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**Psychiatric Disorder in the Young
 Adolescent: A Follow-up Study**

There is a marked lack of information about the incidence and prevalence of psychiatric disorder amongst adolescents in the general population. This situation contrasts strongly with that in the field of adult psychiatry in which numerous studies have been conducted, and also with that of child psychiatry, in which, at least amongst younger school-age children, our epidemiological knowledge is increasing (Rutter *et al.* 1970, Shepherd *et al.* 1971). In the adolescent age group there are studies of suicide and suicidal attempts, of admission rates to psychiatric beds (Henderson *et al.* 1971) and of selected groups of supposedly healthy subjects (Offer *et al.* 1970), but survey information of a type likely to yield knowledge suitable for the planning of services is not available. Such knowledge is particularly necessary at a time when adolescent psychiatric services are expanding and when the subject of adolescent psychiatry is becoming identified, rightly or wrongly, as a specialty in its own right. The present study, of which this is a preliminary report, aims to provide epidemiological information about psychiatric disorder in a total population of 14–15-year-olds living in an area of small towns. It also aims to determine how far disorders at 10–11 years persist into adolescence.

Method

In 1965, the total population of children aged 10 and 11 living on the Isle of Wight was surveyed by use of parent and teacher questionnaires of known reliability and validity (Rutter & Graham 1966). Subsequently, the group identified as at risk for psychiatric disorder was examined more intensively. Their parents were interviewed about their social circumstances and the behaviour of their children; the teachers were asked to provide further information; and the children themselves had a psychiatric interview, together with testing of their intelligence and educational attainment. The data relating to the emotional state and behaviour of the children were collated and a judgment was made about the presence and type of psychiatric disorder (if present) in each individual child. It was found that the total prevalence of psychiatric disorder in this population at 10–11

Table 1

Methods used in psychiatric survey of 14–15-year-olds

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- (1) First stage selection:
 Parent questionnaire
 Teacher questionnaire
 Control group
 Disturbed at 10–11 years
 Administrative group
- (2) Individual examination of selected children:
 Parental interview
 Teacher interview
 Psychiatric interview with child
 Psychological testing
- (3) Overall assessment and diagnosis
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years was 6–7%, using the necessarily arbitrary criteria which had been developed. Apart from a few rare conditions, most of the disorders could be classified under three diagnostic categories: emotional¹ (or neurotic) disorder, conduct (or antisocial) disorder, and mixed disorders in which both emotional disturbance and conduct disorder were present to marked degree but with neither predominant.

In 1968 and 1969 the same population was similarly surveyed when the children were 14–15 years old (Table 1). Parents and teachers completed comparable behaviour questionnaires, with a high response rate (99% for teachers and 88% for parents): 6.6% of the children scored over the cut-off point on the teachers' questionnaire and 5.1% over the cut-off point on the parents' scale. Only 22, or about 1%, of the children scored over the cut-off point on both questionnaires. All these children were selected for further investigation, together with children who had been charged with offences in the previous year, who were on probation, who had attended a psychiatric service or who were attending a special school for maladjusted children, making a total group of 304, or 13.2% of the general population. In addition, the 126 children who had been previously identified as showing significant psychiatric disorder at age 10–11 years were selected for further investigations, as was a new randomly chosen control group of 200 children.

These investigations were conducted along similar lines to those in the earlier study except that more detailed information was obtained in a number of areas. The parents were asked about the quality of family relationships, using a method described elsewhere (Rutter & Brown 1966, Brown & Rutter 1966). The children were additionally asked a number of questions about their social lives, including frequency of peer

¹The descriptive term 'emotional disorder' is used here in preference to the term neurosis which is sometimes thought to carry etiological or psychodynamic implications, which may be unjustified.

contacts. Finally, teachers were on this occasion personally interviewed about the behaviour of the selected children. Information was gathered independently so that the psychiatrists, psychologists and family interviewers were unaware whether the child was a control or had been selected for some other reason.

The psychiatric information thus obtained was collected together and a judgment made about each child as to the severity and nature of psychiatric disorder, when present. Again, this judgment was made in ignorance of why the child had been selected. Severity of disorder was on this occasion rated on a four-point scale: 0 for no disorder, 1 for dubious or slight non-handicapping disorder, 2 for slight handicapping disorder, 3 and 4 for moderate and severe handicapping disorders.

A coding of 1 was made if the child showed odd or deviant behaviour which was unaccompanied by any social impairment or handicap. If there was impairment, a coding of 2, 3 or 4 was made, the choice between these being made on the basis of the severity and persistence of the disorder and the extent to which it was associated with distortion or impairment of personality development. Psychiatric disorder was considered present only if there was social impairment, i.e. a severity coding of 2, 3 or 4.

