

## DUAL DIAGNOSIS

Stephen Edwards & Chad Bennett



### ABSTRACT:

Significant progress has been made in the diagnosis and management of less severe forms of autism spectrum disorder. Traditionally, the diagnosis of autism was given where criteria for the developmental disorder were clearly satisfied and the level of associated disability significant or severe. The presence of intellectual disability also meant access to lifelong assistance from public disability services. Those who were not judged as autistic but exhibited fewer or less severe symptoms did not receive assistance tailored for their needs furthermore, some were diagnosed with psychotic illness in their adolescence and treated in the adult public mental health services. Current clinical practice would now allow a diagnosis within the milder range and appropriate assistance during developmental years. Despite the progress in clinical practice, specialist public services for adults with autism spectrum disorders still do not exist and only those eligible for disability or mental health services obtain assistance from the public service system.

This paper refers to a group of 25 adults who had been receiving treatment for psychotic disorders but with a less than optimal treatment response. After assessment by the Victorian Dual Disability Service (a clinical service specialising in intellectual disability and mental illness) it was found that they had diagnoses within the autism spectrum that had not been previously identified. This paper will outline a clinical model used in the late assessment for autism spectrum disorder where treatment is in place for psychotic illness and intellectual functioning is within the borderline or mildly disabled range. Data will be used in the presentation to illustrate how the model accounts for the particular challenges of gathering developmental history, intellectual functioning and mental status data within the constraints of a public mental health service.

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## INTRODUCTION

The Victorian Dual Disability Service (1) is unique within the adult mental health system in Australia. It is funded solely by the Mental Health Branch of the Victorian Department of Human Services to provide specialist clinical assessment and advice to the adult Area Mental Health Services (AMHS) across the state. These public mental health services seek assistance where they are assessing or treating an adult with intellectual disability (ID) for a mental illness. Referrals are made either at the point of initial assessment, to formulate diagnosis and management plans or when either of these require review. Often, these adults also receive support from Disability Services Branch (DS), which provides and funds support to people with ID.

During three years of operation, over eight hundred adults have been assessed with the dual mental disorders ID and mental illness. A notable proportion of these referrals involved the late assessment of people with borderline intellectual functioning (BIF) or mild ID and a longstanding diagnosis within the psychotic spectrum of either DSM IV (2) or ICD 10 (3). This paper outlines the impact of the adult service system on the sample and the clinical model used in assessment whilst the presentation will illustrate with case examples to highlight challenges in the late diagnosis of autism spectrum disorder (ASD) in this group.

## THE SERVICE SYSTEM

The more disabling forms of ASD are usually evident prior to school with specialist ASD clinics acting as the primary source of diagnosis and management advice. These children will usually be registered for DS services. Those whose cognitive and social functioning is less affected usually have a diagnosis made during school years either by a specialist clinic or a Child and Adolescent Mental Health Services (CAMHS). Co-ordination between these services and schools can facilitate diagnosis and management that is tailored for the child's individual needs. It is less likely these days that adulthood is reached without a diagnosis being made. Both the education system and CAMHS services discontinue at adulthood and a specialist clinical service does not exist for adults with ASD. Consequently, late assessment for the developmental disorder or a co-existing mental illness presents a challenge for DS & AMHS. These two services are administratively separate and have quite different legislative (4,5) policy (6,7) and clinical (8) foundations.

Whilst Disability Services (DS) offers lifelong assistance depending on the degree of functional disability, this is not necessarily targeted for the disorder(s) causing the ID. Services are focussed on support rather than treatment and aim to maximise independence and social integration with the aid of whole-of-life planning. Case managers provide short term brokerage to organise or fund required support. Assessment and intervention for disturbed or challenging behaviour is guided by an applied behaviour analysis paradigm. This approach emphasises the unique phenomenology of the challenging behaviour without assigning individual pathology. Assessment uncovers the

function(s) of the behaviour and interventions focus on environmental as well as individual change.

