Self-mutilation among adolescents and youth:

Some clinical perspectives

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Introduction

The most recent Ministry of Health statistics indicate that the rate of youth suicide (15–24 years) in New Zealand has increased to 20.0 deaths per 100 000 population in 2001 compared with 18.1 per 100 000 population in 2000. As such, New Zealand has the highest male suicide rate among youth (15–24 years) and the second highest rate among females compared to other OECD countries.[1] The same statistics show that the youth hospitalisation rate for intentional self-harm in 2002 was 186.5 cases per 100 000 population and represents 28% of the total for all ages. Against this background, there is increasing (and understandable) public and media concern over the phenomenon of self-cutting among young people.[2] The concern is primarily around its possible links to suicide, and the potential for this behaviour to spread among young people, particularly in educational settings.

The deliberate infliction of harm to one's own body without suicidal intent is not a new phenomenon. It has been observed as far back as the stone age and was/is practised across religions and cultures. It was (still is in many cultures) associated with religious rituals and perceived as a culturally sanctioned behaviour with significant cultural and social symbolism. Pathological self-mutilation, however, is mostly associated with mental illness and was first reported in the scientific literature more than 150 years ago (see Favazza[3] for an historical account).

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Definition and classification

As far as it relates to mental health, several definitions of this phenomenon exist. In fact, researchers and mental health professionals have not agreed upon one term to identify the behaviour. Self-harm, self-injury, and self-mutilation are often used interchangeably as have self-injurious behaviour, and self-wounding. It has been defined as the deliberate committing of direct physical harm to one's own body, without conscious suicidal motivation.[4] Others[5] identify pathological self-mutilation as the deliberate alteration or destruction of body tissue without conscious suicidal intent. As the lack of suicidal intent is central to the definition, it is possible to include self-poisoning (including drug overdoses) in this group as long as it can be proven that there was no suicidal intent. From here on I will refer to the phenomenon as self-mutilation (SM).

Favazza[3] classified SM in general into the following:

1. **Major self–mutilation**, such as the amputation of the limbs or genitals and eye gouging, is rarely reported and is most commonly associated with major psycho-pathology such as schizophrenia.
2. **Stereotypic SM** such as head banging and self-biting which tend to be monotonously repetitive. This is more commonly seen in people with autism, mental retardation, some organic conditions such as Lesch-Nyhan Syndrome and de Lange Syndrome, and sometimes in schizophrenia.
3. **Superficial**:
   (a) **Compulsive SM** such as nail biting, skin picking and hair pulling, commonly occurring in anxiety and psychotic disorders.
   (b) **Episodic SM** such as skin cutting, skin carving and skin burning. They occur in association with a large number of Axis I and Axis II psychiatric disorders (see below).
   (c) **Repetitive SM** occurs when self-injury becomes the standard response of an individual to certain psychological states such as anxiety or stress. Often these individuals are referred to as 'cutters', 'slashers' or 'burners' despite the fact that they use more than one method of SM.

The following will primarily (not exclusively) refer to the Superficial type which is by far the most common and most likely to be encountered among adolescents in primary health care settings.

Prevalence

Self-mutilation is encountered in a variety of settings, particularly amongst those young people with more severe psychopathology. About 20% of non-residential clinical populations report some form of self-mutilation.[6] Our own database at the Youth Inpatient Unit (which is a facility for young people aged 15–18 who have acute psychiatric illness) indicates that in the year from March 2002 to March 2003, 45% of all admissions had deliberately harmed themselves either by cutting or by other means, without the intent to kill themselves (Swadi, Unpublished data).

Self-mutilation is not uncommon in community settings. A similar rate of 4% was reported in two separate studies of large general population groups of relatively high-functioning nonclinical US subjects.[6–7] Another study found that about 12% of college students have a reported history of deliberate self-injury.[8] A recent study among young adults from New Zealand indicate that 6.8% have cut themselves and 1.3% have burnt their skin at some time in their life.[9]

Clinical presentation

Most SM begins between the ages of 15 and 25 years. However, clinical experience leads us to believe that it can actually start a few years earlier. It is not uncommon for GPs and mental health workers to see 12–13-year-olds with SM. Whether that reflects a definite trend remains to be seen, as is the possibility that SM has become more prevalent in recent years.