Results

Of the 304 children selected on the basis of the screening tests, 177 (58.2% of this group and 7.7% of the total general population) were finally diagnosed as showing psychiatric disorder (Table 2). This figure cannot be used on its own as a measure of prevalence as it does not take into account the presence of psychiatric disorder in those children not selected on the screening tests. The findings for the control group (all of whom were individually assessed) show that of the 157 unselected children 24 (15.3%) were found to have psychiatric disorder. Applying the percentages for selected and unselected children to the general population, it may be seen that the corrected prevalence rate for psychiatric disorder in 14-15-year-old children is 21.0%.

Table 2

Total prevalence of psychiatric disorder

	Percentage with disorder	No. in total population	Estimated number with disorder in total population
Not selected on screening procedures	15.3	1999	306
Selected on screening procedures	58.2	304	177
Total		2303	483

Total prevalence 483/2303 (21%)

Table 3

Psychiatric diagnosis of children selected on screening procedures

Diagnosis	Boys	Girls	Total	Percentage of total population
Emotional disorder	33	40	73	3.2
Mixed disorder	29	16	45	1.9
Conduct disorder	39	9	48	2.1
Hyperkinetic syndrome	1	1	2	0.1
Child psychosis	1	0	1	0.1
Other	7	1	8	0.3
Total	110	67	177	7.7

Considering only those children selected on the screening procedures, it was found that psychiatric disorder was twice as common in boys as in girls (Table 3). This difference is entirely due to the higher rate of conduct disorders and mixed disorders among boys, and is closely similar to the pattern found at 10-11 years. Emotional disorder was equally common in the two sexes. Other diagnoses were uncommon.

Among the children not selected on the screening procedures, nearly all the disorders were of the emotional (16 cases) or mixed type (7 cases), and there was only one case of conduct disorder. Unlike the selected groups, the emotional disorders in the unselected children were preponderantly in girls (11:5). Accordingly, the inclusion of the unselected children greatly inflates the prevalence of emotional disorder (to 12.9%), and makes it more frequent in girls. It also increases the prevalence of mixed disorder (to 5.8%) but has little effect on the figure for conduct disorder. The validity of all these corrections depends on the control group being truly representative of the general population. Further checks on this are still being undertaken.

Some of the family influences associated with psychiatric disorder at age 14-15 years are shown in Table 4 and Fig 1. Mental disorder in the mother (as assessed from a standardized interview with her) and marital discord or disruption (i.e. a single parent family or a marriage rated poor or very poor on the basis of a systematic assessment) were both strongly and significantly associated with adolescent psychiatric disorder.

Table 4

Family factors and adolescent psychiatric disorder

	Not living with two natural parents (percentage with variable)	Father with manual occupation (percentage with variable)
Emotional disorder	18.6	65.7
Mixed disorder	34.9	67.4
Conduct disorder	26.8	70.0
Total disorder	25.3	67.3
Control group	18.1	69.9

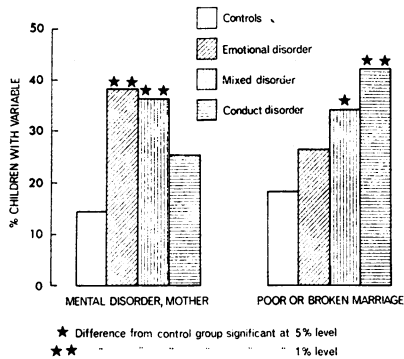


Fig 1 Family factors and psychiatric disorder in adolescence

However, the pattern was somewhat different in that maternal mental disorder was mainly associated with emotional disturbance in the youngster whereas marital discord or disruption was mainly associated with conduct disorder.

Disorders were no more common in children whose fathers had a manual job. Mixed disorders (but not pure emotional or conduct disorders) were significantly more frequent in the case of children who did not live with their two natural parents (because of parental death, divorce, or separation).

The findings so far refer to the picture at age 14–15 years. It remains to consider how this relates to the disorders present three or four years earlier. Fig 2 provides a picture of the psychiatric state at follow up of the children diagnosed as having a disorder at age 10–11 years. Outcome varied markedly by diagnosis. Children with conduct disorders fared worst, three-quarters of them still showing disorders in adolescence. The disorders generally ran true to form in terms of diagnosis but an appreciable minority of those with conduct disorders at 10–11 years showed emotional disturbance at 14–15 years. By contrast, children who had suffered from emotional disorders when younger never developed an anti-social disorder. The outlook for children with emotional disturbance at 10–11 years was significantly better than for those with conduct disorders ($X^2=7.3, P<0.01$), but it was by no means uniformly good. Nearly half (46%) still had problems in adolescence, a rate more than double that (21%) in the general population. As might be expected, children with mixed disorders had an intermediate outcome, with 58% showing some degree of disturbance at follow up.

There were too few girls with conduct disorder to make a comparison between the sexes worthwhile for that diagnostic group, but the outcome appeared roughly comparable for boys and girls. However, comparison was possible in the case of

those with emotional disorder. No sex difference in outcome was found.

