

A Review of Suicidality in Persons with Intellectual Disability

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Abstract: It has been assumed that impaired intellectual capacity could act as a buffer to suicidality in the population of persons with intellectual disability (ID), developmental disability or mental retardation. The few studies conducted contest this assumption and in fact findings show that the characteristics of suicidality in that population were very similar to that in persons without intellectual disability. This paper reviews the studies conducted and describes the symptomatology in this population, risk factors, screening and intervention. Professionals working with this population should therefore be aware of and assess for this behavior, since in one study it was found that many caregivers were unaware of suicidality in their clients. Only two studies had systematically examined differences between suicidal and non-suicidal individuals with ID with regard to risk factors. Risk factors found were history of prior psychiatric hospitalization, comorbid physical disabilities, loneliness, sadness, depression or anxiety. There is limited research on intervention for suicidal behavior in the ID population, but professionals should consider risk factors for suicide in this population and intervene when suicidal risk/behavior is found.

Introduction

Suicide is today ranked as the 11th leading cause of death in the United States, where data from 2002 showed a rate of 11.0 per 100,000 population (1) with an estimate that about one-third of all people have suicidal ideation at some time during their lifetime (2). With this in mind, it is interesting to find little attention in the scientific literature to suicidal behavior in persons with intellectual disability (ID), developmental disability or mental retardation, since children, adolescents and adults with ID are at high risk for developing mental health problems with a prevalence of psychopathology approximately four times higher than that found in the general population (3–5). There still seems to be a tendency to underdiagnose psychiatric disorders in this population, which could be due to diagnostic overshadowing, lack of appropriate diagnostic criteria or appropriate assessment measures. Since people with

ID have a higher incidence of depression (6, 7), we have found it interesting that the issue of suicide in this population has received very little interest by researchers (7). Prevalence rates of suicide and suicide attempts in this population seems much lower, but they do occur (6, 7). This paper will review research on suicidal behavior in the population of persons with intellectual disability.

Suicidal Behavior in Children and Adolescents

There is only a handful of papers concerned with suicide in children and adolescents with ID, which for the most part are case reports. Sternlicht et al. (8) reviewed the charts for all residents of a state school for persons with ID and found 12 adolescents (mean IQ 63, range 48–79), who had attempted suicide or revealed suicidal ideation. Kaminer et al. (9) reported on three adolescents with mild/moderate ID

with suicidal ideation with one a 16-year-old with mild ID and schizoaffective disorder, who threatened to kill himself, since he was seeing and hearing scary things. They also speculated that maybe intellectual disability with its intellectual and adaptive limitations could work as a “buffer” against suicidal behavior, because of the lack of cognitive sophistication to conceptualize, plan or carry out suicide.

Menolascino et al. (10) described eight persons with suicidal behavior out of 305 persons referred to an inpatient psychiatric facility, where one 19-year-old with mild ID was referred after his parents found him in his apartment with a knife and a suicide note.

A 35-year follow-up study on suicide mortality in a Finnish national cohort of 2,369 persons with ID (11) found 10 cases of suicide and eight cases of undetermined external causes (UEC) of death, but none below the age of 25 years. Besides the above case reports we have only found two other studies, which we will describe in more detail.

Suicidal behavior in children and adolescents, Rhode Island Study

Walters et al. (12) studied 90 consecutive admissions to their dual diagnosis specialty unit at a children’s psychiatric hospital: 19 adolescents (10 males) with a mean age of 15.75 years and a mean IQ of 59 (range 37–86) were identified as suicidal (21% of the sample). As part of the extensive assessment, coding and observation during the hospitalization (mean length 11.3 months) description of suicidality were classified as:

- Ideation as verbal statements about death, dying or killing oneself, but without expressed intent to do so (like: “I do not want to be in this world anymore. I want to be dead”).
- Threat as verbal statements about intent to hurt or kill oneself with no associated behavior (like: “I am going to choke myself until I die”).
- Behavior as potentially harmful actions with/without verbal statements (like running from the unit towards a busy street after saying that he/she wants to be dead).

