10. Child psychiatry

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The literature is replete with evidence of major advances in the field of child psychiatry during the last decade. All avenues are being actively explored with both great verve and scientific rigour. One of the more exciting aspects of such advances is the willingness to use whatever techniques appear appropriate to a particular question irrespective of whether they have been developed or modified to deal with problems in other branches of psychiatry (such as the use of multivariate techniques in classification), other branches of medicine (biological techniques of paediatrics) or in relation to other species (ethology). We can therefore again only deal with some of the areas in which important advances have been recorded. These include:

Depression in Childhood has become a highly topical subject. There has recently been considerable debate about the concept, diagnostic criteria and treatment.
School Absence and Refusal is one of the more dramatic conditions presenting in child psychiatry clinics. Older views on psycho-pathology and diagnostic classification have recently been subject to careful scrutiny.
Abdominal Pain in Childhood these common symptoms have traditionally been regarded as trivial, but some recent work suggests that this may be a false assumption.
The Problems of the Children of Immigrants both adult and child psychiatrists in Britain today must have an understanding of the problems of immigrants. This is for practical reasons because, especially in large urban areas, immigrants are likely to form part of their practice. There are also important theoretical issues involved.

DEPRESSION IN CHILDHOOD

For a long time manic depressive disorders were considered to be rare in the pre-pubertal child. There has also been a longstanding resistance to the theory that children can suffer from depressive disorders similar to those occurring in adulthood. The question is whether this historical resistance has any scientific or clinical basis. While there is no new evidence to contradict such views in the case of manic depressive disorders, the situation has changed dramatically in the case of depressive disorders. A vast amount of modern literature now attests that the depressive disorders have assumed an important position as a topic for concern, debate and scientific enquiry. In this paper we therefore confine ourselves to a review of advances in our knowledge of depression in childhood, and discuss such themes as the concept of depression, the relationship between depression in

childhood and the adult, differences in views about diagnostic criteria, classification, prevalence and we finish with a brief comment on response to treatment.

Most authors consider that there are sound theoretical reasons for distinguishing between depressive conditions found in pre-pubertal and pubertal children, and then confine themselves to discussions on pre-pubertal depression (Graham, 1974). One of the arguments for this approach is that the psychiatric conditions manifested in adolescence rapidly become more akin to those in adults than do those in the pre-pubertal period. However, focussing on the pre-pubertal period precludes the question of just how depression in the post-pubertal schoolchild differs from that in the adult, and how that in pre-puberty differs from that in puberty. The gap from pre-puberty to adulthood is so vast that opportunities may be lost in identifying links between morbid conditions at these three different stages of life.

Unfortunately, as yet there has been little attempt to study morbid mood states at different stages of development. The question therefore becomes, in what way does the long list of non-specific symptoms, but especially symptoms and syndromes displayed by disturbed children, resemble and differ from the symptoms displayed by adult depressives, and what continuities are there between the two?

Similarities and continuities

The most competent review of similarities and continuities between the symptoms of sadness and misery and syndromes of psychiatric disorder in childhood and depression in adulthood is that of Graham (1974). He reviews studies under a number of headings. The following summary draws heavily, but not exclusively, on this review.

Epidemiological studies

Rutter et al (1970) in the Isle of Wight study described three groups of disorders—conduct, neurotic and mixed conduct neurotic. The rates of the symptoms of sadness and misery did not differ between the groups, irrespective of whether the information was derived from parent or teacher reports.

Common environmental stresses

When confronted with an environmental crisis the adult may display a morbid change of mood, becoming sad, miserable, distressed, sometimes anxious, sleeping and eating badly—and this combination of features goes towards the diagnosis of a reactive depression. However, children confronted with what can be considered to be equivalent environmental crises may react with antisocial and neurotic symptoms, among which are some reminiscent of adult-type depressive symptomatology. However, this does not appear to be a specific response, as one of the commonest stresses is bereavement. Rutter (1966), although finding a higher than expected rate of bereavement among children attending a child psychiatry department, reports that no specific psychiatric diagnosis was associated with bereavement, and often no association with depression, sadness or misery.

Physical stress

On the other hand, it is well known that certain physical illnesses may be followed by mood changes, such as in post-influenzal depressive states. The

mechanisms by which this occurs are not clear—they may be biological or based on psychological stress.

Familial studies

In his study of ill parents Rutter (1966) found no link between sadness in children and any particular syndrome in parents and vice versa. This is of particular significance because, if there is a higher rate of depression in parents, then the children are both genetically predisposed and culturally at risk of having a depression. This important finding merits replication with strictly defined ascertainment criteria for depression in both children and adults. If such genetic links cannot be adequately demonstrated, then the relationship between childhood and adult depression must be questioned.

Follow-up study

Robins (1966), in her 30-year follow-up study, found that neurotic disorders in childhood were not associated with a higher rate of neurotic or psychotic disorder in adulthood than they were in a control group. Similarly, Dahl (1971) could not find an association between neurotic disorder in childhood and manic depressive disorder in adulthood.

Finally, Pritchard and Graham (1966), in their study of patients seen both as children and adults at the same hospital, thought there was some continuity between the attendances at the different age ranges, but that the child group as adults had lower rates of depressive illness than the total hospital psychiatric patient population.

In conclusion it is evident that, on the basis of currently available research, there is little similarity or continuity between symptoms and syndromes of depression in childhood and adulthood. It is nevertheless possible that such negative findings have occurred because depression in childhood has so far been inadequately conceptualised and characterised. These negative findings must therefore constitute a considerable challenge to researchers and stimulate collaborative research between workers in the child and adult field.

Symptoms and syndromes of depression in childhood

A variety of standpoints have been adopted by workers in this field. The main standpoint is that of Graham (1974) who, on the one hand, distinguishes between pure depressive illness in the pre-pubertal period, which he considers to be rare and which does not give rise to any great diagnostic problems, and on the other, the depressive symptoms of sadness and misery, which are relatively frequent and which are often associated with neurotic and conduct disorders of middle childhood. He considers that the latter are best viewed as reactions rather than illnesses.

The other standpoint is that childhood depression is a genuine entity which is a forme fruste of adult depression. This gives rise to questions about the concept of depression and the features that should be used to characterise it.

One of the cardinal features in adult-type depressive disorders is a mood change which, together with other features, handicaps the child's daily activities. However, this is an area of dispute and only now are workers addressing themselves

to this crucial issue. Some of them argue that we must not expect symptomatology in children to be the same as symptomatology in adult depressive disorders, nor even to be shown as dysphoric moods. This will be touched on later. Frommer (1968) adopts a contrasting position; not only does she describe three types of depression—pure depression, phobic depression and enuretic and encopretic depression—but she also lists a wide range of features including abdominal pain, anorexia, headaches, encopresis and enuresis which she considers to be typical of childhood depression.

Other workers go even further and question whether mood change is a necessary feature of childhood depressive disorder. This latter notion has found favour with certain authors to the extent of them developing two allied concepts of masked depression (Glaser, 1968; Cytryn and McKnew, 1972) and depressive equivalents (Malmquist, 1971). The former is, in essence, a depressive disorder without mood change, and with the symptomatology including such features as hyperactivity, aggressive behaviour, delinquency and learning difficulties, while the latter most commonly manifests as somatic complaints. The arguments in favour of such concepts consist of the association of significant crises or reactions, which are commonly associated with depression in adulthood with diverse symptoms or syndromes in childhood—the findings that bereavement (Rutter, 1966) and suicide (Shaffer, 1974) are often associated with anti-social behaviour; then there is the phenomenon of symptoms shifting with age so that children may produce different (disguised) symptoms at younger ages. Others see such features as simply being presenting or referral symptoms and not necessarily features which contribute to the characterisation of the underlying syndrome; or as attributable to non-specific psychological disturbance which constitutes behavioural colouring appropriate to that age and stage of development (Kovacs and Beck, 1977). The problem with such notions is that they extend the concept of depression so widely that the majority of childhood behaviour disorders could be viewed as being depressions. A variation of the original concept of masked depression might prove more acceptable—this consists of a condition where the more fundamental dysphoric mood is concealed by the florid non-specific behavioural symptomatology rather than there being an absence of mood change. This is a reasonable possibility as many of the behavioural check lists do not specifically focus on mood changes and hence they may have been missed. Then there are others who describe depression in more abstract terms such as a negative self-image (Ponznanski and Krull, 1970) or loss of an ideal state (Sandler and Joffe, 1965).