There is no evidence to support the common perception that SM is generally more common in females than males although it may be among some populations such as those with personality disorder.

Among young people, SM can take a variety of forms, but skin cutting seems to be the most common. Others include skin burning, self-hitting, swallowing of objects, self biting, piercing skin with pins, scratching skin with sharp objects, interfering with wound healing and of course deliberate ingestion of pills without the intention to die.

Self-mutilation outbreaks can occur in community settings such as schools. Fenning et al.[10] described an outbreak of SM in a public school. The majority of the adolescents involved in this behaviour did not demonstrate any severe overt psychopathology and were high in their academic achievement. The SM behaviour seemed to be contagious: a 'hard core' of initiators with more severe psychopathology 'induced' the behaviour in the more passive and less disturbed subjects. Females were more involved than males. Interestingly, they found that isolation of the 'hard core' students seemed to be the only effective means to lower the severity and frequency of the phenomenon.

Similar reports of outbreaks among inpatient adolescents indicate that the subjects were most often diagnosed with severe personality disorder or schizophrenia.[11]

Co-morbidity

Self-mutilation is not a diagnosis although there have been calls to include at least some forms of it under the category of Impulse Control Disorders.[3] Although it may occur in adolescents with no psychiatric symptoms, it is often associated with some form of psychopathology. It has been reported in patients with anxiety, depression, dissociative disorders, post-traumatic stress disorder, eating disorders, obsessive compulsive disorder, drug abuse, body dysmorphic disorder, bipolar disorder and psychotic disorders.[6–7,12–20] Some young people with pervasive developmental disorders (such as autism) and those with intellectual disability may also engage in self-injury.[21]

However, by far, the most common co-morbidity is with personality disorder particularly when associated with anxiety disorders.[19] This co-morbidity is so common that SM is sometimes considered to be a symptom of personality disorder, especially borderline personality disorder. According to one study, self-harmers scored higher than non-self harmers on self- and peer-report measures of borderline, schizotypal, dependent, and avoidant personality disorder symptoms and reported more symptoms of anxiety and depression.[7] Studies seem to indicate that self harm is more likely to be associated with anxiety than with depression, and that's why some people seem to think that self harm is a means for reducing anxiety rather than punishing one's self.[22]

Although the act of SM is not usually seen as an indication of suicidal intent, the risk of suicide is higher in those young people than others, especially amongst those with borderline personality disorder. Suicide attempters with cluster B personality disorders who have a history of SM tend to be more depressed, anxious, and impulsive, and they also tend to underestimate the lethality of their suicide attempts. Therefore, clinicians may be unintentionally misled in assessing the suicide risk of self-mutilators as less serious than it is.[23]

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Which adolescents self-mutilate?

There is no particular profile of adolescents who self-mutilate. However, those with mental health problems, personality, and interpersonal relationship difficulties, are more likely to report SM. There is evidence to

indicate that adolescents who have been physically or sexually abused and those with post traumatic stress problems, are more likely to self harm.[17,24–25] Our experience suggests that many young people who repeatedly harm themselves also have a background of early attachment problems and have experienced significant rejection.

Why do young people mutilate themselves?

In most cases, there is no one single cause for SM. It is usually the product of multiple factors which may be related to genetics, environment, events, personality, and psychological state. Sometimes, however, the behaviour is clearly driven by delusional beliefs or is in response to hallucinations. Support for a biological contribution in the aetiology of SM is emerging. The hypothesis that self-mutilation leads to the release of endorphins which in turn reduces dysphoria has long been postulated.[26] More recently serotonergic dysfunction has been proposed with some credibility.[27–28] Alterations in the opiate systems and stress-response pathways have also been suggested on the basis of significant increase in pain tolerance among self-mutilators.[29]