Staff in the Adult Mental Health Services (AMHS) balance the clinical task of determining type of illness with the administrative task of deciding whether symptoms reach case level and therefore warrant publicly funded assistance. Mental illness is assumed to be episodic even though the course of a mental illness such as schizophrenia is usually chronic and disabling in its own right. The AMHS provides clinical intervention focussed on maximising recovery and minimising relapse according to recommended guidelines for the diagnosed illness. Developmental disorders such as ASD and ID do not in themselves warrant AMHS assistance but discerning their permanent effects from the episodic effects of a mental illness such in the psychotic spectrum poses a significant challenge in this clinical setting.

### **THREE MENTAL DISORDERS**

#### **Intellectual Disability**

Whilst ID is usually diagnosed by school age, aetiology is still unclear in a majority of cases despite significant advances in genetic research over the last ten years and the identification of the genotype of many syndromes associated with intellectual impairment (9). The major impact of ID or BIF is to impair a person's ability to conceptualise and describe their subjective experience through words (10). This usually means that the interview process is more difficult to conduct so that collateral information including symptom data from informants becomes an important part of the assessment process. Unlike serious mental illness, intellectual disability is not necessarily associated with suffering and disturbed or challenging behaviour is only one example of a need that prompts contact with DS.

Intelligence is continuously distributed across the general population and grouping people together according to the amount they possess can obscure needs related to specific disorder such as ASD. This occurs because the sub-population within any given range will be quite heterogenous in most other characteristics, making targeted treatment and management approaches more difficult to refine. For instance, people with trisomy 21 & ASD might share similar global level of global intellectual functioning but little else in terms of physical, social and cognitive characteristics typical of the two conditions. Of course the impact of diminished IQ does not simply evaporate in people functioning above the mild ID range and there is an evolving area of research (11) indicating that the effects of mild ID and BIF are qualitatively similar, though perhaps marginally different in quantity.

Like other developmental disorders, the defining features are permanent and relatively stable over time. When assessing for mental illness, the effects of mild ID and BIF can usually be accounted for by modification and enhancement of interview based methods. Standard classification systems also suffice in research and clinical settings for this less affected group (12). In contrast, assessing those with moderate to severe ID may rely entirely on informant data and specifically modified classification system is

recommended. Rates of schizophrenia are higher right across the population with ID and for the group with moderate to severe ID, higher still (13).

### **Autism Spectrum Disorder**

Earlier conceptualisations saw ASD classified alongside childhood onset schizophrenia under the category of childhood psychosis (14) and it was not until the alignment of the DSM IV and ICD 10 that it was clearly acknowledged as a biologically based developmental disorder (15). Better measures and more coherent classification systems have contributed to increased consistency in diagnosis but this process still involves the quantification of behaviours characteristic of the disorder rather than its physiological causes. Descriptions of people with lesser degrees and variations of autism symptoms had previously been inadequate due to decisions based on arbitrary cut-off criteria. There is now significant agreement that the expression of autism in the general population is best described as a continuum or spectrum of disorders (16).

This broader conceptualisation of autism as a group of conditions with a central characteristic of social dysfunction has gained support in recent genetic (15) and neurofunctional (16) research as well as those researchers attempting to make sense of the behavioural features of in less affected sufferers and their families (17) (18) (19) (21). The most widely described and studied of these is Asperger's syndrome (22) but other terms used in the literature include high functioning autism, atypical autism and pervasive developmental disorder NOS. Whilst the inclusion of these disorders in the autism spectrum is now a part of clinical practice, there is little epidemiological research and limited consistency in diagnostic systems for these regions of the spectrum (21). The detection of symptoms in these milder forms may well depend on the sensitivity of those they live as well as the severity of the symptoms (19).

