

Child and adolescent self-poisoning: service-related characteristics

Ashraf Nasr, Panos Vostanis and Linda Winkley

This study presents the pattern of assessment and 6-month out-patient attendance of 54 children and adolescents who took an overdose over a 12-month period, and were assessed by a district child and adolescent psychiatry service. Attempts were precipitated by arguments (67%) or school-related stressors (19%). In 70.4% of cases, analgesic tablets were used. A psychiatric disorder was present in 51% of the cases. At 6 months, 13% of the patients were still attending for follow-up, while three children (5.5%) had taken a second overdose. Admission to a paediatric ward can facilitate the initiation of treatment. Child mental health services should aim at providing prompt assessment, good communication with other agencies, and follow-up arrangements, particularly with high-risk young people and their families

The annual incidence of attempted suicide among children and adolescents in the general population has been found to be as high as 8.3%, with up to 27% having suicidal ideas during the same period (Shaffer & Piacentini, 1994). Previous studies have identified several risk factors for self-harm, such as history of previous attempts, presence of depression, conduct disorder, substance misuse, low self-esteem, and family dysfunction (Lewinsohn *et al*, 1994; Morrissey *et al*, 1995).

Despite research on the characteristics of young people who self-harm and their natural history, so far there has been little evaluation of service models for the assessment and management of this clinical population. O'Dwyer *et al* (1991) found that the initial assessment of young people who self-harm at an accident and emergency department, and the subsequent liaison with the child psychiatry service, were often unsatisfactory. Recommendations regarding the initial assessment of children and adolescents advocate that ideally a short in-patient admission to a paediatric ward should be used as an opportunity for prompt assessment by a member of the child and adolescent psychiatry team (Royal College of Psychiatrists, 1982). In many hospitals, self-poisoning has

become the most frequent cause of admission to a paediatric ward.

Standards and policies regarding follow-up and treatment, however, vary across the country. A recent national survey (Kurtz *et al*, 1994) found that "although 69% of health districts provided emergency child psychiatry cover for self-harm, 88% did not identify a specific service for prevention of further acts, except for follow-up out-patient appointments". The aim of this study was to describe the pattern of assessment and follow-up of young people who took an overdose over a six-month period in a district child and adolescent psychiatry service.

The study

The Oaklands Child and Adolescent Unit is a district multidisciplinary mental health service that serves south Birmingham (urban area with a total population of 250 000 and a population of children aged 0–17 years of approximately 86 000). There is a policy between the service, the accident and emergency department and the paediatric wards for regular cover and assessment of young people who self-harm by either a child and adolescent psychiatrist or clinical nurse specialist.

All children are admitted to the paediatric ward and referred to the child and adolescent psychiatry team. Psychiatric assessment ideally takes place within 24 hours. The decision to discharge the young person from hospital is made jointly by the paediatric and psychiatric teams, with arrangements for out-patient psychiatric follow-up. Children and adolescents who were referred to the Oaklands Centre during 1994 for assessment after taking an overdose over the period of one year were included in the study ($n=62$). Eight patients who had attended the A&E department primarily for alcohol or drug intoxication were excluded. The case notes of the remaining 54 patients were examined for factors

related to the attempt, the assessment, and contact with the service over a six-month period.

Findings

The mean age of the sample was 14.2 years (range 9–16). The majority ($n=39$ or 72.2%) were female. Patients were assessed by: a registrar ($n=27$ (50%)), a clinical nurse specialist ($n=7$ (13%)), a senior registrar ($n=14$ (26%)), or a consultant ($n=5$ (9.3%)).

Most children were assessed within 24 hours of referral ($n=48$ (89%)). At least one relative was involved in 44 assessments (81.5%), predominantly the mother. A social worker was present in eight assessments (15%). All attempts were made by taking an overdose. In 70.4% of the cases ($n=38$) analgesic tablets were used (Table 1).

The attempts had been precipitated by a variety of factors: family arguments in 25 cases (46.3%); school-related stressors such as bullying, anxiety about exams, or suspension in 10 cases (18.5%); arguments with partners in 13 cases (24.1%); feelings of unhappiness in five cases (9.3%), and bereavement in one case (1.8%).

A psychiatric disorder (ICD-10 criteria; World Health Organization, 1992) at the time of the assessment was established in 57.4% of the cases ($n=31$, Table 2). The majority of these (25) presented with an emotional disorder (depression/anxiety). Following the assessment, 43 (79.6%) children were discharged to their family home, relatives (3.7%), in the care of the local authority (residential or foster care – 9.3%), or to an in-patient adolescent psychiatric unit (3.7%). Children whose relatives had not been involved in the initial assessment were, not surprisingly, more likely to be discharged to social services care ($\chi^2=34.2$, $P>0.001$).

At six months, only seven children (13%) were still attending the mental health service. Twenty-one (38.9%) had lapsed from the clinic, 19 (35.2%) had been discharged in agreement with the clinician, five (9.3%) were receiving another

Table 2. Type of psychiatric disorder ($n=54$)

	<i>n</i> (%)
Emotional disorder	17 (31.5)
Conduct disorder	3 (5.5)
Mixed emotional/conduct disorder	8 (14.8)
Learning difficulties	1 (1.9)
Bulimia	2 (3.7)
No disorder	18 (33.3)
No diagnosis recorded	5 (9.3)

type of treatment, such as family and individual psychotherapy, and two (3.7%) lived outside the catchment area and had been transferred to their local mental health service. Three patients had taken a second overdose within the six-month period. Two of them had been re-admitted to the paediatric ward, while the third had disclosed the attempt at a psychiatric out-patient appointment.

