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Adolescent units: a need for change?

AIMS AND METHOD

To describe the characteristics and diagnoses of patients admitted to a general adolescent psychiatric in-patient unit. We describe the age, gender and psychiatric diagnosis of the patient, as well as whether the patient exhibited violent behaviour in the ward, whether he/she needed to be transferred to a different service and whether he/she was admitted under a section of the Mental Health Act 1983.

RESULTS

Patients were evenly distributed in terms of gender, with most being 14–16 years old. Diagnoses were varied with adjustment disorder predominating, but could be separated into four main groups. Levels of violence were high, being associated with detention under the Mental Health Act 1983, and often resulted in transfer to another service.

CLINICAL IMPLICATIONS

The needs of certain adolescents admitted to a general-purpose adolescent unit may not be best met in this environment. Current services must change to meet the needs of their patients. There may be a need for greater specialisation.

Adolescence is a time of change. This change takes many forms, encompassing the physical, social and psychological realms, and adumbrates the transition from childhood to adulthood. Epidemiological studies suggest that the prevalence of significant psychiatric disorder among adolescents is around 18–21% (Offord *et al*, 1987). In contrast, the number of adolescents with an identifiable disorder who ultimately receive in-patient treatment is very small (Cotgrove & Gowers, 1999), and little systematically collected data on diagnosis, and hence needs, exists for these patients.

Adolescents requiring in-patient psychiatric care are usually admitted to general-purpose adolescent units employing a wide range of treatments (Jaffa, 1995). Despite this, it has been estimated that up to a third of people under the age of 18 who require hospital care are admitted to paediatric or adult psychiatric wards (Worrall *et al*, 2002). Many of these admissions are deemed inappropriate, and happen both because of the lack of availability of Child and Adolescent Mental Health Service in-patient services and because general-purpose adolescent units may find it difficult to meet the needs of certain patients, particularly those manifesting aggressive behaviour (Worrall *et al*, 2003).

The current service

Thorneywood Adolescent Unit is a psychiatric in-patient facility providing care for young people, aged 12 to 18, living in Nottingham, Central and North Nottinghamshire,

and Derbyshire. The unit also has contractual agreements with other health authorities within the Trent area. The unit accepts emergency admissions and cleaves to a generic psychiatric model of care. The service offers admission for assessment of patients experiencing psychiatric symptoms, severe self-harm behaviour and socially-unacceptable behaviours that necessitate psychiatric assessment. The unit also provides treatment for complex psychiatric problems requiring specialised assessment with continuous and prolonged observation, and life-threatening psychiatric illness such as anorexia.

The present study

From 1 February 2001 to 1 April 2002, data were collected, in a prospective and systematic fashion, on the cohort of patients admitted to the Thorneywood Adolescent Unit within this period. Information was gathered on the age, gender and diagnosis of those admitted, as well as their reason for referral, whether the patient was admitted under the Mental Health Act 1983 and whether he/she displayed violent behaviour. The study also considered whether the patient eventually needed to be transferred to a different in-patient facility. Diagnoses were generated following an assessment period in the unit. Different tools were used to reach a diagnosis, such as the Schedule for Affective Disorders and Schizophrenia for Children and Adolescents (K-SADS) (Ambrosini *et al*, 1989) and the Strength and Difficulties Questionnaire (SDQ) (Goodman, 1997). These tools are



regularly employed in the unit to inform diagnosis. Generation of an ICD-10 (World Health Organization, 1992) diagnosis is a service requirement of Nottinghamshire Healthcare NHS Trust.

Findings

During the study period, 56 patients were admitted to the Thorneywood Adolescent Unit ($n=56$), with five of these eventually being readmitted. For the purposes of the study, only the first admission for each patient was considered.

Age and gender

The mean age of the patients was 15, with the vast majority lying in the age range 14–16. Of these, 17 (30%) were 14 years of age, 16 (29%) were 15 years old and 15 (27%) were aged 16. At the limits for age-eligibility regarding admission, only five (9%) patients were aged 17 and a mere three (5%) were 12 years old on admission. No patients aged 13 were admitted during the study period. The numbers of male and female admissions were approximately equal, with a very small male preponderance (30 male (54%) versus 26 female (46%)).

Reason for referral

The reasons for referral of the study subjects encompassed five broad domains. Of these, management of a self-harm episode predominated:

- Management following an episode of self-harm ($n=23$ (41%))
- Assessment of a possible psychotic disorder ($n=19$ (34%))
- Treatment of a known psychotic disorder ($n=2$ (4%))
- Treatment of an eating disorder ($n=8$ (14%))
- Treatment of a depressive disorder ($n=4$ (7%))

Diagnosis following assessment

When considering the ultimate diagnosis for the subjects, the vast majority (20 (36%)) garnered a diagnosis of adjustment disorder. All of these patients were referred for assessment and management of deliberate self-harm. Most of the adolescents with this diagnosis had a long history of self-harm and their needs could not be met in a short-stay psychiatric unit. Only one of them was ultimately transferred to a therapeutic community. The ICD-10 diagnoses of the adolescents admitted to the unit during the study are recorded in Table 1.

Of the 56 patients admitted during this period, 41 (74%) were admitted informally and 15 (26%) were admitted under the Mental Health Act 1983. No adolescents were admitted under the Children Act 1991. Manifestation of violent behaviour by the admitted patients was a common event: 14 (20%) exhibited high levels of violence, with five (9%) of these requiring transfer to an adult intensive care unit. With regard to a history of violence within the unit, there was not a statistically

significant difference for gender ($P=0.12$). However, patients admitted under a section of the Mental Health Act 1983 were more often violent ($\chi^2=5.1$, d.f.=1, $P=0.02$).