Finally, there are those who argue that the picture in childhood and adult syndromes are broadly similar, but that in childhood there are some additional unique features (Kovacs and Beck, 1977). From their review of the literature, Kovacs and Beck claim they can recognise in childhood the groups of additional symptoms found in adult depressive syndrome—affective changes, cognitive changes, motivational changes and autonomic disturbances. The closest to the approach advocated by Kovacs and Beck is that of Weinberg and colleagues (1973). They list a number of features considered to be representative of depression, such as aggressiveness, suicidal thoughts, sleep disturbance, falling off of school performance, loss of appetite, social withdrawal, somatic complaints, loss of mental energy and loss of physical energy. This approach appears to be

attractive as their list of diagnostic criteria contains certain clinical features similar to those considered to be characteristic of adult depression. In order to be diagnosed as depressed, the children had to have the primary symptoms of a dysphoric mood and express self-depreciatory ideas, but, in addition, needed to have at least two of the other eight secondary symptoms, which include aggressive behaviour, sleep disturbance and somatic complaints. This important research has two major limitations—first, sadness and misery are not uncommon in childhood (Graham, 1974) and if dysphoric mood is used as a primary symptom it must be qualified by a statement as to degree or severity, otherwise the concept is so widened as to become meaningless (Werry, 1976). Hence only the extreme variations of primary symptoms should be considered to be abnormal. Second, some of the secondary symptoms are also so common in disturbed children that they cannot be considered in any sense to be specific to depression. It is therefore not surprising that almost 60 per cent of Weinberg and colleagues' clinical sample were diagnosed as depressed (42 out of 72). It seems likely that similar cases are likely to emerge from a study of a clinical population using a behaviour checklist and diagnosing those children as depressed who achieve more extreme scores. There is considerable support for this hypothesis in the preliminary study of Albert and Beck (1975). The over-diagnosis achieved by the Weinberg et al (1973) study stands in sharp contrast to the very low rate reported by Poznanski and Zrull (1970) in their description of affective depression in 1788 children.

Other workers (Kovacs and Beck, 1977) are trying to apply to children, scales developed for adult depressives. Such scales, despite modification, still produce unacceptably high rates of depression in child psychiatric populations similar to those found by Weinberg et al. Limitations of such self-report scales of depression have been discussed by Nowels (1977) who points out that the concepts used may have a rather different meaning for children than for adults and that there is a wide variation in the ability of children to respond meaningfully to the questions used. It would seem that both sets of scales discussed above suffer from similar deficiencies. We can only conclude that such techniques do not as yet have sufficient validity.

Delineating a syndrome of depression

Workers in the field of adult psychiatry have pioneered various methods of delineating a syndrome. The first and classical method is the clinical approach which entails a detailed study and description of phenomena and, where possible, includes a study of the onset, course and natural history of the condition. For childhood depression one would study in this way a series of cases among whom are a number who are unequivocally depressed. On the basis of this approach a decision is made as to whether a cluster of features can be identified which conform to a pattern sufficiently characteristic to be considered a circumscribed disorder. This exercise usually also incorporates the development of agreed patterns of criteria necessary and sufficient for the diagnosis of childhood depression (Gittelman-Klein, 1977). We believe that these diagnostic criteria should be phenomenological as they would then lend themselves more easily to quantification. Subsequent frequency analysis of all features would ensure that

the diagnostic criteria would be based on a firm statistical basis rather than being determined by clinical impressions alone.

Childhood depression has been studied sufficiently for us to make some suggestions about diagnostic criteria. While it would be unwise to use a dysphoric mood as the cardinal diagnostic criterion, both because of its frequency (Graham, 1974) and because the diagnostic value of an individual behavioural symptom is limited, in the current state of knowledge it would seem unwise not to use it as one of the primary diagnostic criteria. It would be necessary to ensure that such mood changes are of reasonable duration and are sufficiently durable to be only poorly reactive to environmental changes (Anthony, 1967). Gittelman-Klein (1977) also places emphasis on the child's reduced ability to experience pleasure as part of the mood change. The next most likely contender for inclusion is suicidal ideation. However, Gittelman-Klein (1977) points out that the reported research into suicide suggests that, in a high proportion of suicidal children, there is no associated depression (Koski, 1971; Shaffer, 1974). Loss of energy could similarly be considered to be one of the primary criteria. Statistical analysis of data from clinical studies will help to identify other primary diagnostic criteria.

This phenomenological approach should subsequently be supported by comparative studies of family factors, of life circumstances and life events, etiological and genetic factors, prevalence, outcome, premorbid personality, etc. Furthermore, the specification of clearly defined ascertainment criteria constitutes an essential prerequisite to clinical studies, which are undertaken to validate instruments currently being developed to identify depression in childhood. However, such an exercise is often bedevilled by problems of reliability of clinical judgment and also by the varying ability of children at different ages to respond to the questions asked (Nowells, 1977).

Clinical research of this kind will enable workers to subclassify depressive disorders either by type, by age or both. So far most of the work on depression in childhood has been confined to the clinical approach described above.

A more sophisticated approach consists of applying multivariate analyses, such as factor analysis, to identify factors of depression, or cluster analysis to try to identify groups of depressed children. Another multivariate approach consists of discriminant function analysis in which one attempts to ascertain whether two mutually exclusive populations of patients can be significantly discriminated one from the other, and thus to discover if genuinely distinct conditions have been identified. This technique has been used by Pearce, but unfortunately, his work has not yet been fully reported in the literature.

Pearce took 547 children who had attended the Maudsley Child Psychiatry Department. About a quarter of them had the *symptoms of depression* and Pearce compared these with a larger group of maladjusted children with other disorders. In the preliminary analysis the group with the symptoms of depression proved to be older, more severely disturbed, came from more disturbed family backgrounds and had experienced more in the way of psychosocial stresses than had the other group. With regard to other symptoms they had more suicidal ideas, more ideas of reference and more persecutory ideas. Other evidence of disturbance was present in the group with the symptoms of depression, including obsessions and school refusal, and vegetative disturbance including eating and sleeping problems.

Pearce undertook a discriminant function analysis in order to ascertain whether he could identify discriminants between groups of children with the symptom of depression and those without. He found that a third of the children with the symptom of depression had more in common with those without the symptom. This is an important finding as it indicates that not all children with the symptom of depression suffer from a syndrome of depression. Furthermore, 11 per cent of those without depression (approximately 46 children) were classified as being depressed when using the discriminant function analysis. In addition, many of the symptoms previously thought to be depressive equivalents, such as enuresis, aggression and stealing, were found to be negatively associated with the depressive symptom.

Classification

Much of the current view on diagnostic criteria and classification of the depressive disorders of childhood has been made on clinical impressions and theory whereas, according to Rutter (1965), an acceptable classification should be based on the fact and the categories need to be operationally defined; it should convey clinically relevant information, and the aim should be to classify the disorders, not the children. Such an approach to classification needs to be based on empirical research rather than on theoretical models (Shepherd et al, 1968) but at present we are more reliant on the literature than on information from an empirical approach for the development of diagnostic criteria. Nevertheless, on the basis of the more recent literature there is sufficient knowledge to attempt a biaxial preliminary classification—the first phenomenological and the second etiological. The first axis contains the following categories:

Pure depression—this is a syndrome in which the depressive symptomatology is predominant, pervasive and durable and therefore fairly resistant to situational changes. The symptomatology is reminiscent of adult depression. The condition is more likely to have an acute onset and occurs more frequently and characteristically in the older child.

