'. These behaviours include:

• aggressive behaviour
• self injurious behaviour
• noncompliant behaviour
• inappropriate sexual behaviour
• antisocial behaviour, and
• tantrums.

Over the past 2 decades there have been substantial demographic changes in the population of patients with an intellectual disability. There has been a movement out of congregate care facilities with people living with their parents for longer and then moving into a range of community based accommodation, educational and employment options. This has resulted in increased reliance on general practitioners for management of health issues. Patients with an intellectual disability have high rates of unrecognised and under treated medical problems;[2,3] at times these present as behaviour problems.[4] Psychiatric illness is more common and difficult to diagnose, monitor and treat.[5]

Most Australian states have specialised behaviour management teams comprised of psychologists, social workers and more specialised disability workers. Assessment techniques are usually modelled on Applied Behaviour Analysis (ABA).[6,7] They involve interviews with key people in the person's life supplemented with direct observation. A comprehensive description of the behaviour is drawn up, the person's interpersonal and physical environment is assessed, and potential antecedents and triggers and consequences of the behaviour are identified. This is supported by systematic observation to provide baseline information. An assessment is made as to the function of the behaviour and a treatment package is developed. These assessments may require medical or psychiatric review by GPs. Alternatively, behavioural issues identified by the GP may result in referrals to these teams. *Figure 1* provides a guide to the assessment process for challenging behaviour.

Describing behaviour

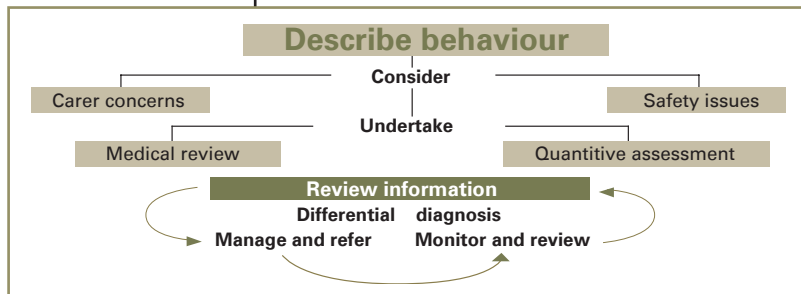An accurate description of the behaviour is an important starting point:

Figure 1. Guide to the assessment of challenging behaviour
Adapted from: The GAP MAP Video[13]

- identify the key secondary sources for the history, eg. carers, parents, old files and previous specialist assessments
- describe the behaviour accurately and succinctly
- avoid general terms such as 'aggressive' or 'self injurious'
- describe what the person actually does, eg. 'hits his head with a closed fist such that it makes a noise that can be heard across the room'
- include all phases of the behaviour, eg. 'the aggression ranges from aggressive posturing, to verbal abuse, to a full on physical attack with kicking and punching'
- establish the frequency and severity of the behaviour, eg. how often in an average week? What was the most severe episode?
- check the reliability, eg. check patient's file, other carers, family
- identify any triggers for the behaviour, eg. when does it always/never/rarely happen? What is happening immediately before the behaviour?
- establish the long term history of the behaviour, eg. when did it first appear? What was happening at the time? Has the person always had this behaviour?

Safety issues

Potential dangers of the behaviour – not only for the person, but for the people around them – need to be assessed. This assessment provides insight into the urgency of an intervention as well as helping with the overall assessment of the behaviour. At times temporary measures may need to be implemented including environmental changes, staff training in restraint techniques and self protection, and in some cases medications might be considered. While safety is important, it needs to be assessed in the overall context so that it does not overrule the person's need for a full, active and inclusive life.

Carer concerns

The needs and concerns of carers are important in the assessment and management process. Questions to address include:

- why are you seeing the patient now
- what is the state of health of the carer
- how is this affecting other people around the patient
- will the carers be there in the long run
- what are the safety concerns
- how familiar are the carers with the patient, and
- what are the carers' views about management?

