Family influences on the development of psychological problems in teenagers

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SUMMARY. A study was designed to test the opinion that teenagers at risk of psychological disturbance can be identified on the basis of their family background. A copy of the general health questionnaire (28-question version) was sent to 322 17- and 18-year-olds registered with a semi-rural group practice. The records of all the 195 teenagers who replied, and those of their parents, brothers and sisters were examined and any record of chronic illness and psychological or social problems noted. Teenagers with family disruption, legal difficulties, parental marital problems or maternal psychiatric disorder recorded in the medical notes of their families were significantly more likely to have a high score on the general health questionnaire than those without such a record. Teenagers with high scores had attended the surgery more frequently during the previous year than those with low scores. Further work may enable more precise recording of family problems and enable a group at high risk of developing distressing psychological symptoms to be clearly identified. By early identification of this group, the general practitioner may be in a position either to prevent problems arising, or to intervene more effectively if a crisis develops.

Introduction

RUTTER has used the phrase 'inner turmoil' to describe the disturbance that seems so prevalent in adolescence. He estimated that 10% of teenagers suffer from marked internal feelings of misery and self-deprecation.[1] Another survey revealed that 3.5% of teenagers had a significant psychiatric disturbance and only 45% were completely free of psychological symptoms.[2]

The family background of individuals plays a major role in determining their susceptibility to psychological disorder. Emotional problems in children are associated with marital discord, parental irritability and maternal psychiatric disorder.[1] Emotional problems in men are associated with the loss of a parent before the age of 13 years and with unemployment[3] while women are likely to suffer depression if they lose their mother before the age of 11 years.[4,5] In contrast, children from broken homes tend to exhibit conduct disorders rather than emotional problems[6] and those from families with more than four children have an increased risk of delinquency and conduct disorder.[7]

General practitioners maintain close contact with families over long periods of time, and they are in an ideal position to identify factors within a family that increase the risk of psychological disorder in the children. The aim of this study was to investigate the features of disturbed families with teenagers that were recorded in the medical records of one practice, and to establish if these features were related to psychological disturbance in the teenagers.

Method

A survey was carried out among teenagers registered with a general practice situated in an Oxfordshire market town. The practice list size was 9400. All patients aged 17 and 18 years were identified from the age–sex register and were sent a questionnaire together with a stamped, addressed envelope. A reminder was sent to those who did not respond after one month. The questionnaires were marked with a code number to avoid unauthorized identification of respondents.

The questionnaire consisted of the 28-question version of the general health questionnaire,[8] together with additional questions about accommodation, employment, smoking, alcohol consumption and use of the oral contraceptive pill. The general health questionnaire has been used extensively in general practice as a screening tool for psychological disorder,[9] and has been validated against standard psychiatric interviews. The questionnaire detects distressing symptoms, which may reflect a more serious depressive or psychotic illness, or may simply reflect a transient mood disturbance. In the teenager the majority of cases detected are likely to be of a transient nature. The questionnaire has also been used and validated against the present state examination[10] in this age group.[2]

General health questionnaire scores of six or above were taken as showing a significant mood disturbance. In a similar study to detect psychological disturbance, this cut-off point gave a sensitivity of 100%, a specificity of 84.5% and an overall misclassification rate of 15%.[2]

Twenty teenagers in each of the high and low scoring groups were invited to attend for a follow-up interview. Those attending were asked to complete the general health questionnaire again.

The medical notes of all of the teenagers were examined for relevant information. If the teenager lived with his or her family, then the notes of the parents and siblings were also examined. This was easily accomplished since, in this practice, the Lloyd-George medical record envelopes for each family are grouped together. The information was collected without knowledge of the general health questionnaire score and was recorded on a printed analysis sheet.

Social problems were recorded if there was a comment in the notes or on the summary sheet of any member of the family. The categories used were based on the ICHPPC coding.[11] 'Legal problems' were recorded if a member of the family had a criminal record or had been in prison and 'marital problems' if the doctor had recorded that marital problems exist between the parents. Minor anxiety states and depressed mood were recorded as minor affective disorder. A record of a major psychiatric problem was accepted if there was a specific note of a prolonged depressive illness or a psychotic illness. Bereavement and alcohol problems were recorded separately.

All the information was coded, stored on magnetic tape and analysed using a standard statistical package (SPSS-X). The tests of significance used were chi-square using Yate's correction, Fisher's exact test for contingency tables and the Mann-Whitney U test.