Mixed depression—this is of two types. First, there is phobic depression—usually associated with a fear of leaving home or attending school, and which may precede or follow the onset of reluctance to attend school. Second, there is depression with neurotic or antisocial disorder. In these groups, though the phobic neurotic or antisocial symptoms are widespread, the most prominent symptoms are still dysphoric ones. Some may consider that a number of these cases should be included in the previous category.

We are then left with the so-called depressive equivalents and masked depressive states. We consider that the former should be included in the mixed depressive category only if the dysphoric symptomatology is sufficiently prominent; otherwise they should be viewed as essentially neurotic disorders with some associated depressive symptomatology. Nor should the masked depressive states be included until empirical research demonstrates a relationship between such states and more obvious depressive disorders on a wide variety of features.

The second axis is etiological and its categories are still poorly defined. Initially we can only suggest a division into endogenous where there are no obvious

precipitants, and secondary. The latter consists both of physical precipitants, such as when a depressive disorder occurs soon after an influenzal illness, and psychosocial precipitants. There would be grounds for arguing that the depressive syndrome was secondary if the child was experiencing acute or chronic intercurrent stress. However, there might still be speculation whether the depressive syndrome was secondary to the environmental stresses or a secondary reaction to and superimposed upon widespread neurotic symptoms.

Prevalence

With the many questions about the concept of depression, diagnostic criteria and classification, it is no wonder that there are widely differing estimates of prevalence. The prevalence rate depends on the broadness of the definition used and the wide range of symptoms seen as representative of depression: the broader the definition, the higher the rate; the narrower the definition and the more specific the criteria, the lower the rate. The rates therefore vary according to those who deny the very existence of depression in childhood or those who consider it to be very rare (Graham, 1974; Makita, 1973), to those who view it as common and see a large number of common symptoms in childhood as being pathognomic of depression (Frommer, 1968). Perhaps closest to Frommer's views are those which see depression as being masked (Glaser, 1968; Cytryn and McKnew, 1977). As already discussed, an acceptance without qualification of the concept of masked depression and depressive equivalents would allow most conduct and neurotic disorders to be perceived as depressive equivalents (Werry, 1976). Using the epidemiological data of Werry and Quay (1971), Leftkowitz (1977) calculates that if a wide range of symptoms were considered to be diagnostic of depression in childhood, then 22 per cent of boys and 18 per cent of girls in ordinary elementary schools could be judged to have depressive disorders! It is our view that a more rigorous concept and criteria are necessary for the concept to be scientifically credible and the syndrome to have any clinical value. When more rigorous criteria are used, the prevalence rate in the general population is low but increases with age. For example, on the Isle of Wight (Rutter et al, 1976) depression is described as about 1 to 2 children per 1000 population at the age of 10–11 and 15 per 1000 of the population in adolescence. On the other hand, depressive symptomatology is described in 10 per cent of the population at 10–11 years and 20 per cent of the population in adolescence. As already described, Weinberg et al (1973), using a broad set of criteria, rate nearly 60 per cent of their clinical sample as depressed—so that the syndrome rate in their USA clinical sample is much higher even than the symptom rate of 25 per cent described in a UK in-patient population (Pearce, 1974).

Treatment of childhood depression

So far, most of the studies on the drug treatment of depression have been poor methodologically. Those undertaken have been criticised on a number of grounds—heterogeneity of the patient population, the lack of specified criteria for diagnosis of depression, lack of specified criteria for improvement, lack of controls and the lack of double-blind techniques. In a recent survey of earlier literature, Rapoport (1977) concludes that, so far, there is inadequate evidence of drug efficacy.

SCHOOL ABSENCE AND REFUSAL

'School phobia' is a misnomer for a heterogeneous collection of mainly neurotic disorders associated with a profound reluctance to attend school. Nevertheless, the early writers appeared to take the view that this was a homogeneous condition. The theories advanced to explain the bases of this group of disorders were to a large extent governed by the psychotherapeutic school to which the clinician belonged. Those belonging to psychodynamic schools are more likely to find dynamic theoretical explanations acceptable; those who are behaviour therapists are likely to find learning theory explanations acceptable and biologically orientated clinicians are inclined to explore the genetic relationship between 'school phobia' and adult neurotic and depressive illnesses. As one would expect, there is also considerable divergence of opinion about treatment.

In this paper we intend, in the main, to focus on classification, as we believe that a logical classification with a scientific basis in empirical research will bring some order to this complex field, and will improve the chances of identifying explanatory mechanisms that are likely to achieve more general acceptance and place treatment on a sounder footing. However, in order to help the reader to have a better appreciation of the basis of our classification, we will first describe the clinical picture, explanatory mechanisms and family factors. We use the term 'school refusal' to refer to those conditions with a predominantly psychological basis.

Clinical picture

While there has been some disagreement about the clinical picture, most of the patterns described coincide reasonably well and therefore merit rather brief description. One important area of disagreement is the pattern associated with the *type of onset*—it may be *insidious* or *acute* or with an acute episode superimposed on a more chronic pattern (Berney et al, 1979). The age of onset of the more acute type is bimodal with a peak in the junior school years and in the early adolescent stage (Baker and Wills, 1978). Coolidge et al (1957) describe the group with an acute onset as being previously normal children, younger than those with chronic onset, and from well-adjusted families. Berg et al (1969) describe the children in the acute group as being more independent and older, and significantly less neurotic and maladjusted personalities. Baker and Wills (1978) describe the acute condition as occurring more commonly in adolescence and often precipitated by evident stress. In school refusal with a chronic onset, Coolidge (1957) describes the children as being older than those in the acute group, with sensitive and poorly socialised premorbid personalities and with a background of neurotic disturbance in mothers. Hersov (1960) also reports that the chronic type occurs in older children and adolescents. Baker and Wills (1978), in contrast to Berg et al (1969), found a higher incidence of mental illness in the parents of their chronic group—they also describe younger mothers with large families coming from the lower socio-economic classes. Finally, in a recent study, where discriminant function analysis was used, there proved to be only a moderate substantiation of the distinction of acute and chronic types of school refusal (Kolvin et al, 1979).

The *earliest symptoms* about which the children often complain are somatic—

they include loss of appetite, nausea, headaches, abdominal pain or other vague discomforts (Schmitt, 1971) and, as such, they imitate a wide range of medical disorders. Alternatively, the child may present with complaints about some aspects of school or schooling. Manifest anxiety, and its more acute somatic correlates, become more evident as school attendance draws nearer. Such symptoms often build up rapidly over the period just before attending school, in anticipation of a return to school, and therefore are particularly evident early in the morning, especially on Mondays, at which time the mounting anxieties may give way to panic. Some children reluctantly get to school, some get half-way there and then make desperate bids to return home, while others make a bolt for home during school hours. A common pattern consists of child being fearful and quite incapable of leaving home without parents—a reaction which is termed 'separation anxiety' and which is associated with excessive dependency on parents. A less common pattern consists of general anxiety, involving less hesitancy about separation from parents but leading to paralysis with fear at the idea or actuality of attending school.

The majority of children who do not get to school are described as having *compliant and conforming* personalities when at school, and a retreat from social situations and recreational activities is often described. Other descriptions include excessive passivity, dependence and inhibition (Hersov, 1960). In contrast to the personality pattern which emerges at school, at home they are often described as being wilful and stubborn (Hersov, 1960), argumentative, bossy to other members of the family and prone to outbursts of temper. A more recent clinical study has endorsed the picture of separation anxiety, excessive dependency and high self-expectations (Waldron et al, 1975). However, other work has not confirmed the excess of wilfulness in school refusal compared with other neurotic disorders of childhood (Berg, 1974).

As opposed to their tendency to incriminate some *adverse experiences* within the school or schooling, children with school refusal tend not to be described by the school staff as having educational or behavioural problems (Hersov, 1960). However, Berg's work (1975) suggests that their achievements may have been exaggerated because age and intelligence have usually not been adequately allowed for in most studies. Nevertheless, poor educational achievements are not infrequent amongst phobic children who are of average intelligence (Chazan, 1962). Real learning difficulties do occur, and should be suspected.