Epidemiological studies of autism in its most disabling form show that about 80% of subjects also have ID (22). Literature on the milder forms of ASD, such as Asperger's syndrome is still sparse though and literature on the existence of these conditions in people with ID or BIF is even more scarce. Whilst ID is defined by global deficits in cognitive and adaptive functioning, according to standardised measures, with a range of known and unknown causes, ASD are characterised by quite specific deficits in social and communicative skills as well as restrictions in imagination and can be distinguished from. The difficulty in discerning these ASD specific patterns from the global effects of lowered intelligence is highlighted by the two major diagnostic systems, DSM IV & ICD 10 for mental disorder using ID as an exclusion factor for Asperger's syndrome. Critical for researchers and clinicians alike is the extent to which these two patterns of deficit can be separately identified yet co-exist.

A variety of mental illnesses can co-exist with ASD in adults (27). These are most commonly depression and anxiety (19, 24) and occasionally psychosis (25)(26). The literature contains documented case studies of people with ASD and psychosis but limited progress has been made on guidelines for the assessment and management of mental illness in this difficult to assess population and no studies could be found on dealing with this set of multiple diagnoses in public mental health system (26).

### **Psychotic Illness**

Schizophrenia is classified with a number of other psychotic disorders however schizophrenia is the prototypal psychotic disorder and used as the basis for further discussion. The term psychosis is taken to mean disorders that include delusions, prominent hallucinations, disorganised speech or behaviour, and catatonic behaviour. Unfortunately, there is a confusing picture of different courses, levels of outcome, functional status and associated predictors and risk factors. This is partly because of the complex nature of schizophrenia itself so that different studies have focused on different types of symptoms and used different tools to measure them. In addition the major symptom domains follow relatively independent courses and do not change in the same time frames. In contrast to developmental disorders the diagnosis is usually made in adolescence or adulthood and consequently is an illness of primary focus for the adult mental health system.

Studies of the intellectually disabled population tend to show higher rates of psychotic illness and behavioural disorders but comparatively lower rates of mood, anxiety and substances disorders when compared with the general population (13). Conversely, studies of the population receiving treatment for schizophrenia show higher rates of BIF and mild ID and that people with recurrent psychosis and low pre-morbid intellectual functioning respond more positively to an intensive case management program, measured in terms of costs and satisfaction (11).

### **A MODEL FOR CLINICAL ASSESSMENT**

The following section aims to compare and illustrate the differences between Schizophrenia and Autism in the context of intellectual disability. The three core components of a late assessment of ASD are: 1. Information about developmental history 2. objectively assessed intellectual functioning and 3. mental status interview. The following discussion focuses specifically on the mental status interview.

### **Symptoms**

#### **Perceptual disturbances.**

In Schizophrenia the typical perceptual disturbance is hallucinations and these are normally auditory, though can occur in any sensory modality. Although hallucinations are not recognised to occur in autism difficulties arise in assessing for their presence or absence. In autism and intellectual disability self-talk is relatively common and can be misinterpreted as a response to auditory hallucinations. Most mental health workers will screen for auditory hallucinations with the question “Do you hear voices?” To which many people with Autism and intellectual disability will respond “Yes” reflecting either a concrete, literal answer (as we all do hear voices in the absence of hearing problems) or a desire to try and give the ‘right’ answer that the examiner seems to be looking for. As abusive voices are common in psychosis a common question is if they hear people calling them names, unfortunately this is often true for people with disabilities again leading to the answer ‘yes’. On occasion echolalia can also confuse the picture, particularly when the end of the sentence is repeated in response to the question so the answer “hear voices” is given and taken as an affirmative statement. People with Autism have difficulty with pro-nouns and may refer to themselves as ‘you’ or by their own name. These statements may be taken as the person giving examples of auditory hallucinations because this

structure closely resembles the expected content of auditory hallucinations in Schizophrenia, which are often experienced as using the person's name or addressing them in the third person (i.e. 'You').

