Potentially Lethal Suicide Attempts in Persons With Developmental Disabilities: Review and Three New Case Reports

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Reports of suicide among persons with mental retardation and developmental disabilities (MR/DD) are rare, although a literature review documents that cases of lethal and potentially lethal suicide attempts are identified in population studies. Case reports in the literature also find individuals with MR/DD engaging in completed suicides or potentially lethal suicide attempts. The methods of suicide are varied and similar to those found among the general population. Three cases of potentially lethal suicide attempts are presented. All three were young men who suffered from major depressive episodes, had experienced recent significant social losses, and lived in their family home. 

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In a recent meta-analysis of the literature on suicide, Harris and Barraclough10 found that all mental disorders were associated with an increased risk of suicide with the exception of mental retardation (MR) and dementia. Yet individuals with MR/DD have attempted or completed a suicide. Inability to make cognitive connections between the feelings of depression and thoughts to end one’s life, for example, could account for a low rate of suicidal behaviors even when the rate of depression is substantial. Continuous supervision by family and/or staff may provide emotional and social support which mitigates against hopelessness and suicidal thoughts. On the other hand, suicidal thoughts and attempts may be dismissed as lacking in seriousness when seen in a person with MR/DD. This results in under-reporting of this problem and lack of proper treatment. In this paper, a literature review of suicide and MR/DD is presented, along with three new cases of potentially lethal suicide or attempts.

Studies/Reports Including Completed Suicides

Suicide by overdose with rifampin was reported in a 26-year-old man with MR, a ten-year history of moderate alcohol abuse, and previous suicide attempts. He was being cared for by a church group. At initial medical treatment, he denied a suicide attempt, but later, as symptoms worsened, admitted to ingesting 200 capsules of rifampin (300 mg), which was fatal despite hospital care.

Bloch4 reported a follow-up of 18 students who had attended special education programs in Israel. Among these individuals, one committed suicide. He functioned in the mild to borderline range of MR/DD and was under mental stress, but did not have any psychiatric treatment, and the suicide was unexpected.

Sletten and his colleagues,20 in reviewing all 97 completed suicides in five Missouri State Hospitals in 1960 to 1970, identified three individuals with MR/DD. Virkkunen22 in Finland reviewed cases of 142 disability pensioners among completed suicides. In this group, three individuals had MR/DD. Carter and Jancer7 examined a series of 204 sudden deaths at Stoke Park Hospital in the United Kingdom, which served individuals with MR/DD. Over a 50-year period only one documented case of suicide was found. Many individuals had histories of psychiatric disorder, and some deaths occurred after the patients were found missing from the
hospital, raising the question of whether some deaths may have been suicides.

**Studies Finding Suicidal Attempts and Gestures in MR/DD**

Andreasen and Noyes\(^2\) investigated suicide by attempted self-immolation among all admissions to a hospital setting over eight years and identified 14 patients. One of these patients had MR/DD.

Benson and Laman\(^3\) compared 22 individuals with MR/DD in outpatient psychotherapy to a group of 22 individuals with suicide ideation, and of these, 12 made suicide attempts. The most common method was medication overdose. Also noted were hanging or suffocation, cutting of the wrists, and drinking drain cleaner. Those with suicidal ideation or attempts functioned in the mild to borderline range of intellectual abilities.

In a retrospective record review, Sternlicht and colleagues\(^21\) found a rate of nine suicide attempts per 1,000 patients at a state institution. Of approximately 5,000 residents, 45 suicides (33 males and 12 females) were identified. The three most common methods were use of a sharp instrument, jumping from a high place, and hanging/strangulation.

Walters and her colleagues\(^24\) in Rhode Island conducted a study examining 90 consecutive admissions to an inpatient service for children and adolescents with MR/DD. They found ten patients exhibiting suicidal attempts, six of which were potentially fatal. Of patients in this study who made suicidal statements, acts referred to included a wide array of behaviors such as overdosing, drowning, shooting, jumping from a bridge and cutting/stabbing oneself. In contrast, those that actually made a suicidal attempt included primarily cutting/stabbing oneself, overdosing, and more rarely, jumping, burning oneself, and swallowing batteries.