Explanatory mechanisms and family factors

Almost without exception, the child and parents assiduously seek a cause; they usually see this as lying beyond the home, and related to the school, schooling, school staff or relationship with peers. Explanations suggested by the early literature include fear of separation from parents or home, and the anxieties and fears attendant on leaving parents and going to school, termed '*separation anxiety*' (Johnson et al, 1941; Klein, 1945; Kahn and Nursten, 1964; Hersov, 1960). This has been expanded to include an inability to cope with the adjustment of new life experiences (Moore, 1966). Workers such as Eisenberg (1958) and Johnson et al (1941) postulate that underlying the condition is an over-expanded mutually dependent and hostile mother-child relationship with anxieties on separation from

the parents. Systematic research does not suggest that this is universally applicable, with rates varying from about a third of cases (Smith, 1970) to three-quarters or more (Waldron et al, 1975; Berney et al, 1979). While differences in definition are likely to play a part, it does not appear to be an age-related phenomenon as high rates are reported in groups of children with wider age ranges (Waldron et al, 1975; Berney et al, 1979). One possibility is that severe separation anxiety may be the cardinal characteristic of one sub-type of school refusal but may occur only in varying degrees in others. Others have emphasised the mutual clinging interactions of mother and child (Eisenberg, 1958) or other parental factors such as overindulgence, inconsistent discipline and marital disharmony. A more recent study emphasises the tendency for the child with school refusal, rather than the husband, to be excessively important to the mother (Waldron et al, 1975) and separation anxiety may therefore primarily be a response to mothers' reactions.

As implied earlier, it has been suggested that the child with school refusal has an *impaired capacity for independent functioning* (Waldfogel et al, 1957) and thus an inability to cope with family and environmental changes, such as starting school, changing schools and in anticipation of leaving school; or is particularly vulnerable in the face of recent crucial life events, such as bereavement, parental illness, personal physical illness. Waldron et al (1975) report that significant life events were identified in nearly half of their cases but only in under a fifth of children with neurotic disorders. This rate is roughly similar to the 66 per cent reported by Hersov (1960) and the 50 per cent noted by Davidson (1960). The hypothesis is that such family and personal physical and mental illness may hinder the development of independence of the child. Nevertheless, such life events are relatively common experiences and thus we doubt if they are sufficient to precipitate school refusal unless they occur against the background of a vulnerable family or a child with a vulnerable personality, or both.

The pattern of dependence of child on the parents has had some objective validation by Berg (Berg and McGuire, 1971; Berg, 1974; Berg et al, 1978). Using a dependency questionnaire—a self-rating instrument completed by mothers—they showed that children with school refusal were significantly more dependent than the normal population. They also demonstrated that the mothers of such children would prefer them to be even more dependent. One interesting suggestion (Hersov, 1960) is that such children have been less exposed to separation from their parents than truants, the implication being that separation may have positive effects of improving the child's capacity for independent functioning.

The central importance of the anxiety-laden or anxiety-prone personality of the mother has been emphasised in early reports and literature (Johnson et al, 1941). Later writers focus more specifically on the family contribution either in terms of a type of total family neurosis (Malmquist, 1965; Skynner, 1974) or the alleged passive and ineffectual personality of father which prevents him from asserting himself in the face of an over-expanded mutually dependent mother-child relationship (Davidson, 1960; Skynner, 1974). Bowlby's (1973) summary of his views of the operant psychodynamics is most plausible and attractive. He identifies four patterns of pathological family interactions:

First: The parents, but especially the mother, on the basis of chronic anxiety regarding attachments, keeps the child at home to be a companion.

Second: The child is worried lest something happens to parents but usually the mother, while he or she is at school, and so prefers to remain at home in order to prevent it occurring.

Third: The child is fearful about something unpleasant happening to himself while at school and again remains at home in order to prevent it occurring.

Fourth: The parents, but usually the mother, are fearful that something unpleasant will happen to the child while he is at school and so prefer to keep him at home.

Reports such as those by Eysenck and Rachman (1965), Kahn and Nursten (1962) and Kennedy (1965), suggest that such patterns may be valid. Other factors which are considered to be important are the child being worried about parental ill health, but particularly mental health; that the child is almost anticipating death, illness or threats of illness to the parents if the child does not behave. Again, there is some evidence from the literature to suggest that there is some truth in such views (Klein, 1945; Garvey and Hegrenes, 1966).

Diagnosis and classification

The last 40 years have seen a focussing of interest of research workers from psychiatry, sociology, psychology and education on children who absent themselves from school. The reasons for such poor attendance are protean and it is not surprising that workers attempted to achieve some order in this field by developing a systematic classification. The earliest attempts were by Broadwin (1932) who distinguished a small 'neurotic' sub-group among truants, with particular emphasis on neurotic or personality problems of an obsessional type. The next milestone in the attempt to delineate sub-groups was the work of Johnson et al (1941), who applied the label 'school phobia' to a small sub-group of neurotic children. Johnson saw a similar broad distinction and described two types of disorder—the first based on delinquency, and the second based on a more deep-seated psychoneurotic condition. These workers also made an attempt to clarify the picture by providing clinical descriptions of sub-groups and also by comparative studies. In this way, Broadwin and Johnson laid the foundations for subsequent work and research. The masterful original description of the sub-groups of children who truant and who are unable to attend school for psychological reasons, drawn by Broadwin, has subsequently largely been substantiated by both Warren (1948) and Hersov (1960). Indubitably, the most systematic of these studies was that of Hersov, but Cooper (1966) has also made a useful contribution. Hersov studied two polarised groups of truants and phobics, and compared them with regard to a wide variety of family factors and child behaviour. The distinction between these poles can be summarised as follows.

The families of the 'school phobics' have a higher rate of family neurosis; have had less experience of maternal absences; are exposed to more consistent, but a rather over-anxious type of discipline and come from smaller families. In the case of truants, the rate of neurosis in the family was considered to be lower; they were exposed to more parental absences, especially of father; the discipline was

less consistent and the family size was larger. At school the 'phobic' children's work was considered to be of good standard and when actually at school they conformed more; they had had less frequent changes of school, and, when they were not at school they displayed considerable concern about the work they were missing. As far as personality was concerned, the 'phobic' children were found to be passive, dependent and over-protected. The truants' work at school tended to be poorer; their behaviour tended to be more undisciplined and they also had more frequent changes of school; and, finally, they tended to display lack of concern about their poor attendance.

The attempt to distinguish sub-groups by comparing poles has not always met with approval (Tyerman, 1968). The crucial question is whether the characterisation of poles is an artificial academic exercise because one is really dealing with a spectrum of disorders. For example, as has been shown in relation to boys on remand by the courts for not attending school, a substantial proportion of the phobic/truant population falls within the middle of this spectrum (Tennent, 1969). Furthermore, characteristic pictures of syndromes are best drawn from comparisons with normal control groups because polar contrasts are likely to produce caricatures. Nevertheless, most clinicians continue to find these polar characterisations a useful guide when drawing pen portraits of the individual child. However, it should be emphasised that within a spectrum there may be a number of continua of environmental factors and child behaviour. Hence, in the clinical formulation, one often has to locate the individual case along family social adversity and family mental health continua. Similarly, the child's behaviour needs to be located along a number of continua—anxiety at separation or change, specific fear of school, concern at missing school and various measures of premorbid personality.

The endeavours of these early workers have now been overtaken by advances in knowledge both with a theoretical and empirical basis. It may, therefore, be helpful to present a more modern classification of poor attendance at school and also discuss the categories delineated.