People with autism can have hypersensitivities to sensory stimuli, which may be experienced as either pleasurable or noxious. This hypersensitivity can result in an ability to hear voices or noises that other people can't hear which can be mistaken for hallucinations. Attempts to minimise such stimuli by blocking the ears with hands can be seen as an attempt to eradicate auditory hallucinations. The pre-occupations that may develop with some stimuli such as light are often not understood and it can be assumed that the person is 'seeing' something that is not there that results in the fascination. Hyposensitivities can also be present and a high pain threshold is commonly described, this may be associated with extreme forms of self-harming behaviour, which appears so bizarre that it is attributed to a psychotic illness.

In clinical practice it is essential to evaluate the persons capacity to answer complex questions. This process assesses their understanding of the relevant concepts and their communication style so that the clinician has a better understanding of how to ask questions and explore the answers. In general our experience suggest that people with Autism are unable to describe experiences in detail, such as which direction voices come from, the sex of the voice etc. Behaviours suggestive of hallucinations appear to be of little value as they can often be explained in an Autistic framework.

### **Thought.**

The language disorder in autism can be mistaken for the thought disorder of schizophrenia, as it is often idiosyncratic, sometimes copied, grammatically odd, irrelevant and socially inappropriate and can on the surface appear to be illogical (28). However someone who knows the person well is often able to explain the statements in a way that illustrates the meaning and logic behind what is said and indicate if this a longstanding trait or a recent phenomena. In many cases of autism the content often includes repetitive phrases that reappear in subsequent answers, which is not seen in the thought disorder associated with schizophrenia. Many people with Autism have intense preoccupations with bizarre ideas that may resemble delusions. Sometimes these ideas can extend to an intense fantasy life that may involve acting out some parts of the fantasy such as pretending to be a character out of star trek but these can usually be demonstrated to be a lifelong preoccupation and idiosyncratic way of thinking. Many people with Autism experience being teased and bullied which can make them extremely sensitive to any perceived criticism. This is exacerbated by their difficulties in assessing and understanding social interactions and can result in extreme responses to apparently innocuous comments that can be mistaken for a persecutory psychosis. In clarifying these aspects of the presentation a reliable informant is invaluable.

### **Signs.**

#### **Motor and behaviour.**

People with either schizophrenia or Autism can present with catatonic symptoms including stupor, muteness, and posturing and stereotypic or manneristic movements (29,30). In both disorders behaviour can be bizarre and un-understandable such as laughing to themselves, pointing at imaginary objects or have sudden unexpected 'outburst' behaviours. In an acute episode people with a psychosis can present with

extreme arousal and this picture can be mimicked in Autism by stress that can commonly arise from unnoticed subtle changes in the environment or daily routine. Both disorders are likely to be treated with antipsychotic medication and may show signs of tardive dyskinesia. These signs cannot be taken as indicative of either disorder, however in schizophrenia there is often a pervasive loss of motivation and energy that is not usually seen in Autism

#### **Emotion.**

Emotional expression is often diminished in both Autism and schizophrenia and forms part of the diagnostic criteria for both groups. However in Autism this is usually lifelong and in schizophrenia is usually apparent after several acute episodes and this may be the most useful discriminatory factor. Depression and anxiety are commonly diagnosed in both groups. (31) (27)

#### **Communication and Social function**

Difficulties in interpersonal relationships are characteristic of schizophrenia and have long been recognised and deterioration in social and occupational functioning is one of the key criteria for a diagnosis of schizophrenia in DSM IV. Social impairment is also well recognised as a core feature of Autism. Although the underlying pathology is probably different for the deficits in these areas there are a number of similarities as outlined below. Both groups can exhibit reduced non-verbal communication, atypical eye contact, impaired turn taking and difficulty in identifying emotions associated with facial expression. In addition both groups often have reduced speech production that lacks prosody, have difficulty in supplying concise relevant information in conversation and may actively avoid social contact. People with schizophrenia and Autism often have to bear the consequence of poor social competence. Their peculiar behaviour, their dull emotional responsiveness, and lack of ordinary social graces act as barriers to continuing relationships and establishing new, supportive friendships and people with both disorders can present as lonely somewhat eccentric individuals. (28),(32),(33),(34). The interview experience for the clinician can be very similar for both disorders and in the absence of exposure to Autism may lead to a diagnosis of Schizophrenia.