In the United Kingdom, Walters\(^25\) conducted a survey of all consultant psychiatrists working in developmental disability, asking for their clinical experience of suicidal behavior. A total of 111 replies were received, and five patients were identified as having committed suicide. All five patients had IQ’s over 60 and a preexisting psychiatric illness. Also reported were 13 patients who had made suicidal attempts or gestures, all with IQ’s of 53 or above. Walters then added four case reports of patients with IQ’s below 50 from her practice of over 20 years at a facility of approximately 200 individuals. The first case was a male who suffered from bipolar disorder. On several occasions during a depressed period, he left his facility in pajamas in order to die, stating he wanted to be “put in his coffin box.” The second case was a man who was found with a belt tied around his neck, stating he wanted to “kill myself” because he could not be home with his mother. The third case was a man with Down syndrome, epilepsy, and severe MR/DD who had extremely difficult behavioral patterns lasting months, necessitating seclusion and close supervision. During each episode, suicidal behavior was reported. He was found with a knife in his hand and threatened to take his life; at age 30 he was found with a leather belt around his neck. He was thought to suffer from a psychotic illness. The last case was a man with severe MR/DD who at age 74 was found in the bathtub trying to submerge his head, stating “I’m trying to drown myself.” He suffered from chronic serious and painful medical conditions, and presented as tearful, withdrawn, monosyllabic, stating he was unhappy and had no friends.

Pary and colleagues\(^16\) surveyed suicidal behavior in persons with Down syndrome compared to a control population of persons with MR/DD of other etiologies using the Client Development Evaluation Report of the California Department of Developmental Services. Of 11,277 individuals with Down syndrome, four had reports of suicidal behavior (0.04%). Among non-Down syndrome individuals, however, 1,142 reports of suicidal behavior were given among a total of 143,143 individuals (0.8%).

Hardan and Sahl examined the medical records of all children and adolescents assessed in a special developmental disabilities program over a one-year period, abstracting information reporting suicidal ideation, threats or suicide attempts. They found 17% of the patients made suicidal attempts. Methods included hanging, jumping off a bridge or in front of a motor vehicle, slashing/cutting wrists, and stabbing.

Kaminer et al.\(^14\) reported three cases of adolescents with MR/DD who were treated on an inpatient psychiatric unit for suicidality. One case, an 18-year-old man with moderate MR/DD, impulse control disorder, conduct disorder, and depressive symptoms, had threatened to kill himself. Subsequently he eloped to a major street and lay down on the road, nearly ending his life.

Jancar and Gunaratne\(^13\) reported two cases of dysthymia. One man suffered dysthymia and major depressive episodes from adolescence until his death at age 64. During that time, pharmacotherapy and ECT failed to provide relief.
He began to talk of suicide at age 26, often running away from his institutions to kill himself. He talked of drowning and once drank ink as a suicidal gesture.

Sturmeyle reported a 39-year-old man with moderate MR/DD with a history of alcohol and drug abuse. He engaged in many sexually provocative behaviors, made multiple accusations that his rights were being violated, and was diagnosed with Psychoactive Substance Disorder, Inappropriate Sexual Disorder NOS, and Personality Disorder NOS. He had a history of suicidal ideation, attempts, threats, and homicidal threats. Using a behavioral approach, his treatment team conducted a functional assessment, concluded that social reinforcement was strong, then designed a comprehensive behavioral intervention, which was very successful. There was no information given regarding the attempts or potential lethality.

Hurley reported two cases of potentially lethal suicidal behavior in persons with Down syndrome. One individual was a 25-year-old woman with mild MR/DD who lived in social isolation with her mother and experienced a major depressive episode. Prior to her attempt, she sent a note to her day program staff stating, “I'm going to kill myself.” Subsequently, she went to her town square and attempted to throw herself in front of a car. The second case was a 26-year-old man with Down syndrome, also functioning in the mild range of MR. In response to social rejection by females beginning in adolescence, he engaged in minor self-injury and made suicidal statements. He was diagnosed with a major depressive episode after jumping from a second story window.