Poor attendance at school can be described as falling under the following three main headings:

1. In association with *serious* or *chronic physical illness*.
2. In association with *social malaise*. Here there are two sub-groups namely—*first*, children who are kept at home by their parents or stay at home for *domestic reasons*; and, *second*, the more usual form of *truancy*. Obviously, in certain cases there will be overlapping between the two.
3. *As a symptom of a major psychological syndrome:*
   a. Syndromes where school refusal is the *most prominent symptom*—this is divided into three sub-categories:
      (i) *Separation anxiety* type—this type of school refusal is reminiscent of the classical picture described by Adelaide Johnson where the children are unable to attend school because they are beset by anxieties about separating from the home or their parents. It is commonly referred to as 'school phobia'.
      (ii) Where there is a *specific fear* of school and schooling (Eysenck and Rachman).

(iii) As part of a *complex widespread neurosis* (Coolidge and Brodie, 1974).

b. *Where school refusal is a subsidiary symptom*—this occurs in two major conditions, namely, *depression* of childhood and *schizophrenic* type illnesses.

Adelaide Johnson saw school refusal as having family determinants, with the child being incapable of attending school because of an anxiety about leaving the home or the parents. Behaviourally orientated researchers would view the self-same syndrome as a neurotic pattern of behaviour reinforced by the parents, and would further point out that a *specific fear* of school or schooling has been demonstrated in a small percentage of cases (Eysenck and Rachman, 1965; Ross, 1972). It is interesting to note how the school refusal syndrome can be viewed as having different explanatory mechanisms by workers with different psychological standpoints: some consider that it has a dynamic interactive basis with the child developing fears of leaving home, while others contend that it is based on a fear of school, which is learnt maladaptive behaviour. In either situation, the anxiety or fears of mother and child may be reciprocally enhanced or reinforced by the other (Eisenberg, 1958; Yates, 1970). Hence, anxiety about leaving home may be reinforced by the mother as may the fear of attending school. In such circumstances, the return to home or to the mother may in itself be a fear- or anxiety-reducing phenomenon. The child may also react with anxiety to parental anticipatory fears about new situations. Furthermore, heightened anxiety states in the parents or actual anxiety-provoking experiences in the school, may lead to the child and parents interactively reinforcing each other and thus perpetuating each other's anxieties about separation or changes. In many ways, therefore, the psychopathological mechanisms are far more complex than previously imagined.

That depression has been associated with school refusal has also been known for more than 30 years (Warren, 1948). Some aspects of the relationship of depression to school refusal has already been considered in the previous section. It is, however, worthwhile emphasising some of the issues. Some workers consider that depression may be just one symptom of a school refusal syndrome which essentially has a neurotic basis. Others consider that depression constitutes a more fundamental disorder with secondary neurotic symptoms (Frommer, 1968), or that it may be concealed by more florid neurotic symptomatology (Kolvin et al, 1979), or may remain unrecognised because of the atypicality of presentation. Yet again, it may constitute a sub-syndrome amongst a wider group of school refusers. Variations of the above themes are, that there is an affective continuum in school refusal, with mild cases presenting mainly with neurotic symptomatology, while at the other end are more severe cases presenting mainly with depressive symptomatology (Kolvin et al, 1979).

We do not know as yet whether school refusal is associated with the symptom of depression, or whether there is a fundamental depressive state with secondary neurotic features which include school refusal, or a fundamental neurotic state which extends into depression, an affective continuum, or two distinct syndromes which share some fringe symptomatology. There are signs that current research will begin to provide answers to some of these questions. For instance, Gittelman-Klein and Klein (1971) are opposed to the view that there is a fundamental underlying depressive disorder in the school refusal syndrome, because they have

found that children are able to experience pleasure and retain a sense of competence in school refusal. From a study using multiple approaches to classification—first, a clinical classification based primarily on phenomenology; second, discriminant function analysis and, finally, factor analysis—one group of workers have demonstrated that the main distinction lies between school refusal *with* and *without* depression (Kolvin et al, 1979).

Prevalence

Recent parental reports provide evidence that a high proportion of normal junior school children are uneasy about school, with about 10 per cent not liking school and 40 per cent having some kind of school problems (Kolvin et al, 1977). Clearly such minor variations must be excluded when considering prevalence. For such reasons rates must be tied to the definition employed and the population studied and hence it is difficult to provide agreed figures. If the definition includes both complete inability to attend school and also marked reluctance to attend, with attendance being achieved by means of considerable coercion from parents or representatives of the education authority, then the figures described in the literature would seriously underestimate the problem. If the definition is inability to attend school for at least one consecutive month of the school year, it would exclude children who had great difficulties in getting to school, but an ability to get there occasionally; this, again, would underestimate the problem. A more useful way of presenting prevalence data would be as rates by severity, with each degree of severity defined—such as—*very severe*, consisting of a complete inability to attend school; a *grave inability* to attend school, when the child manages to attend some of the time; a *moderate degree of severity*, where there is profound reluctance to attend school, but the child manages to attend most of the time. Even providing rates by severity would create problems as this definition does not take coercion into account. Hence it may be necessary to offer a second dimension varying from considerable to moderate or little—in relation to the pressure applied by family and community agencies.

Bearing the above reservations in mind, it is not surprising that prevalence rates in clinical samples in the United Kingdom are described as being as low as 1 per cent (Chazan, 1962), and as high as 8 per cent by a group of workers who are particularly interested in the condition (Kahn and Nursten, 1962). In their epidemiological research, Rutter et al (1976) report a rate of below 0.7 per cent in 14-year-olds. However, this important research was not specifically geared to studying school refusal at any depth and we therefore believe that it is unlikely to reflect the less severe categories described above, nor the degree of pressure applied by parents or community agencies.

Another question that has to be answered is the rate of depression in school refusal. This is variously reported in the literature as ranging from 20 per cent (Hersov, 1960) to over 50 per cent (Davidson, 1960). However, more extreme rates are reported which are dependent on the theoretical orientation of the clinicians. Hence, Gittelman-Klein and Klein (1971) deny the presence of a fundamental depressive disorder in 'school phobia', whereas Frommer (1967) finds it universally applicable.

Treatment and outcome

Treatment, too, is often dependent on the psychological orientation of the clinician. Those with a psychodynamic orientation have tended to advocate either psycho-analytical psychotherapy for the child, or general psychotherapy for the child and parents (Johnson et al, 1941; Estes et al, 1956). More recently conjoint family therapy has become fashionable (Skynner, 1974).

It would be sensible to precede an account of the behaviour modification approach with some discussion of the contentious subject of return to school. Some authorities advocate a withdrawal of all pressures and a delay in return to school until the deep-seated neurosis from which the child is suffering has been adequately resolved (Johnson et al, 1941). Other authorities advocate an early return to school, on the grounds that continued absence from school reinforces the view that the school is a pathogenic situation, and also fosters continued collusion between the parents and child about maintaining the status quo. They also contend that it reduces opportunities for improving socialisation outside the home, and therefore independent emotional growth, and for continuing the normal educational programme. Yet others advise that the clinician should sensitively determine the most strategic time for returning the child to school because, if this is too early, pressure may well give rise to catastrophic reactions which may include the contemplation of suicide (Davidson, 1960).

In contrast, learning theorists advocate the use of behaviour modification. Lazarus (1960) claimed considerable success with desensitisation techniques, and variations of these are of interest. One such variation consists of desensitisation at the level of emotive imagery, and was developed by Lazarus and Abramowitz (1962). However, difficulties may be encountered because of lack of motivation or poor ability to participate in the establishment of hierarchies or an inability to produce the required images on demand or to maintain them. Systematic desensitisation has been used by some workers to deal with either the specific fears of school or the total school refusal situation (Kennedy, 1965; Lassers et al, 1973). Garvey and Hegrenes (1966) employed a graded approach to the school, with the child initially being accompanied and supported, which they considered the least anxiety-provoking situation, with a gradual full return to school, which was the most anxiety-provoking situation. Their technique clearly had respondent conditioning components but other workers have employed a more explicit and systematic operant framework (Patterson, 1965). More recently even the use of implosion has been explored (Smith and Sharpe, 1970).