A large proportion (79%) of these 19 adolescents had prior psychiatric hospitalizations (mean of 2.4) and their psychopathology could be classified into three categories: behavioral disorders (six cases), affective

disorders (five cases), psychotic disorders (one case) and family conflicts (seven cases). In fact 10% of the adolescents had been physically abused, 10% sexually abused and 26% both physical and sexually abused; 32% had a history of suicidality prior to or at the time of admission, 26% were suicidal only during hospitalization and 42% were suicidal both prior and during hospitalization.

Out of the 19 adolescents, six were suicidal prior to admission and all expressed suicidal ideation, four made suicidal threats and three demonstrated suicidal behavior. Of the other 13, who were suicidal only during hospitalization or both prior and during hospitalization, 12 (92.3%) expressed ideation, 11 (84.6%) made suicidal threats and nine (69.2%) demonstrated suicidal behavior.

This sample of 19 adolescents with mild-moderate intellectual disability showed suicidality characteristics similar to adolescents without intellectual disability. There was a high prevalence of physical or sexual abuse of the adolescents with intellectual disability prior to hospitalization, which could be the trigger of suicidal behavior also seen in the general population (13). Another earlier study (14) found that 39% of multihandicapped children admitted to a psychiatric hospital were reportedly abused prior to the hospitalization.

Suicidal behavior in children and adolescents, Pittsburgh Medical Center Study

Hardan and Sahl (15) conducted a retrospective study of 233 patients over a 12-month period in their special program for children and adolescents with developmental and comorbid psychiatric disorders (including a school partial hospitalization program, summer intensive treatment program, school-based partial program, a 24-bed inpatient unit and an outpatient clinic).

They found that 47 (20%) (34 males, 13 females, mean age 10, range 4–18 years) had a past or present history of suicide ideation or attempt (SI/SA). Of the 47, 44 had thoughts of suicide, eight had made threats, and eight had made a suicidal attempt. Of the 47 there were 12 (25.5%) with borderline, 17 (36%) with mild and five (11%) with moderate intellectual disability. There were 22 in the total sample of 233 with severe/profound intellectual disability, but none had SI/SA. Only eight had attempts. In only

four cases could it be said that the patient had an understanding of the concept of death and only one had a clear comprehension. Their diagnoses were mostly behavioral disorders (28 cases), affective disorders (16 cases), psychotic disorders (one case) and family conflicts (17 cases). In this study there was no mention of past or present physical or sexual abuse, but that does not mean that it did not take place.

Eight adolescents (17%) had suicidal ideation on admission or experienced ideation during hospitalization and in 23 cases (49%) an acute psychosocial stressor was associated with SI/SA (there was no mention of what this psychosocial stressor was, but could very well be abuse as found in other studies [12, 14]). The most observed behaviors in the suicidal group were impulsivity, poor concentration, hyperactivity, sadness, aggression and sleep disturbances. The three most often reported symptoms were sadness, somatization and eating disturbances.

Suicidal Behavior in Adults with Intellectual Disability

Suicide in adults with intellectual disability (ID) has been reported (6, 10, 16–20), but very few in-depth studies have been undertaken. A retrospective outpatient study of the first psychiatric diagnostic evaluation for 100 adults with mild ID, 100 patients with moderate, severe or profound ID compared with 100 matching patients without ID (N-ID) showed that N-ID were significantly more likely to present with mood complaints, anxiety complaints and suicidality (14 patients) (6). When mild ID was compared with moderate, severe and profound ID it was found that mild ID was significantly more likely to present with anxiety complaints and suicidality (six cases with mild ID and none with moderate, severe or profound ID).

A recent study from Toronto (7) included 98 adults with borderline to moderate ID from several community (eight service agencies for persons with ID in Southern Ontario) and one outpatient clinical setting (University of Toronto Centre for Addiction and Mental Health) and showed that 26 reported that they thought that life was not worth living “sometimes” (three with borderline, 18 with mild and five with moderate ID), while seven reported that they thought about that “most of the time” (six

with mild and one with moderate ID). Of this total of 33 persons (34% of the sample), 23 told the interviewer that they thought about killing themselves and 11 said that they knew how they would do it (three with an overdose of pills, three slashing wrists, four with a jump, one with knife and one shooting). A total of 11 reported earlier suicide attempts. An interesting finding was that 16 of the persons, who had self-reported feeling suicidal, were not rated as so by the informants, meaning that for 23% of the cases family/staff were unaware of the presence of these thoughts. When the different groups were compared the suicidal adults were more likely to be unemployed, have dual diagnosis, under greater stress, lonely, depressed and with increased anxiety. They also reported less family support, less reciprocity in relationships and less overall social support. A review of the clinical charts revealed that the death of a relative or abuse history were common precursors to suicidal behavior (20, 21).