#### **Cognition, initiative and drive.**

Both groups have difficulties in problem solving, decision-making, the focusing and sustaining of attention, information processing and ability to screen out irrelevant information. In undertaking tasks there is often difficulty in initiating and sustaining the attention and concentration needed to complete them (35), (36.) Problems can arise due to lack of commonsense and use of appropriate judgement in everyday life and this appears to relate to cognitive deficits (37). In the real life situation this can lead to difficulties in managing everyday tasks despite appearances to the contrary.

#### **Investigations.**

There are no specific investigations that are diagnostic of either disorder. However on IQ testing people with Autism are more likely to have a 'scatter' of scores on the various subtests whereas people with schizophrenia are more likely to have 'flat' profile.

#### **Response to treatment.**

In clinical practice it is not uncommon to adopt a hypothesis driven model, which is tested, by the degree of response to treatment. A common example is to treat on the assumption of a psychotic illness and if there is a positive response to take this as supportive evidence for a psychosis. However recently there has been research that

indicates that people with Autism can also have a positive response to antipsychotics. This limits the utility of this approach in distinguishing the 2 disorders. (38)

### **Conclusion**

In our experience it is not uncommon for people with a mild intellectual disability and a diagnosis of schizophrenia who are not responding to treatment to have an unidentified Autistic spectrum disorder. As a result of this we have documented the features of a clinical model that we have developed to investigate this possibility.

#### **Main features of the clinical model.**

The model is based on a standard psychiatric interview that is modified to incorporate the elements discussed above and as listed below.

- Awareness of the possibility of Autism in what appears to be treatment resistant psychotic illness.
- Need for a collateral source of information.
- Need to accurately record a detailed developmental history.
- To examine the pattern of onset and course of the disorder.
- To establish the persons capacity to understand the concepts inherent in the questions.
- To take account and be aware of any strategies the person may commonly use in answering questions to ensure that the clinician is conscious of any limitations in the information received.
- To try and collect as much detail as possible about the nature of any possible hallucinations.
- To determine if unusual beliefs or thought patterns are part of the person's normal pattern of thinking about the world
- Less weight is placed on signs or symptoms that occur on both disorders such as emotional blunting or response to treatment.
- Features such as repetitive speech, repetitive behaviour and reliance on routine are more suggestive of an Autistic spectrum disorder
- Pronounced language difficulties are more suggestive of Autism and a speech therapist can assist in identifying this type of issue.

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**Biography of presenters for World Autism congress.**

**Dr Chad Bennett, Clinical Director (Psychiatrist)**

DR Chad Bennett is a Psychiatrist who heads up the clinical operations of the Victorian Dual Disability Service (VDDS). He completed his medical training in London, gaining experience of a number of specialities before choosing to train in psychiatry at St. Georges Hospital, London. He was admitted to member of the Royal College of Psychiatrists in 1992 - the same year that he migrated to Australia. He became a member of the Royal Australian and New Zealand College of Psychiatrists in 1998.

**Stephen Edwards, Senior Clinician (Psychologist)**

Stephen Edwards is a psychologist with an interest in Pervasive Developmental Disorders. Steve's focus is on adults with Asperger's Syndrome, and an examination of the level of alignment of public clinical and support systems to the particular needs of this client group.

Steve is qualified as a Psychologist (Child and Educational, with an emphasis on assessment) and as a Social Worker, with a focus on family interventions. He has successfully completed a variety of projects, including a research project investigating the reliability of the PAS-ADD as a diagnostic tool in formulating diagnoses for Victorians with a known or suspected Dual DisAbility. Steve has presented at a wide range of conferences throughout Australia and has academic involvement as a lecturer with various universities