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Results

Three-hundred and twenty-two questionnaires were distributed and 196 completed forms were returned (a response rate of 60.9%). One form was returned incorrectly completed. Of the 195 correctly completed forms 91 were returned by males and 104 by females. Significantly more males in social classes 1 to 3N returned questionnaires (66.7%) than in social classes 3M to 5 (42.9%) ($\chi^2=6.8$, $P<0.01$). The class difference in the response by females was not significant.

The pattern of family problems in respondents, non-respondents and in high scorers on the general health questionnaire is shown in Table 1. Among those teenagers with divorced parents significantly fewer were respondents than non-respondents. In general fewer respondents came from families with problems recorded than non-respondents but this difference did not reach significance. In seven categories (divorce, single parent family, parent–child problems, housing difficulties, economic difficulties, suicide attempt by father and bereavement) the proportion of teenagers with the problem was slightly higher among the non-respondents than among those with a high score on the general health questionnaire.

Forty-four of the 195 responding teenagers (22.6%) obtained a score of six or above on the general health questionnaire — 14 of the 91 males (15.4%) and 30 of the 104 females (28.8%). This difference between the sexes was significant ($\chi^2=4.3$, $P<0.05$). There were no significant differences in the scores obtained by teenagers in different social classes.

Of the problems listed in Table 1 parental marital problems ($P<0.05$), family disruption ($P<0.05$), legal problems ($P<0.05$) and major maternal psychiatric illness ($P<0.01$) were associated with a significant psychological disturbance in the teenagers (high score on the general health questionnaire). No significant associations were found between high scores and employment, accommodation, smoking, alcohol consumption and use of the 'pill' (Table 2).

Teenagers with a high score on the general health questionnaire consulted the doctor more frequently (Table 3). Females using the oral contraceptive pill also consulted more frequently than those not using the 'pill'. The two factors appeared to be additive as high scoring 'pill' users consulted most frequently.

Of the 20 teenagers in each of the high and low scoring groups invited to attend for a follow-up interview only three (15%) of the high scorers responded, compared with five (25%) of the low scorers. Two of the former group no longer scored six or above on the general health questionnaire, and this indicates the variability of mood in teenagers.

Table 1. The pattern of family problems among the 322 teenagers according to whether they were respondents or non-respondents and whether they were high scorers (6+) on the general health questionnaire (GHQ).

	% with problem			
Family problem	Overall ($n=322$)	Respondents ($n=195$)	Non-respondents ($n=127$)	High scorers on GHQ ($n=44$)
General				
Divorce	18.0	14.4	23.8*	20.5
Marital problems	16.1	13.8	19.8	25.0†
Single parent family	11.2	9.2	14.3	13.6
Family disruption	7.1	7.2	7.1	15.9†
Parent–child problems	8.1	5.6	11.9	11.4
Legal problems	4.7	3.1	7.1	9.1†
Housing difficulties	1.2	0.5	2.4	0.0
Social maladjustment	3.7	2.1	6.3	6.8
Economic difficulties	0.6	0.5	0.8	0.0
Psychological				
Mother psychiatric	4.7	4.6	4.8	13.6††
Mother affective	21.4	21.0	22.2	27.3
Suicide attempt by mother	1.6	2.6	0.0	4.5
Father psychiatric	1.2	1.5	0.0	0.0
Father affective	9.0	12.3	4.0*	13.6
Suicide attempt by father	0.9	1.0	0.8	0.0
Alcohol problem	5.0	4.1	6.3	6.8
Bereavement	4.7	5.1	4.0	2.3

*$P<0.05$, for respondents versus non-respondents: $\chi^2=4.1$ for divorce, $\chi^2=5.4$ for father affective.
† $P<0.05$, †† $P<0.01$ for high GHQ scorers versus low scorers: $\chi^2=4.8$ for marital problems.

Table 2. Characteristics of all respondents and those who were high scorers (6+) on the general health questionnaire (GHQ).

	% of respondents with characteristic	
Characteristic	Overall ($n=195$)	High scorers on GHQ ($n=44$)
At college/school	39.0	34.1
Unemployed	3.6	6.8
Living away from parents	19.0	20.5
Smoking>10 cigarettes per day	11.3	11.4
Alcohol consumption>3 units per day[a]	4.1	4.5
Using the 'pill'	48.6 ($n=104$)	63.3 ($n=30$)

[a]A unit of alcohol is one glass of wine or sherry, half a pint of beer or cider or one public house measure of spirit.