NEW CASE REPORTS

Mr. A

Mr. A was a 28-year-old man with mild MR/DD due to asphyxiation at birth. He was a man of average height and build, with a very sociable and friendly demeanor. At age 8, he was diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) but his family declined treatment. At age 13, he had significant behavioral problems, and his parents sought psychiatric services, rejecting pharmacotherapy but accepting individual and group psychotherapy for three years. He completed vocational training programs, and his family was able to obtain several jobs for him due to his good social and adaptive skills. He did not retain his employment, however, due to his limitations in applying sustained focused attention and his constant socialization on the job. Since age 24, he worked in small odd jobs arranged by his family. He became quite lonely for companionship and developed a romantic interest in a cousin. This resulted in a family altercation, and the patient felt shame and humiliation. Believing he was disgraced in his family, he attempted to drown himself in a lake. He was observed by passers-by and brought to the Emergency Room, resulting in referral to outpatient psychiatry. Mr. A found his precipitating situation too shameful to discuss, but he easily discussed his history and social problems. He presented as hyperactive, impulsive, hyperverbal, with poor concentration and attention. His mood was depressed, he had insomnia, was very worried, and had a negative view of the future. He was diagnosed with a Major Depressive Episode but declined pharmacotherapy. However, he contracted for individual psychotherapy, where a Cognitive Behavioral Therapy approach was used, modified for his developmental level. He easily learned coping statements, and followed through on simple homework assignments. His profound loneliness was a major difficulty, not only the lack of a romantic relationship, but also missing the comradery he had in high school. He was assisted in joining a local network of social programs for people with special needs, and recovered from his depression. After one year, he was symptom free and therapy was terminated.

Mr. B

Mr. B was a 32-year-old man with mild MR/DD due to meningitis at age 3. He had been followed in psychiatric care for over 15 years, diagnosed with recurrent major depressive episodes. Mr. B functioned in the mild range of MR and had a seizure disorder treated with carbamazepine. There is nothing known about his family of origin, except that he was removed from his mother’s care at age 6 due to severe neglect, and had lived with the same foster family since that time. Mr. B was followed by the Department of Mental Retardation for case management services. He had been placed in competitive employment as a janitor and retained this job for many years. Mr. B was sociable, had a long term relationship with a woman, and had a daughter by her. Due to problems in this relationship, he began to experience severe depression. After refusal of visiting rights with his daughter when he was 25, he made his first suicide attempt, drinking a bottle of Vicks Cough Syrup. One year later, he cut his wrists, both incidents resulting in
psychiatric hospitalization. Subsequently, he had two further hospitalizations after admitting to suicidal thoughts when very depressed about his life circumstances. He was lonely and had periods of feeling very incompetent in his job, although he actually did well there. Mr. B responded well to carbamazepine and fluoxetine but had a pattern of stopping his pharmacotherapy when he felt better. He would again become depressed and experience suicidal thoughts. Attempts to keep Mr. B in treatment were futile. He would not agree to regular appointments for psychotherapy, and came for brief appointments occasionally, with calls to his home and foster family to encourage keeping appointments.

Mr. C

Mr. C was a 50-year-old man with mild MR/DD and seizure disorder treated with Dilantin and phenobarbital. He was placed at a state developmental center for a short time, and then attended special education programs until age 16. Mr. C did well in the community, working successfully in a grocery store operated by a family friend. His only social contacts were at work and with his family. After his father passed away when Mr. C was 40, he and his stepmother had increasing difficulty at home. His stepmother openly ridiculed him and neglected his social and home care. After hearing her argue about the “burden of his care” with his brother, Mr. C attempted suicide by taking rat poison stored in the kitchen. He was brought to the Emergency Room, treated, and referred to outpatient care. Mr. C presented as child-like, affable, and cooperative. His mood was bright, and he did not admit to feelings of depression. He did admit to having no friends, wanting a girlfriend, and to ingesting the rat poison because “no one wanted him.” Mr. C was diagnosed with a major depressive episode, and treated with antidepressant pharmacotherapy, engaged in psychotherapy, enrolled in a support group for individuals with MR/DD, and was assisted in joining special needs activities. He responded well in treatment, and continued in psychotherapy and other supports, recovering from his depression.

**Discussion**

Each of these individuals suffered from a major depressive episode and made potentially lethal suicide attempts: suicide by drowning, overdose and slashing of wrists, and ingestion of poison. These three patients had many social factors precipitating major depressive episodes. They reported feelings of rejection, loneliness, and isolation. Because they were very independent in the community, with only mildly impaired cognitive abilities, they had the skills, opportunity, and cognitive thought pattern to initiate a suicide attempt.