Comments

In recent years, there has been a growing awareness of and concern about the extent of deliberate self-harm among children and adolescents. Cases are often complex, as attempts are precipitated by a variety of factors. On discharge, the young person is likely to return to the same living environment. An admission to a paediatric ward, even in the absence of physical illness, allows the psychosocial assessment to take place, a temporary respite from the precipitating stressful situation, and the initiation of treatment. The young person sometimes benefits from staying on the ward, which can be in conflict with current pressures for early discharge from hospital.

It is often acknowledged that the automatic involvement of the child psychiatry team may lengthen the admission period for physically fit young patients. In this study, most children were assessed within 24 hours of referral. Length of admission could thus be kept to a minimum through good communication between the paediatric and child psychiatry teams, and provision of out-of-hours child psychiatric cover. The psychiatric assessment of deliberate self-harm can be carried out by members of the multi-disciplinary mental health team other than child psychiatrists, following appropriate training and supervision. In our sample, 13% of the assessments were carried out by a clinical nurse specialist. Such allocation of assessment and treatment needs to be encouraged further, as it has cost-effectiveness implications.

Child and adolescent mental health services should also take into account the pattern of out-patient attendance and the risk for further

Table 1. Drug of overdose ($n=54$)

	<i>n</i> (%)
Analgesics	38 (70.4)
Tricyclic antidepressants	4 (7.4)
Minor tranquillisers	2 (3.6)
Antibiotics	3 (5.5)
Antihypertensive	1 (1.9)
Anti-epileptic	1 (1.9)
Shampoo/detergent	1 (1.9)
Missing information	4 (7.4)

suicidal attempts. The majority of families drop-out of follow-up fairly early, either because they perceive that the precipitating problems have been resolved, or because of difficulties in engaging with the service. The latter need to be investigated in more depth in order to improve the compliance with treatment of those most in need. For example, one factor which has been shown to be particularly important for a positive outcome is whether the parent or carer has taken on board and understood the reason for the overdose.

Although the short-term prognosis of deliberate self-harm in young life is relatively good, 10–14% make further attempts within one year (Hawton, 1982; Kerfoot *et al*, 1996). In terms of resources and clinical outcome, services should attempt to identify such high-risk individuals and families and to improve follow-up arrangements and patients' direct access to the mental health team (Pfeffer *et al*, 1994). As young people's suicidal thoughts or attempts may not be disclosed to parents, previous engagement with the clinician, and clear communication with teachers and other agencies involved, are essential in the management and secondary prevention of deliberate self-harm and underlying psychiatric disorders.

References

- HAWTON, K. (1982) Attempted suicide in children and adolescents. *Journal of Child Psychology and Psychiatry*, **23**, 497–503.
- KERFOOT, M., DYER, E., HARRINGTON, V., *et al* (1996) Correlates and short-term course of self-poisoning in adolescents. *British Journal of Psychiatry*, **168**, 38–42.
- KURTZ, Z., THORNES, R. & WOLKIND, S. (1994) *Services for the Mental Health of Children and Young People in England*. London: Department of Public Health, South Thames RHA.
- LEWINSOHN, P., ROHDE, P. & SEELEY, J. (1994) Psychosocial risk factors for future suicide attempts. *Journal of Consulting and Clinical Psychology*, **62**, 297–305.
- MORRISSEY, R., DICKER, R., ABIKOFF, H., *et al* (1995) Hospitalising the suicidal adolescent: investigation of decision-making criteria. *Journal of the American Academy of Child and Adolescent Psychiatry*, **34**, 902–911.
- O'DWYER, F., D'ALTON, A. & PEARCE, J. (1991) Adolescent self-harm patients: audit of assessment in an accident and emergency department. *British Medical Journal*, **303**, 629–630.
- PFEFFER, C., HURT, S., KAKUMA, T., *et al* (1994) Suicidal children grow up: suicidal episodes and effects of treatment during follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry*, **33**, 225–230.
- ROYAL COLLEGE OF PSYCHIATRISTS (1982) The management of parasuicide in young people under sixteen. *Bulletin of the Royal College of Psychiatrists*, **6**, 182–185.
- SHAFFER, D. & PIACENTINI, J. (1994) Suicide and attempted suicide. In *Child and Adolescent Psychiatry: Modern Approaches* (3rd edn) (eds M. Rutter, E. Taylor & L. Hersov), pp. 407–424. Oxford: Blackwell.
- WORLD HEALTH ORGANIZATION (1992) *The ICD-10 Classification of Mental and Behavioural Disorders*. Geneva: WHO.

Ashraf Nasr, Registrar in Psychiatry, Reaside Clinic, Birmingham; and *Panos Vostanis, Senior Lecturer in Child and Adolescent Psychiatry, University of Birmingham, Parkview Clinic, Queensbridge Road, Moseley, Birmingham B13 5QE; and Linda Winkley, Consultant Child and Adolescent Psychiatrist, Oaklands Unit, Birmingham

*Correspondence