

## **Aggression as a Symptom of Mood Destabilization in Pervasive Developmental Disorders**

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### **Abstract**

*Mood disorders are underdiagnosed, and often misdiagnosed as psychotic or behavioral disturbance in people with developmental disabilities generally and particularly with pervasive developmental disorders (PDD). It is often a behavioural change, predominantly aggression, that leads to a request for a consultation. A review of all outpatient referrals to the Dual Diagnosis consultation service revealed that physical aggression was a presenting problem for the majority of referrals irrespective of their PDD status. Clients with PDD constituted almost two-thirds of the referrals, and mood disorders were not recognized in 80% of those clients. Furthermore, discontinuation of antipsychotic medication was recommended for 80% of PDD clients with mood disorder. Diagnostic and treatment implications of these results are discussed.*

It is recognized that mood disorders are underdiagnosed and under-treated in the general population. People with developmental disabilities (DD) who experience mood disturbance are at even a greater risk of not being diagnosed (Lowry, 1998). There are a number of reasons why mood disorders are not recognized and accurately diagnosed in individuals with DD. It is difficult to apply the DSM-IV criteria to individuals with severe and profound levels of intellectual disability who possess limited or no ability to self-report subjective experience. Furthermore, the greater the impairment, the less likely it is that the individual will present with the picture of classical depression and mania. Diagnostic overshadowing (attributing the symptoms of a psychiatric/emotional disturbance to the intellectual disability) and behavioural overshadowing (seeing the symptoms as learned behaviours maintained by environmental contingencies) can further contribute to overlooking the mood disturbance.

Finally, symptoms can also be masked by psychotropic medications prescribed for other reasons, such as sedation or management of aggression.

Research studies and clinical case reports indicate that mood disturbance is associated with an increase in aggressive behaviours in people with developmental disabilities. Lowry's (1998) review of prevalence studies shows the rates for aggression in people with DD and comorbid depression or mania range between 28.1%-75%, for self-injurious behaviour such as hitting or biting oneself between 34.3%-50%, and for property destruction 31.2%-57.1%; in contrast, the respective rates for people with DD and no mood disorder are 12.5%, 8.8%, and 6.8%.

The prevalence of mood disorders in community residing individuals with pervasive developmental disorders (PDD) is unknown but available evidence suggests that it may be as high or possibly even higher than in the general population. Clinic-based studies suggest that depression is the most common psychiatric disorder in PDD, with rates between 30-37% (Ghaziuddin, Ghaziuddin & Grede, 2002), and perhaps even more in high-functioning individuals with PDD (Tantam, 2000). A genetic link between mood disorders and Asperger syndrome (a high functioning PDD), has been postulated (DeLong & Dwyer, 1988). There are no studies on prevalence of aggressive behaviours in people with PDD and comorbid mood disorder, but case studies have reported new onset or increase in rates of aggression as part of clinical presentation of depression in these individuals (Clarke & Gomez, 1999).

Concerns have been raised that unrecognized and misdiagnosed mood disorders in the DD/PDD population tend to be treated inappropriately with antipsychotic medications while more effective psychopharmacological and/or behavioural treatments are not utilized (Robertson et al., 2000; Stenfert Kroese et al., 2001). Not only are the difficulties not resolved, but such medications have many adverse side effects.

The purpose of the present study was to investigate how often physical aggression was a presenting symptom of unrecognized mood disturbance in clients with PDD referred for outpatient psychiatric consultation.

## **Method**

All the referrals from the Peel region for the Dual Diagnosis consultation service at the Centre for Addiction and Mental Health over a 2-year period were reviewed to identify:

1. how many referred clients were described as having PDD
2. how many clients with PDD had aggression as a presenting problem
3. how many clients received the diagnosis of a mood disorder following consultation
4. how many significant medication changes were recommended following the diagnosis of a mood disorder

All clients received extensive diagnostic assessment from the consulting psychiatrist (second author) who is experienced in the field of dual diagnosis.

### Results

In total, thirteen clients with developmental disabilities living in the community were seen for outpatient psychiatric consultation. Of the 13 clients, 9 (69%) had a diagnosis of PDD, including Autism, Asperger Syndrome, PDD, and PDD NOS.

The findings, summarized in Table 1, indicated that physical aggression was a presenting problem in the majority of referrals irrespective of the PDD status, and the rates of aggression were similar for individuals with PDD and DD (non-PDD). However, the absolute numbers for DD were small. Mood disturbance was present in more than half of the referrals, with a similar rate for individuals with PDD and DD. All clients with mood disorder, irrespective of their PDD status, exhibited physical aggression.

*Table 1: Aggression as a Presenting Symptom in Relation to PDD and Psychiatric Diagnoses*

	<i>PDD</i> ( <i>n=9</i> )	<i>DD (non-PDD)</i> ( <i>n=4</i> )
No aggression	2 (22%) 1schizophrenia 1panic d/o	1 (25%) anxiety d/o
Aggression	7 (78%) 1 (11%) schizophrenia 1 (11%) adjustment d/o 5 (56%) mood d/o	3 (75%) 1 (25%) OCD 2 (50%) mood d/o

Prior to consultation, mood disorder was not recognized by care providers and treating clinicians in 80% of the PDD clients, and it appears that behavioural manifestations of mood disturbance, one of which was aggression, were managed with antipsychotic medication (olanzepine or risperidone), often in conjunction with other psychotropic medications. Reduction and discontinuation of antipsychotic medication, and introduction (or increase of the existing dosage) of appropriate mood controlling medication (antidepressant or mood stabilizing) was recommended in 80% of cases.

### Discussion

The results of this preliminary study indicate that clients with PDD and mood disorder constituted a significant proportion of outpatient psychiatric referrals. Furthermore, aggression was part of the clinical presentation for all of these clients. Mood disorder was likely to be overlooked by clinicians (80%) and inappropriately treated (80% taking antipsychotic medications).

These results have important implications for the diagnosis and treatment of mood disorders in individuals with PDDs. Further research on prevalence of mood disorders in PDD is needed with emphasis on mood disorder symptoms that are unique to PDD presentation. Presence of aggressive behaviour, particularly if marked by changes in frequency or severity, should sensitize the clinician to the possibility of an underlying mood disorder. The use of antipsychotic medication to manage behaviour caused by underlying and undetected mood disturbance may be inappropriate and ineffective. The results underscore the importance of psychoeducation of families and direct care providers about symptoms of mood disorder and their relevance to the treatment and clinical management of individuals with PDD.

### References

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