Persons with Down Syndrome

A study of 164 adults with Down syndrome found nine cases of depression with one who had suicidal ideation, a 23-year-old female with moderate intellectual disability (ID), who lived with her recently divorced, depressed and hostile mother (22).

Another study (18) includes two case reports of suicide attempts, both of which occurred during major depressive periods. One was a 26-year-old male, who from adolescence had approached females without disability for dates, but was mostly rejected. With these rejections he started suicidal ideation, burning himself with lighter and finally jumped from a second story building, but was only slightly injured. The second case was a 25-year-old female, who ran away from home in a depressive state and attempted to throw herself in front of a car, which missed her.

Suicide

One study from the United Kingdom (23) of 204 sudden deaths in residential care for persons with ID over a 50-year period found one case of suicide (jumping off a bridge). Another study of mortality

over 60 years from a large U.S. residential care center in California (24) did not report any case of suicide.

A 35-year follow-up study from Finland (11) based on a national cohort of 2,369 people with ID reported 10 cases of suicide with most of them (six) residing in mental hospitals. Social support was lacking in all cases and one case of sexual abuse. The overall suicide rate was 16.2 per 100,000 persons in this population, which was less than one-third of the rate in the general Finnish population.

A study of mortality and morbidity among older adults with ID from the 1984–1993 period in New York (2,752 deaths of adults 40 years and older) showed a 9.5 per 100,000 rate for accidents, suicides and homicides (25).

In Israel the Division for Mental Retardation (DMR) of the Ministry of Social Affairs provides service to about 25,000 persons with intellectual disability in Israel (26). About 6,500 are provided service in residential care centers, about 2,000 in community living (hostels, protected apartments), while the rest are provided service, but live with their family (25). The Office of the Medical Director reviews every case of death in residential or community care and for the 1991–2005 period there has been no case of suicide in this population (27, 28).

Risk Factors for Suicidality

In order to prevent suicide in the ID population, it is important to identify relevant risk factors for such behavior. Clinical studies describing samples of individuals with ID who were suicidal have identified sexual abuse, family instability, stress, and lack of social support as risk factors. In the general population, gender has been identified as a risk factor, with women being more likely to attempt suicide, but less likely to succeed, while men less likely to attempt, but more likely to succeed (21). The majority of case studies of attempted and completed suicide in ID tend to focus on men, but further research is warranted (21).

Only two studies have systematically examined differences between suicidal and non-suicidal individuals with ID with regard to risk factors. Benson and Laman (16) reported that suicidal individuals were more likely to be higher functioning, to have a history of hospitalization, and to have comorbid

physical disabilities. The two groups did not differ in terms of where they lived or worked, family involvement, family history of psychiatric issues, or comorbid substance abuse. Lunskey (7) and Lunskey and Canrinus (21) reported, based on a larger sample, that suicidal individuals with ID were more likely (than non-suicidal individuals with ID) to be unemployed, have a psychiatric diagnosis, and endorse greater stress, loneliness, depression and anxiety. They also reported less family support, less reciprocity in their relationships and less overall social support compared to individuals with ID, who were not suicidal. A review of the clinical charts revealed that the death of a relative and abuse history were common precursors to suicidal behavior. Similar reports of abuse history have been found in studies with adolescents (12).

Intervention

There is limited research on intervention for suicidal behavior in the ID population. Treatments for depression include medication, cognitive behavior therapy, behavioral and psychodynamic approaches, but no large scale studies have targeted suicidality specifically.

Two recent case reports on combined approaches for individuals with parasuicidal behaviors and borderline personality disorder reported significant reductions in parasuicidal behaviors in individuals with ID (29, 30). It is possible that some of these strategies have utility with individuals who have made several suicide attempts, but who do not have a borderline personality disorder diagnosis. Again, further research on treatment is warranted.