Based on an extensive literature survey and on interviews conducted with more than 300 self-mutilators of all ages, Favazza[30] identified a variety of reasons as reported by the patients themselves covering religious, spiritual, sexual and psychological themes. However, the most commonly reported are related to emotional and mood states. It has been speculated that self-mutilating behaviour serves a coping function that is activated by an increase in emotional arousal.[27,31] Many young people report that they self-mutilate for relief of tension, and when they are emotionally stressed and confused; often referred to as affect dysregulation. They are unable to process, understand and manage intense feeling and as such SM becomes a method for affect regulation.[32] This method brings quick relief which gets repeatedly reinforced; eventually taking an almost addictive character.[33] Dissociation seems to be an important mechanism. The self-injury is intended to assist the individual in dissociating from immediate tension.[26] Following the act of cutting, these individuals usually report feeling better,[34] with an appearance of calmness and resignation.[3]

Individuals who self-mutilate are often accused of 'trying to gain attention'. This is unlikely as cutting and other self-harming behaviour tends to be committed in privacy. In addition, self-harming individuals will often conceal their wounds.[34] However, SM may be accurately considered as a maladaptive means of communicating feelings, which gets reinforced by the inappropriate and inconsistent response of family and professionals.

Management

Self-mutilation is a 'grisly topic'[3] and can generate a great deal of counter-transference among health professionals. An important skill of the professional working with a self-harming individual is the ability to look at wounds without grimacing or passing judgment.[34] An understanding of its significance to the individual young person may help to develop a management plan that may significantly reduce the behaviour. Furthermore, encouraging the healthy expression of emotions, and patience and willingness to listen are equally important.[35]

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From the above account it is not hard to conclude that there is no specific treatment for self-mutilation. However, most significantly, there needs to be some form of psychiatric appraisal to investigate the possibility of a treatable psychiatric disorder, especially anxiety and/or depression or, rarely, a psychotic illness. This appraisal should take into account the possibility of a more serious 'hidden' psychiatric disorder such as anorexia nervosa or bulimia. In many cases, the effective treatment of associated psychopathology can bring about significant improvement in self-mutilative behaviour. However, in many other cases it is likely to be a long management process that utilises both psychological and pharmacological methods of treatment. Although tranquillisers and anxiolytics have been used in the short-term management of SM, there have been recent reports to indicate that SSRIs such as fluoxetine and atypical antipsychotics such as risperidone might reduce the frequency of self-mutilation.[36–37]

The psychological methods of treatment are mostly along individual counselling and/or cognitive behavioural lines. One form of behavioural therapy that seems to show some promise is dialectical behavioural therapy (DBT) which utilises behavioural and cognitive strategies to reduce SM.[38] It helps patients to learn practical methods to avoid events that trigger SM, block access to means of SM, increase supervision by others, and to develop other external controls. Therapy would also focus on learning to use positive behaviours as an alternative to SM. Clinical trials have proved it to be of benefit at least for some patients.[39] Other treatment methods that have shown effectiveness in working with self-mutilating young people include learning problem solving strategies, art therapy, activity therapy and support groups.

It is important to try to develop a 'crisis management' plan for those who repeatedly self-mutilate. This plan must involve the young person, their family, the general practitioner as well as the local mental health service. The plan would clearly outline points of action for managing episodes of self-harm in a non-reinforcing way. From our experience, this approach can have

immense benefits to the young person and their family.

Conclusion

There is much more to be learned about self-mutilation (and much more to be said than in this brief article). It is only recently that the behaviour began to be taken more seriously and attempts to understand its origin began to take shape; a fortunate move away from the 'Why-don't-you-do-it-properly?' view of the past.[40] Self-mutilation generates a great deal of fear and anxiety amongst many of us. We often feel frustrated and helpless about what to do. The start may be in recognising the fact that those who self mutilate are very distressed rather than manipulative young people. To dismiss their SM as insignificant or as attention-seeking would be substantially off the mark. Without over-reacting and reinforcing the behaviour, it is important to view SM in a rational way that tries to understand its clinical context from the perspective of each adolescent's mental health. It must be taken seriously, assessed carefully and the risks associated with it must also be evaluated and managed. With a carefully designed and patiently executed management plan, it is often possible to help those adolescents make significant gains and improve their quality of life.

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