One of the studies with a large sample is that of Kennedy (1965). He differentiated between children with school refusal, coming from relatively stable and harmonious homes, with whom he reports considerable success, and those coming from homes with wider social and adjustment problems, which he reports are likely to prove more resistant to treatment. Unfortunately, as there has been no comparison, control or follow-up studies, it is not possible to come to any conclusion about the relative efficacy of behaviour modification. In addition, some experts advise caution in the use of these techniques as their deceptive simplicity makes them attractive to the inexperienced and to the untrained (Ross, 1972).

Despite the lack of comparison or follow-up studies, whatever the form of treatment, the outcome appears to be good (Hersov, 1960; Davidson, 1960;

Kennedy, 1965). This is particularly the case for younger children (Rodriguez et al, 1959) and even in those adolescents in which the condition is severe enough to warrant admission to an inpatient unit (Berg, 1970). However, it has been pointed out that return to school does not necessarily imply adequate resolution of the underlying neurotic problem. For example, a follow-up study of adolescents admitted to a psychiatric inpatient unit (Warren, 1965) suggests that resolution may be far from complete, as over 60 per cent had serious adjustment problems six or more years after discharge.

The value of antidepressants has been questioned. There have been only two controlled studies, one of which reports positive and the other negative effect (Gittelman-Klein and Klein, 1971; Berney et al, 1979). On the other hand, common sense suggests that some psychopharmacological agents may be useful as adjuvents to other forms of treatment. For instance, hypnotics may be useful in helping the anxious child to get to sleep, and anxiolytics may be used to reduce anxiety, both generally and in relation to attending school, and also for making the child more accessible to psychotherapeutic intervention.

In modern child psychiatric practice, dogmatic approaches to treatment and management tend to be less and less evident, the current fashion being to tailor treatment to the individual and the family using a judicious combination of techniques—psychodynamic, behavioural and pharmacological.

RECURRENT ABDOMINAL PAIN IN CHILDHOOD

The size of the problem

That abdominal pain in childhood is an extremely common symptom has been confirmed in a number of epidemiological studies. Apley (1975) as part of an early and wide-ranging study, questioned 1000 schoolchildren of ages 4 to 15 attending a routine school medical examination. He found the prevalence rate for current abdominal pain (defined as three incapacitating episodes of pain over a time period of at least three months within a year of questioning) to be 9.5 per cent in boys and 10.8 per cent in girls over childhood as a whole. Øster (1972) also used the school medical examination as the starting point in his 8-year study of children between the ages of 8 and 19 years. He found a prevalence rate rather greater to that of Apley at 16.7 per cent for girls and 12.1 per cent for boys. Cullen and MacDonald (1963) studied 3440 children and found a prevalence of 5.6 per cent with boys in slight preponderance. Other studies have provided prevalence rates based on whole population screening by questionnaire. This method, while possibly based on a more complete sampling, suffers from the serious disadvantage that a clinical evaluation of the symptom, its context, duration and handicapping qualities cannot be made. In the National Child Development Study (Pringle, 1966) the rate of 'periodic abdominal pain' was 15.7 per cent for girls and 14 per cent for boys at the age of 7. In the Isle of Wight Study, in response to a single questionnaire item at age 10–11, the prevalence rate was 3.6 per cent for boys and 6.2 per cent for girls (Rutter, Tizard and Whitmore, 1970).

In an attempt to overcome some of the difficulties of the above studies and establish a community-based prevalence rate, we have analysed interview data derived from the Newcastle Child Development Study. This used a focussed

interview technique with standard probes and five-point scales to interview parents of a random sample of children at age 5. The points of the scale were all clearly defined. The sample was reinterviewed when the children were 7 (Kolvin et al, 1975). At age 5, 8.5 per cent of the children had abdominal pain at least four times per month, while at 7, this had reduced to 4.5 per cent who had pain at least four times per month. At age 5 there was a slight preponderance of girls (9 per cent) to boys (8 per cent).

Three studies have compared prevalence rates over a wide age range. While all showed age-related differences, the patterns in the three studies were rather different. Apley (1975), in his school study of 1000 cases showed a peak for both sexes at age 5–6 and a second peak for girls at age 10–11. Øster's (1972) study showed a peak for both sexes which reached 21 per cent for boys and 30 per cent for girls at age 9. Cullen and MacDonald (1963) used an interview method in a general population study of 3440 children. They found a peak prevalence for boys at age 10–11 and of girls at 7–8. This is almost the complete reverse of Apley's (1975) findings. Øster's study was based on 18 162 observations. Although he does not report the thorough clinical examination that Apley does, he did collect his data by standard questioning. It is therefore interesting that his age-related differences fall between the extremes of the other two studies.

Symptomatology

Apley (1975) discussed the site, nature, severity, time relations and duration of the pain. The only feature that was helpful in indicating an organic cause of the pain was where it was situated laterally in the abdomen. The pain could be very severe. In 10 per cent of cases it could make the child cry, it could wake him from sleep, it could last for up to several days and in a quarter of cases the temperature was raised. None of these factors was found to be helpful in indicating an organic cause of the pain.

There are a number of symptoms which are commonly associated with abdominal pain in childhood. In Apley's (1975) series nearly two-thirds had a history of vomiting, one-fifth had headache, pallor was present in half the cases and in one-quarter there was sleepiness after the attack. In 5 per cent of cases the temperature was raised. Those associations are in line with common clinical experience and in recognition of this, recurrent vomiting, abdominal pain, fever and headache were grouped together by Wyllie and Schlesinger (1933) as the *periodic group* of disorders. MacKeith (1955) has suggested that diurnal limb pains should be added to this list of commonly associated symptoms. Before considering this issue further, it is necessary to discuss briefly those cases where there is a more tangible underlying disorder.

Underlying organic disease

It is only in a minority of cases, for example, 8 per cent of Apley's (1975) hospital series, that an organic basis for the disorder is found, although it must be remembered that future research may reveal other organic problems. Dodge (1976) provides a list of disorders of the gastro-intestinal tract, urino-genital tract, liver, spleen, pancreas and the central nervous system which, together with drugs and metabolic disorders, may give rise to recurrent abdominal pain with trouble-free

intervals. He advises that in abdominal pain in childhood, the minimal investigations should include a urinalysis, haemoglobin, white count and film and an ESR.

Evidence of a syndrome

It was suggested earlier that there may be a cluster of symptoms; abdominal pain, headache, fever, vomiting and limb pains which occur together with sufficient frequency to be considered as a group. This raises the question of whether recurrent abdominal pain should, after exclusion of organic disease, be considered as one of a cluster of symptoms which together constitute a definable syndrome.

There are a number of ways in which one could attempt to delineate the syndrome. First, we should be able to confirm the clinical impression of a cluster of related symptoms using quantitative techniques. Øster (1972) appears to be the only author who has attempted to do this. He reports that among 2178 children seen in a single year, 37 per cent had symptoms of some sort. This was made up of 28 per cent who had *either* abdominal pain, headache or limb pain and 9 per cent who had more than one of these symptoms, presumably simultaneously. In common symptoms, we have to allow for the possibility that the symptoms may occur in combination on the basis of chance alone. Øster's results are, in fact, reported in sufficient detail to allow us to apply a test of significance to his data. The results suggest that the frequency of combinations of abdominal pain with other symptoms occur at well above the level that might be expected by chance alone. Apley (1975) also reports headache as being somewhat more frequent in the history of children with abdominal pain than in a control group. His report does not give sufficient detail to allow statistical comparison of the two groups.

A second source of evidence that may help us to delineate a syndrome is regularities in age-sex trends. The difficulty here is that there is little agreement between different studies concerning the sex and age distribution of abdominal pain itself. Apley (1975) and Øster (1972) and the Newcastle data agree that it occurs more frequently in girls whereas Cullen and MacDonald (1963) found a slight preponderance in boys. In each case the sex difference is slight, but we are left with no clear trend in the figures which could help us in syndrome delineation. The same situation arises when we consider the age trends, again, as shown above, age-related prevalence rates show quite different trends in the three studies reviewed.