The above studies and reports document that suicidality and completed suicides occur among individuals with MR/DD. Although not widely reported, investigators have found cases including those where intent was clear and others where lethality was significant. Because many threats are vague, or attempts are not possibly lethal (e.g., taking several vitamins), the risk remains that these situations occur much more frequently than reported, because they may not be perceived as “serious.” It is also possible that cases of completed suicide continue to go unreported in this population.

Suicide is an increasing public health problem in recent decades. In the US, it is the eighth leading cause of death. Risk factors include the presence of a psychiatric disorder, medical illness among elderly persons, and substance abuse. Many social, economic, cultural, and biological factors are thought to be involved in suicide. A mood disorder, however, is the most frequent diagnosis associated with suicide. Suicidal ideation is one of the diagnostic criteria of Major Depressive Disorder. The NIMH Collaborative Program on the Psychobiology of Depression found 954 persons with mood disorders, and in the first eight years of the study, 3% of the individuals committed suicide. Risk factors for this group included panic attacks, severe anxiety, diminished concentration, global insomnia, moderate alcohol abuse, anhedonia, hopelessness, suicidal ideation and past attempts. It is estimated that 10% of persons suffering from schizophrenia commit suicide. It is imperative that we recognize that suicide can be preventable and often results from suffering associated with treatable psychiatric conditions.

Because the majority of individuals with MR/DD are now living in the community, and many of the higher functioning are living independently with fewer hours of peer or caregiver contact, the potential for suicide may be higher in the future. First, those with the highest cognitive abilities will be the more likely to suffer feelings of social rejection and hopelessness. They are also more at risk for substance abuse. Lastly, living alone, they have the opportunity to either impulsively engage in suicidal behavior or actually plan a suicide, due to their independent
### Table 1. Recommendations for Assessment and Intervention for Suicidal Behavior in Mental Retardation/Intellectual Disability (after Hurley & Soven, 1982)\(^2\)

**Essential Questions Related to Risk of Suicide:**
- ▲ Is there a history of depression or mood disorder, personality disorder, or PTSD, or previous suicide gesture or attempt?
- ▲ Is there a family history of mood disorder, suicide or alcoholism, or a previous suicide gesture or attempt?
- ▲ If the patient has a psychiatric history, is he/she in active treatment?
- ▲ Is there an increase in stressors or changes in relationships or environment, such as personal loss, job failure, or social failures?
- ▲ Is the individual impulsive, violent, or extremely moody?
- ▲ Is there a history of substance abuse, or any evidence of active substance abuse?
- ▲ Could the individual be experiencing a dementia?
- ▲ Does the person present with insomnia, loss of interest, hopelessness, or suicidal thoughts?
- ▲ Has the person taken precautions against discovering suicidal behavior or implements?
- ▲ Did the person prepare a will or note about suicide or death?
- ▲ Has the person ever made a suicidal gesture/attempt before, using a method that might be potentially lethal?
- ▲ Does the individual have the freedom to impulsively engage in a potentially dangerous act?
- ▲ Has the person made a threat that is reasonable, or stated an actual plan?
- ▲ Is there reason to believe that the person sees no hope in the future?

**Events That are Associated With Suicide:**
- ▲ A recent dramatic loss of relationship or home
- ▲ A recent event that is considered shameful
- ▲ Diagnosis or experience of extreme medical conditions
- ▲ Expectation of death from medical conditions

and unsupervised status. Social factors may interact to increase the potential for suicide in persons with MR/DD. Pack et al.\(^{15}\) examined health risk behaviors of African-American adolescents with mild MR/DD and found increasing prevalence of substance abuse and the carrying of firearms.

Professionals in mental health as well as the field of developmental disabilities must take all suicidal statements, attempts or gestures seriously. They must carefully evaluate risk factors, including substance abuse, history of mood disorder, and any recent real or perceived social isolation or loss. (Table 1) In addition to arranging an emergency psychiatric evaluation, the level of supports/supervision needed should be reassessed for any person demonstrating a potential for suicidal behavior.

### References


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