Measure the behaviour

Carers' assessment of behaviour can be inconsistent, so objective or secondary measures of behaviour from existing records are often useful. Records of incidents and medication usage can provide a measure of the severity and frequency of past behaviours. Once the behaviours of concern have been defined, simple charts can help to monitor the behaviour, eg. sleep patterns, weight and mood changes. Keeping the measure simple provides better consistency and makes it more likely carers will do this as a part of their otherwise busy days. *Table 1* provides an example of a chart used to monitor specific behaviours and is modelled on the DBC-M.[8]

Medical assessment

Medical factors may contribute to the behaviour, while the behaviour itself may result in medical risks. People with an intellectual disability have significant levels of unidentified morbidity.[2] Gourash[4] and others have shown that medical problems may present initially as changes in behaviour. The history of the behaviour may provide a clue as to the medical causes. Knowledge of the medical associations of particular syndromes is another factor to consider. This should include a careful systems review, past medical history and the underlying cause for the disability. Consider epilepsy as a cause for behaviour as there is a high prevalence in this group and it can result in behavioural changes. Physical examination is often difficult, but can yield important information.

A systematic approach helps cover the potential causes for behavioural problems. The diagnostic model proposed by Murtagh[9] is one such approach. Consider the 'probability diagnosis' or common conditions occurring in persons of this age and with this underlying diagnosis, eg. 'migraine' headaches in a 20 year old autistic man presenting with 'head banging'. Serious conditions that should not be missed might include malignancy, serious infections, cardiovascular and cerebrovascular disease. Murtagh's 'pitfalls' – or conditions that are often missed – in people with intellectual disability include oesophagitis, medication effects,

urinary tract infections, domestic abuse, seizure disorders, faecal impaction, menopausal symptoms and migraines.

The cognitive and communicative difficulties of people with intellectual disability make common conditions easier to overlook. 'Masquerades' or conditions that present as other problems or physical states in the general population may present as behavioural change and include depression, diabetes mellitus, side effects of medication, anaemia, thyroid disease, spinal dysfunction and urinary tract infections. Challenging behaviours may be the patient's only means of communicating something about a medical problem in particular, eg. agitation at meal times may indicate swallowing difficulties or reflux.

People with intellectual disability have a high prevalence of psychiatric disorders[5] that often present as changes in behaviour. Although major life events impact on people with intellectual disabilities or autism, this is often less obvious than in the general population. Depression and anxiety are much more common than psychotic disorders and may present as bizarre behaviour changes[10] that are misinterpreted as psychotic symptoms. Autistic spectrum disorders may coexist with intellectual disability.

Identify and integrate other resources and assessments

Effective management of 'challenging' behaviour will often require the engagement of a range of support people and services. Each clinician needs to decide their relative role in the overall management plan. These behaviours will often require multidisciplinary or interdisciplinary approaches with well established links between the various professionals that involve mutual respect and an understanding of each other's roles.[11] Who takes the lead role will vary depending on the underlying cause. When it is the medical practitioner, it may involve the use of care plans and case conference Medicare items.

Review/plan

Information gathering is followed by a process of assimilating this information to develop a diagnostic hypothesis. Once the most likely cause for the challenging behaviour and the factors contributing to it have been identified a management plan can be developed. This requires knowledge of the service system and local networks.

Manage and refer

Decisions on management strategies follow an assessment of risks and benefits, resource availability and effects on the person. Some of the more complex

Table 1. Monitoring specific behaviours								
Behaviour				**Date**				
	26 Jun	**27 Jun**	**28 Jun**	**29 Jun**	**30 Jun**	**1 Jul**	**2 Jul**	**Week total**
Abusive language	2	2	1	0	1	2	1	9
Spitting	2	2	0	1	1	0	0	6
Grabbing at staff and clients	2	1	0	2	0	2	0	7
Biting others	2	1	0	1	2	2	1	8
Daily total	8	6	1	4	4	6	2	

0 = not a problem today, 1 = somewhat of a problem today, 2 = major problem today

medical and psychiatric problems will require specialist referral. However, more common problems such as depression or dysmenorrhoea can be managed by the GP. Resources to manage the 'challenging' behaviours vary depending on availability of local services. Whatever the management strategy, communication between service providers and professionals is important.