Discussion

This study describes the population of patients admitted into a general-purpose adolescent unit that aims to provide assessment and treatment for those adolescents with a major mental illness. We argue that the specific diagnostic categories of the patients admitted to the Thorneywood Adolescent Unit in the specified time period can be further condensed, on a heuristic basis, into four broad groups.

- (1) Patients fulfilling a diagnosis of adjustment disorder, being admitted following an episode of deliberate self-harm.
- (2) Patients admitted for the assessment and treatment of psychosis.
- (3) Patients admitted for the management of eating disorders.
- (4) Patients with a diagnosis of affective disorder.

The therapeutic needs for each of these putative groups can be very different.

A moot point in relation to the present study is the extent of its generalisability in regard to other adolescent in-patient unit populations across the country. We contend that, as the Thorneywood Adolescent Unit accepts young people up to the age of 18, the number of patients with psychotic symptoms detected by our study may be higher than other units, whose upper age limit for referrals is 16 years. Equally, units with a lower ceiling to their age criteria may encounter more adolescents

Table 1. ICD-10 diagnoses of patients admitted to the Thorneywood Adolescent Unit ($n=56$)

| Diagnoses | Frequency | % |
|--|-----------|-------|
| Adjustment disorder | 20 | 35.7 |
| Conduct disorder | 1 | 1.8 |
| Oppositional defiant disorder | 2 | 3.6 |
| Psychosis not otherwise specified | 2 | 3.6 |
| Bipolar affective disorder | 1 | 1.8 |
| Dissociative disorder | 2 | 3.6 |
| Obsessive-compulsive disorder | 2 | 3.6 |
| Generalised anxiety disorder | 1 | 1.8 |
| Asperger's syndrome | 1 | 1.8 |
| Hyperkinetic conduct disorder | 1 | 1.8 |
| Disorder of conduct and emotions | 1 | 1.8 |
| Paranoid schizophrenia | 4 | 7.1 |
| Delusional disorder | 1 | 1.8 |
| Acute and transient psychotic disorder | 1 | 1.8 |
| Anorexia nervosa | 8 | 14.3 |
| Mild depressive episode | 2 | 3.6 |
| Mixed anxiety and depressive disorder | 2 | 3.6 |
| Acute stress reaction | 1 | 1.8 |
| Psychotic depression | 1 | 1.8 |
| Drug induced psychosis | 2 | 3.6 |
| Total | 56 | 100.0 |

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with conduct disorder than we found. It is also likely that, in areas of the country served by specialist NHS eating disorder units, the prevalence of young people with eating disorders in generic adolescent units may be much lower.

The most contentious point raised in this study pertains to the way in which current services meet the needs of adolescents and, in particular, the needs of adolescents diagnosed with eating disorders, psychosis and deliberate self-harm. It is generally accepted that patients with eating disorders garner greater benefit from treatment in specialist units (Treasure, 2002). It could also be confirmed that adolescents with psychosis, young people who may present with high levels of aggression, require an environment capable of containing violence – a need not currently met by general-purpose units (O’Herlihy *et al*, 2003). Additionally, patients engaging in deliberate self-harm, for whatever reason, may not be best served by admission to an in-patient environment (Cotgrove & Gowers, 1999), benefiting perhaps instead from a day facility or therapeutic community. Staff working in general-purpose adolescent units may, therefore, have difficulty in dealing with the very diverse needs of their patients, needs that may require specific therapeutic approaches in the same general therapeutic environment.

Hence, should adolescent in-patient psychiatry services move towards increasing specialisation, a tendency discernible in the rest of psychiatry (Colgan, 2002)? In recent times, there have been calls to provide specialist centres for the assessment and management of adolescent-onset schizophrenia (Hollis, 2000), calls which, given the appalling prognosis of this disorder, may become increasingly compelling. Specialist eating disorder facilities for adolescents already exist, but despite claiming good results, are yet to prove their worth with robust evidence. Day care and therapeutic communities, perhaps amalgamated into specialist centres, may provide a more appropriate therapeutic environment for those young people that self-harm. Similarly, adolescents requiring secure in-patient care secondary to violent or severely disturbed behaviour should be provided for in specialist centres, of which there is a dearth at present.

Another option, and one that might facilitate a more needs-led approach, would be for adolescent services to affiliate more closely with general adult psychiatry. It is acknowledged that, despite disorders of older adolescents having more in common with adult disorders than those of childhood, overlap with general adult services is frequently inadequate and unplanned (Parry-Jones, 1995).

This may lead to the particular needs of older adolescents and young adults being overlooked. A move towards a ‘young persons’ service targeted at 15 to 22-year olds might better help to meet their needs.

Increasing specialisation may offer several advantages over current service provisions for adolescents requiring in-patient psychiatric care. Most importantly, specialisation may generate greater expertise in treating individual disorders, which should translate into greater efficacy and efficiency in meeting patients’ needs. At present, the broad-based approach of the general-purpose unit may mean a focus on the general rather than the specific, with therapeutic effects being diluted and needs not being met. Resources may be employed more efficiently in a specialist context and staff may be more motivated, feeling empowered by their ability to be master of something rather than nothing. Specialisation should not necessarily mean a descent into therapeutic dogma; eclecticism must continue, but should be focused in its application to specific patient needs.

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