Discussion

A prevalence of 21% (which is considerably higher than that found at 10–11 years) for psychiatric disorder in the 14–15 year age group has important implications for services, although it would not be possible to plan services on the basis of this figure alone. Other information, such as the motivation of parents and of the adolescents themselves, and the effectiveness of therapy, is also important. Of the children identified as showing disorder in this population, only about 10% (20% of those with moderate or severe disorders) were attending the local child guidance clinic, but many of the mothers whose problem children were not attending did not see themselves as needing more help. It should be emphasized that the label 'psychiatric disorder' should not be taken to imply that treatment by psychiatrists would be the most appropriate method of intervention. It should also be mentioned that the Isle of Wight is a lightly populated area of small towns; Professor Rutter has compared the Isle of Wight rate of disorder with that in a large city. Clearly, the higher rate in the latter also has important implications for services (p 1221).

No association was found between social class and disorder at 14–15 years. This negative finding is in keeping with most (but not all) other studies (Rutter *et al.* 1970). It is quite likely that higher rates of disorder may exist amongst severely socially disadvantaged children, but these do not form any sizeable portion of the population living on the Isle of Wight. By contrast there were significant associations between adolescent disorder and various family factors, especially the mother's mental health and marital discord or disruption. The rate of disorder is known to be higher amongst the children of mentally-ill parents in clinic groups (Rutter 1966) and our findings provide confirmation that the association is

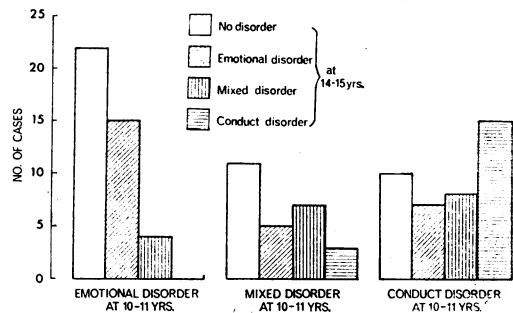


Fig 2 Outcome in adolescence according to diagnosis at 10–11 years

present in the general population. Many studies have shown an association between marital discord and conduct disorders (Rutter 1972).

The follow up into adolescence of the children with disorder in the first survey at 10–11 years provided interesting information. It is clear that, as Robins (1966) found in her 30-year follow-up study of children who had attended a child guidance clinic, children with conduct disorders do particularly poorly. However, Robins also found that in the long run children with emotional disorders do as well as healthy controls. Clearly the same cannot be said of the short-term prognosis, for our findings suggest that the 10–11-year-old children with emotional disorders have a much increased rate of psychiatric problems three and four years later when compared with a control group.

Finally, it should be mentioned that although this paper has inevitably focussed on adolescents with problems it should not be forgotten that the great majority of the subjects we studied did not suffer from significant emotional difficulties on the evidence of their parents, their teachers or themselves. Our interviews with these boys and girls suggested that most of them were not having great difficulties in coping with the stresses of their transitional phase of life, that they were well-adjusted, and that they were enjoying good relationships with those in contact with them, both at home and at school.

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Group Homes: Rehabilitation of the Long-stay Patient in the Community

by N Capstick MD MRCPED

The problem of discharging the chronic schizophrenic into the community is one of increasing difficulty, partly as the result of therapeutic advances and partly due to the lack of residential facilities out of hospital. Among the available facilities are group homes, which provide accommodation for many chronic schizophrenics who have nowhere to go on discharge from hospital.

A group home may be defined as ordinary residential accommodation in the community, in which a small group of people, having been discharged from a mental hospital, are able to live together like a family unit, without residential supervision. The advantage of a group home is that the continuum of rehabilitation commenced in hospital is maintained as the patient is discharged from hospital and has to face the reality of the community, but he is able to do so with the companionship of other expatriates.

A pilot study (Capstick *et al.* 1959) showed the feasibility of such a project. A programme was commenced in West Sussex in 1965 which has now five group homes, with twenty-six places (Capstick & Kirby 1970). Two homes are privately owned and three are run by the Worthing and South West Sussex Association for Mental Health. Each home represents a dual management; the fabric and contents of the house are supplied by the private owner or by the Association, who charge rents based on Social Security rates for accommodation. The Rehabilitation Unit at Graylingwell provides the patients with the necessary follow-up care.

Each home has a supervisor who is a volunteer or a member of the Graylingwell staff. The main function of the supervisor is to help in solving day-to-day problems, such as finding a job, registering with a general practitioner, making social contacts, etc.

The early work suggested that the ideal type of patient to send to a group home was one who had recovered from the symptoms necessitating admission, but who had been relegated to the back wards and allowed to remain in hospital, thus becoming institutionalized. This patient has rarely any friends or relatives who can offer a home. For such, it is felt that discharge into the community would be difficult to maintain on an individual basis, but to be discharged collectively, when each could give support to the other, could lead to