Use of medication without a medical or psychiatric diagnosis

Research in this population has shown problems with polypharmacy with dosage increases in sedative medications that are not evidence based.[12] There is often pressure on medical practitioners to begin or increase medication in response to real and perceived threats to patients, carers and the general community. At times, despite well implemented management strategies, the behaviour continues to significantly impact on the patient's life. In these situations the use of medication without a specific psychiatric diagnosis may need to be considered, especially when the behaviour:
- is a danger to the person or others
- threatens the person's health and wellbeing
- results in residential and day placement breakdown
- restricts community access and other activities important to that person, and/or
- overly distresses the person.

It is important to have a clear understanding of the target behaviour and to have in place a process of review. When considering the use of medication the GP needs to involve the person, their carers and their family in the establishment of a hypothesis for cause of the behaviour and its treatment. Set clearly defined outcomes and make sure that the person or their legal guardian are aware of the rationale for treatment, the potential benefits and side effects, and that they have consented to this treatment. Treatment should only be initiated after identi-

fying the required response, starting with a low dose and increasing slowly according to that response with continuation based on a demonstrable benefit to the patient.

Monitor and review

Once the diagnosis is made and the intervention set in place, it is important to regularly review the progress of the individual both in terms of the efficacy of the intervention strategy and the resilience of the diagnosis. The response to the intervention and observations made over time might alter the basis on which these assessments were made and open up the possibility of a new diagnosis and a more effective intervention strategy. Continuing the data collection strategies put in place at the outset is highly desirable.

Conclusion

General practitioners have the skills to significantly contribute to the management of behaviour problems in people with intellectual disability or autism. Assessment for underlying medical causes is critical in most behavioural assessments. Psychiatric problems occur more commonly in this group, with depression and anxiety likely to result in behavioural change. Medication may sometimes be used in situations where there is continuing unacceptable risk to the patient and others despite well delivered behaviour management programs. In all these situations, assessment relies on an accurate description and history of the behaviour. The ultimate treatment goal should be the best quality of life for the patient.

Summary of important points

- People with intellectual disability have high rates of unrecognised and under treated medical problems.
- Challenging behaviours may be the patient's only means of communicating something about a medical problem.
- An accurate description of the patient's behaviour is essential to good assessment.
- Consider epilepsy as a cause of the behaviour.

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References

1. Emerson E, Cummings R, Barrett S, Hughes H, McCool C, Toogood A. Challenging behaviour and community services 2. Who are the people who challenge the services? Mental Handicap 1988;16:16–19.
2. Beange H, McElduff A, Baker W. Medical disorders of adults with mental retardation: a population study. Am J Ment Retard 1995;99:595–604.
3. Howells G. Are the medical needs of mentally handicapped adults being met? J R Coll Gen Pract 1986;36:449–453.
4. Gourash LF. Assessing and managing medical factors. In: Barrett RP, ed. Severe behaviour disorders in the mentally retarded: non drug approaches to treatment. New York: Plenum Press, 1986;157–205.
5. Einfeld S, Tonge B. Population prevalence of psychopathology in children and adolescents with intellectual disability: 1. Rationale and methods. J Intellect Disabil Res 1996;40:91–98.
6. Donnellan AM, LaVigna GW, Negri-Shoultz N, Fassbender LL. Progress without punishment: effective approaches for learners with behaviour problems. New York: Teachers College Press, 1988.
7. Davis R, Radler G. Behaviour intervention. Aust Fam Physician 1993;22:1457–1464.
8. Einfeld SL, Tonge BJ. Manual for the developmental behaviour checklist: Primary Care Version (DBC-P) & Teacher Version (DBC-T). Second edn. University of NSW and Monash University, 2002.
9. Murtagh J. General practice. 2nd edn. Melbourne: McGraw-Hill, 1999;125–129.
10. Davis J, Judd FK, Herrman H. Depression in adults with intellectual disability. Part 1: a review. Aust N Z J Psychiatry 1997;31:232–242.
11. Davis R, Thurecht R. Care planning and case conferencing. Building effective multidisciplinary teams. Aust Fam Physician 2001;30:78–81.
12. Ryan M. The second annual review of medications prescribed in the residential services operated by the NSW Department of Community Services. Sydney: The Ageing and Disability Services Directorate, The Strategic Planning and Review Branch, 1993;46.
13. Mohr C. The GAP MAP Video(c). An introduction to the global assessment of psychopathology. Managing the assessment process. Centre for Developmental Disability Health Victoria, 1999.

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