Most of the claims for a periodic syndrome arise because the different symptoms are said to occur in the same individual at different times. Stability over time constitutes a third source of evidence by which a syndrome may be delineated. To establish this we need detailed follow-up studies.

Follow-up studies

Seven studies are available. These are most easily summarised in a table.

As we can see from Table 10.1, the available studies, apart from that of Christensen and Mortensen (1975) suffer from a high level of sample erosion and many lack a control group. This makes it difficult to draw any conclusions from the results of the majority of the studies.

The study of Christensen and Mortensen (1975), although a small sample, does

confirm that abdominal pain in childhood predicts both abdominal symptoms and other symptoms in adult life. However, the authors include in their 'other symptoms' group 'bad nerves' and gynaecological complaints as well as headaches. They thus extend the concept of a group of related symptoms very wide indeed and on rather tenuous grounds.

Table 10.1 Summary of follow-up studies of abdominal pain

Study	No. cases at FU	Control group	% Cases identified at FU	Time lapse to follow-up	Outcome
Apley (1959)	30	Yes	50%	8–20 yrs	9 well 9 other symptoms 12 pain continued
Apley and Hale (1973)	30	No Apley (1959) used as comparison	50%	10–14 yrs	9 well 10 other symptoms 11 pain continued
Papatheophilou et al (1972)	14	No	14%	12–14 yrs	All asymptomatic by 12 years of age
Dahl and Haahr (1969)	116	No	Unspecified in Christensen and Mortensen (1975) review	1–10 yrs	36% still had pain 16% other symptoms
Christensen and Mortensen (1975)	34	Yes	89%	28 yrs	Significantly more cases than controls had abdominal and other symptoms as adults
Øster (1972)	635 of which 79% had 'pain' at some time	Not systematically reported	Unspecified	5–11 yrs	29.7% had 'pain' at final follow-up
S. Heinild et al (1959)	69 for symptom enquiry	?	51%	3 yrs	52% symptom-free 41% improved but radiological changes in stomach persisted in 75% of cases

Family factors

A fourth possible line of evidence for a syndrome is the presence of other individuals in the family with the disorder. Øster sent a questionnaire to the parents of a group of children with pain (site not specified) and to a control group. His results showed that a higher proportion of the mothers of the children with pain had pain themselves. Øster's figures are presented in full in his paper and although he does not support his conclusions with tests of statistical significance, it is possible to apply a test of significance to his results. From this it appears that pain symptoms in children are significantly associated with headache in both

parents but abdominal pain in mothers only. Other studies have reported a family history of painful conditions but without tests of statistical significance or sufficiently detailed data on which to make the necessary calculations (Apley, 1975; Cullen and MacDonald, 1963).

To sum up, there is evidence that recurrent abdominal pain, headache and limb pains are symptoms that cluster together in certain children, there is also evidence that the symptoms may be stable over a long period (i.e. they don't turn into some other type of disorder) and, finally, there is evidence of associations with painful conditions in other family members. Thus the strong clinical impressions of a 'periodic syndrome' are supported. It should be remembered that the associations between symptoms, although statistically significant, are low. Low correlations are not unusual among the different symptoms of a disorder (see, for example, Carney, Roth and Garside (1965) for intercorrelations of the symptoms of depression) but it is possible that more rigorous research using quantitative techniques will result in the delineation of further syndromes among children with recurrent abdominal pain.

Possible mechanisms

The value of syndrome delineation is that it provides us with a sound basis from which to explore pathological mechanisms and define aetiological factors. Several possible mechanisms have been suggested for recurrent abdominal pain and we will consider these in turn.

The first suggestion of a mechanism for recurrent abdominal pain is *epilepsy*. This has been prompted by the periodic nature of the symptomatology together with the autonomic changes and the sleepiness after attacks which are commonly observed. If epilepsy were the underlying disorder, there are a number of expectations which should be fulfilled. First, we might expect that children who had overt epilepsy would suffer from abdominal pain more frequently than the population in general. This has been studied by Apley (1975) in 100 epileptic children. Of these he found that 20 had recurrent headache, 14 recurrent abdominal pain and 3 recurrent limb pain. These rates are slightly higher than the population at large but not markedly so.

A second expectation would be a higher proportion of EEG abnormalities in children with recurrent abdominal pain. Papatheophilou et al (1972) studied the EEGs of 50 children with recurrent abdominal pain who had been referred to and EEG department. Twenty-one of the children had an abnormal EEG but only in 11 was this of epileptic type (i.e. spikes or spike and wave). Among all these 11 cases there was some evidence of loss of consciousness although the nature of this is not clearly defined in their report. In addition to this, there was no control group and the relationship of the abdominal symptoms to the EEG changes and the loss of consciousness is not defined. In an earlier study, Apley, Lloyd and Turton (1956) did compare the frequency of groups of schoolchildren and hospital-referred children with controls. They found no difference in the proportions with epileptiform EEGs in either case. A third way of attempting to establish a relationship between epilepsy and abdominal pain would be a therapeutic trial to see if abdominal pain will respond to anticonvulsant therapy. Apley (1975) found that in many cases it in fact did so but this could well have been a

placebo effect; proper clinical trials are necessary before such impressions can be accepted. A fourth way of establishing a link would be to see if there is a tendency for clinical epilepsy to develop at follow-up. The follow-up studies reported above have failed to support this possibility. Thus there is little evidence that epilepsy is a common underlying mechanism of recurrent abdominal pain.

The second mechanism that has been suggested for recurrent abdominal pain is the '*irritable bowel syndrome*' similar to that described in adults (Stone and Barbero, 1970). To examine this suggestion it is helpful to describe the syndrome in adults and then see in what ways extrapolation to children is sensible and meaningful. Chaudhary and Truelove (1962) described 130 cases of irritable colon syndrome. The disorder is more common in women and its onset is more commonly in the third decade of life, although more recently Fielding (1977) reports from retrospective data that one-third of adults with irritable bowel syndrome had symptoms in childhood. There are two main types of the syndrome; the more common spastic colon group and the painless diarrhoea group. In both these groups, the majority of patients had altered bowel habit, usually diarrhoea. Associated symptoms may include nervousness and fatigue but headache and limb pains are not mentioned. Onset was sometimes associated with an attack of dysentery, use of purgatives or with psychological stress. The differential diagnosis was from ulcerative colitis and could be made by the typical appearances on barium enema and the normal, if somewhat hyperaemic, bowel mucosa on sigmoidoscopy. In children, Kopel et al (1967) compared the rectosigmoid motility in normal children, children with recurrent abdominal pain and with ulcerative colitis. They report that after prostigimine there is higher motility among those children with abdominal pain and lower motility in those with ulcerative colitis than occurs in normals. Dimson (1971) studied the transit time using carmine as a marker in a group of children with recurrent abdominal pain, one-third of whom also had headache. He found that most of the children were constipated and that the transit time was delayed. Curiously, in view of this finding, altered bowel habit occurs in a minority of children with recurrent abdominal pain in contrast to its high frequency in adults.

A number of considerations should make us cautious in linking abdominal pain in childhood with the irritable bowel syndrome in adults. Most of the adult cases seem to start in adult life, there is no association with headache and limb pains as there is in childhood and the bowel symptoms that are so prominent in adults are far less common in children. The main feature in common is the altered patho-physiology of the bowel. Although recent research, particularly in adults, has led to a much better understanding of the mechanisms involved (Drossman et al, 1977) its aetiological significance is not clear. It seems a little premature to follow Fielding (1977) in regarding the two conditions as an expression of a single disorder in adults and children.

A psychosomatic disorder?