Intervention should consider risk factors for suicide and intervene in relation to such factors. If the person is very stressed, for example, intervention could focus on reducing such stress. If the person is isolated, intervention could target increasing that person's social support. For any client with suicidal issues, a crisis plan should be developed that is agreed upon by the client, his or her caregivers, and all service providers. Consistency is very important in this area. With regard to behavioral strategies, understanding the function of the suicidal behavior is critical (30). When these behaviors have an attention-seeking component, it is important to reward

alternative strategies to gaining attention rather than providing attention to such behaviors (see Esbensen and Benson [30] for a clear example). When the function of the behavior is to escape from the current demands of life, the person may benefit from medical intervention to treat the underlying depression. If it is possible to help that person escape certain stressful demands without trying to end their life, such efforts should be made (31).

Discussion

Suicide and suicide attempts in persons with intellectual disability (ID) is a topic that has barely been studied by professionals working with this population and, therefore, thought to be a rare phenomenon. The two studies discussed above (12, 15) from two psychiatric settings in the United States catering for the population of children/adolescents with intellectual disability from the 1995–1999 period showed a frequency of 20–21% with suicidal behavior (thoughts, threats and behaviors, but rare attempts). These studies also showed that this behavior was more frequent in the inpatient setting, as a consequence of the worst cases getting hospitalized or maybe learned behavior during hospitalization.

In both studies (12, 14) the characteristics, sex distribution and methods of suicide ideation and attempts were similar to that of adolescents without intellectual disability, but both studies had no case of completed suicide. The first study (12) had a high number of adolescents abused prior to admission, while the second study did not report on abuse, but this information (as in the general adolescent population) should alert every professional to investigate every case of attempted suicide in an adolescent for possible prior abuse (physical or sexual).

In adults with ID, from a community and outpatient sample in Canada, 34% reported that “life was not worth living” sometimes, 23% were thinking about killing themselves and 11% reported that they had attempted to kill themselves in the past (7), while an outpatient psychiatric sample from the U.S. (6) reported a finding of 6%. It seems that suicidal thoughts, threats and behaviors are common in persons with mild-moderate ID, while extremely rare in persons with severe-profound ID (6, 7).

Most of the studies described a life event (family member death, abuse, rejection), dual diagnosis or depression as important risk factors. It therefore seems important to be able to diagnose depression, a separate problem in this population (21, 32). For those with mild-moderate ID there is consensus that standardized diagnostic criteria be used, but for persons with severe-profound ID there is still doubt concerning the method of diagnosis (32).

Conclusions

The clinical implication of the studies reviewed are that suicidal ideation and attempts do occur among persons with intellectual disability and professionals should therefore be aware of and assess for this behavior. Sadness or depression are symptoms that could indicate later suicidal behavior and should be recognized, and subsequently diagnosed and treated accordingly. Hurley and Sovner (33) published recommendations for the assessment and treatment of suicidal behavior in individuals with ID in 1982, still relevant today. They outlined several essential questions related to risk of suicide (e.g., history in individual or family member of suicide attempts or mental illness, increase in stressors, impulsivity, substance abuse, precautions taken against discovering suicidal behavior, suicide note, lethality of past attempts, hopelessness in future) and key events associated with suicide (recent dramatic loss of relationship or home, recent event considered shameful, diagnosis or experience of extreme medical condition, and expectation of death from medical condition).

The assessment of suicidality in those with ID covers similar content to what is assessed in the general population. What complicates such an assessment is that the person with ID often has communication impairments that make obtaining such information difficult. The individual may be hesitant to disclose such information, because of fear of being punished for such feelings or because he or she is eager to please and give the “right answer” to the clinician (for general suggestions on how to facilitate this type of interview, see Bradley and Lofchy [34]). They suggested, for example, finding a comfortable place for the assessment, using visual aids, comfort objects, explaining procedures clearly, in-

volving caregivers as much as possible. A clinician may opt to avoid potential reporting biases by asking a caregiver about suicidality, but such a strategy will also have bias, since many caregivers are unaware of suicidality in their clients (7). Speaking with caregivers is an important part of the assessment, and identifying discrepancies important, however, information from one informant cannot replace the perspective of another.

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