Table 3. Mean consultation rates for high (6+) and low (<6) scorers on the general health questionnaire (GHQ).

	Low score on GHQ		High score on GHQ	
	No. of respondents	Mean no. of consultations per year (range)	No. of respondents	Mean no. of consultations per year (range)
All respondents	147	2.5 (0–22)	42	4.8 (0–38)**
Males	76	1.6 (0–12)	13	3.0 (0–7)*
Females	71	3.5 (0–22)	29	5.6 (0–38)
Not using 'pill'	40	2.1 (0–18)	11	3.9 (0–15)
Using 'pill'	30	5.2 (0–22)	18	6.6 (0–38)

**$P<0.01$, Mann-Whitney U test, $U=2172.5$. *$P<0.05$, $U=311.0$. Six patients who had been registered for only a short time are omitted. One patient did not disclose her use of the 'pill'.

Discussion

These results support the hypothesis that disturbance within the family is associated with emotional problems in teenagers. More specifically, the results indicate that the general practitioner's record of such disturbance may predict emotional problems in teenagers. Records of legal problems, marital problems, family disruption and maternal psychiatric disorder were all related to a score of six or above by the teenagers on the general health questionnaire. Three of the four predictors of a high score —

legal problems, marital problems and maternal psychiatric disorder — were found slightly more often in the family records of non-respondents, but the difference was not significant. However, the frequency of family problems found in the records of the high scorers was higher than the level found for either the respondents or the non-respondents. Therefore, there may be a higher prevalence of high scorers among the non-respondents than among the respondents.

Emotional problems can present themselves in a number of ways, from 'inner turmoil' to exam failure and conduct disorder. The general health questionnaire will only pick out those with an affective mood disorder. In the majority of cases this mood disorder will be an 'adjustment reaction' to a recent crisis. Examples would include a recent abortion or the break-up of a relationship. A few of the cases detected may be of a more formal depressive illness.

Crises and problems are common to all teenagers. This study confirms that it is possible to identify a population of teenagers at higher risk of mood disturbance. This risk is related to family problems and these teenagers are more likely to develop a depressed mood in response to problems than are their peers.

This study suggests that 23% of teenagers are suffering from a significant psychological disturbance. In fact the study was not designed to measure the prevalence of such disorder. Banks suggested a prevalence of 3.5% in a group of teenagers contacted through a careers service.[2] An American study suggested that 9% of teenagers would like to receive advice on depression or emotional upset.[12] The overall prevalence depends on the level of symptoms taken to represent a significant disturbance. The results of this study confirm that minor psychological symptoms are common in a population of teenagers.

These results suggest that, within a large population, it may be possible to predict the effect of family stress on children. Within an individual family these patterns of behaviour increase the risk of teenage disturbance, but do not make them inevitable. The outcome reflects the balance between risk factors and protective factors.[13] Knowledge of these risk factors and other details of the family and teenager may make a contribution to the identification of teenagers and families needing help.

Family problems need to be clearly recorded in the medical notes. Tait has described the use of structured record cards to summarize physical, psychological and social problems.[14] A single record card for the family could also be used. If such sensitive information is retained then consideration needs to be given both to the accuracy of the information and to preventing unauthorized disclosure.

Teenagers with a high score on the general health questionnaire attend the surgery more frequently than those with a low score, yet less than one-fifth of them had a record of emotional problems in their notes. Although the more frequent attendance presents an opportunity for intervention, these teenagers do not seem keen on an overt invitation to discuss problems. It seems that most psychological problems which become apparent, do so during consultations for other matters.

How can the general practitioner discover and help the teenager who may be at risk of developing psychological problems? Over a period of time, and over many consultations, a relationship of trust can be built up. This will involve treating young people as individuals from the earliest possible age and not communicating through parents. If, at a later age, the young person wants to talk about anything to do with their physical or psychological health, then these problems can be explored and discussed. More serious psychological problems may thus be recognized earlier and appropriate help given.[13,15]

Disruption within a family can have a major effect on the teenager. The general practitioner is in a position to recognize this and offer help. Failure to offer help may result in the same patterns of behaviour being passed on to the next generation.

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