Another common thread which runs through the literature on abdominal pain is the association with *psychiatric symptoms*, both in children (Apley, 1975; Stone and Barbero, 1970; Christensen and Mortensen, 1975; Cullen and MacDonald, 1963; Heinild et al, 1959) and in adults (Chaudhary and Truelove, 1962; Hislop,

1971; Hill and Blendis, 1967; Gomez and Dally, 1977). In some studies, the focus was on those cases with the features of irritable bowel, but others included all cases under a wider definition of 'non-organic' abdominal pain (Hill and Blendis, 1967; Gomez and Dally, 1977; Apley, 1975; Christensen and Mortensen, 1975; Cullen and MacDonald, 1963). Heinild et al (1959) found mucosal changes and increased motility in *the stomach* in 80 per cent of their children in response to stress. This suggests that, as in adults, the disorder of motility involves the whole bowel not just the colon as was originally thought.

Lewis (1954) has listed the lines of approach which have been employed in the investigation of psychosomatic relationships. A number of these have been used in attempts to understand the psychological relationships of recurrent abdominal pain in childhood.

The most widely used approach is based on the observation that abdominal pain commonly co-exists with psychiatric symptoms. Thus Apley (1975) gave a detailed questionary to both his school and hospital series. He found a raised incidence of highly strung, fussy and excitable, and of anxious, timid and apprehensive children. Unfortunately, he gives no details of the reliability or validity of his method. Stone and Barbero (1970) investigated 102 children with abdominal pain referred to a paediatric clinic. They observed the children during a two-week hospital admission and explored psychosomatic aspects of the symptoms in interviews with the mother, father and the child itself. Detailed questioning revealed a picture of anxious, conforming and insecure children. However, in the absence of a control group, it is difficult to draw firm conclusions about psychiatric symptomatology from Stone and Barbero's study. Rutter, Tizard and Whitmore (1970), using a parental questionnaire, found a significant association of abdominal pain with psychiatric symptoms in girls but not in boys. While based on questionnaire techniques devised for screen purposes, the Rutter et al (1970) findings have the advantage of being based on a whole population study, of allowing comparison with a control group and of using a well validated questionnaire. Clearly, the issue of association with psychiatric symptoms merits further studies using more refined techniques.

A second approach has been based on the frequent observation that a conflict, emotional upheaval or environmental stress has been reported as preceding the onset of abdominal pain. This is commented on in a number of the studies and richly supported by case description. No one, however, has as yet attempted to confirm this impression of a time relationship on a quantitative basis.

The observation that emotional stress produces gastric hyperaemia and increased secretion in children with gastric fistulae (Engel, 1967) has been the basis of a third approach to elucidating the relationship. It has been hypothesised that if this reaction to stress is often repeated and severe, it may give rise to symptoms of abdominal pain. In adults, there has been a considerable amount of research, starting with Almy (1949) into the relationship of gut motility to psychological stress interviews. However differences between normal adults and those with irritable bowel syndrome have not been firmly established (Drossman et al, 1977). This line of enquiry has produced a number of interesting ideas, for example, Lader (1970) has speculated that by enabling the child to escape from stressful situations, the somatic response that underlies the abdominal pain may

be conditioned and thus reappear whenever the child is subjected to stressful circumstances. There is as yet no evidence to show whether or not this mechanism is actually operative in the clinical disorder.

A fourth way in which workers have sought to establish a psychosomatic link is through treatment. Apley (1975) developed a psychotherapeutic approach which was effective in bringing immediate relief of symptoms. While the improvement was not maintained at long term follow-up, it does serve to suggest that a psychological intervention was effective in treatment. Finally, there is the suggestion of a high level of anxiety and over-protectiveness in the family (Apley, 1975). The regularity with which he has observed these features has led Apley to believe that the pattern of parental handling plays a part in the genesis and maintenance of the disorder.

There is a common assumption among those who seek to establish a psychosomatic link that in some way it is the psychological stress and predisposition to anxiety which comes first in the chain of causation. It should be remembered the cause and effect relationships may be more complex than this. Goldberg (1970), for example, showed that within a group of patients with established organic bowel disease, psychiatric morbidity was significantly raised among patients with offensive diarrhoea. Unfortunately, Goldberg does not report the equivalent comparison for patients with and without abdominal pain; however, his results show that for diarrhoea, at least, the unpleasant *somatic disorder* is likely to lead to the *emotional* problem. It seems quite possible that abdominal pain is generated and maintained by an interaction of somatic and psychological mechanisms.

Exploration of the psychosomatic relationships of abdominal pain in childhood has been greatly handicapped by an apparent lack of understanding of the issues of classification and syndrome definition in child psychiatry. Psychiatric classification should complement and accompany classification of the patho-physiology and physical symptoms of the disorder, but the relevant studies do not yet exist. Two disorders in particular merit intensive investigation among children with abdominal pain. The first of these is a search for the origins in childhood of *Briquets syndrome* (Guze et al, 1972). This is reported in adults to be a syndrome characterised by multiple symptoms with no organic basis. It commences in early life and is commonly associated in both individual and family histories with antisocial behaviour. It seems likely that many children with abdominal pain are destined to develop this crippling disorder. The second disorder, and subject in another section of this chapter, is *depression* in childhood. In adult studies, depression of mild but chronic type is a common accompaniment of abdominal pain (Hislop, 1971; Gomez and Dally, 1977). In view of the treatment implications, it is time that the necessary studies were carried out to see if this is also the case among children.

Treatment

The mainstay of treatment has been a psychological approach of firm reassurance and advice or counselling the parents in how to help the child cope with its anxieties. In some cases this may be supplemented by a mild sedative. As mentioned above, this approach appears to have satisfactory short-term results but the long-term follow-ups tend to show that the improvement is not maintained

(Apley, 1975). It seems likely that more specific treatments will have to await a better understanding of the nature of the disorders involved.

Conclusion

Recurrent abdominal pain is a common symptom in childhood and is only of organic origin in a minority of cases, while the short-term prognosis appears good, longer term studies have suggested that the symptom commonly persists into adult life. It is often associated with other symptoms such as headache and limb pains which constitute the periodic syndrome. There are associations with psychological stress and psychiatric disorder which merit much more investigation than they have so far received. This includes the relationship of abdominal pain to both antisocial disorder and depression in childhood.

PROBLEMS OF THE CHILDREN OF IMMIGRANTS

From a scientific point of view, immigration can be seen as a 'natural experiment' in which we can see the effects of social upheaval and separation experiences, the effects of the unfamiliarity and often hostility of the host community and the attendant stresses of housing, language and employment. In children we can add to this list of stresses the problems of an unfamiliar educational system, separation from the familiar extended family and often the nuclear family during the process of immigration. They also have to cope with the culture gap between their family and the often vastly different culture and values of the surrounding community, some aspects of which their parents may view with disapproval.

When we attempt to understand the influence of all this on the prevalence and nature of psychiatric disorder it is difficult to disentangle the effects of these many factors. In adults, the study of Ødergaard (1932) has never been surpassed. He showed that the raised level of schizophrenia in Norwegian immigrants was probably due to selective immigration of isolated preschizophrenic individuals rather than the effect of immigration itself.

Since the Second World War there have been large immigrations to Britain from Europe, Eire, the West Indies, Cyprus and Malta, Pakistan and India. There is an extraordinary discrepancy in the amount of interest that these different groups have attracted from research workers. In the UK, West Indian children have been the subject of intensive study and their health, development, adjustment and family relationships have been the subject of several studies. Other groups have been far less intensively investigated. This review must focus primarily, therefore, on the situation of the children of West Indians.

Psychiatric disorder

Psychiatric disorder in West Indian children was first studied in children attending clinics and more recently there have been school and community studies. In order to explain the findings, it is necessary to digress for a moment and touch on some of the issues of classification in child psychiatry discussed in a previous edition of this book (Kolvin and MacMillan, 1976). The majority of children either have disturbances in their own emotional life such as depression, phobias, obsessions, anxiety or conversion symptoms or exhibit disturbed social behaviour such as

stealing, truanting or aggressive behaviour. Rutter (1965) sets out the case for 'emotional disorders' and 'conduct disorders' being distinguishable clinical entities. Thus conduct disorders occur more often in boys, commence at a later age, are more often associated with overt family discord, have closer relationships with education under achievement and have a poorer prognosis than do emotional disorders.

Returning to West Indian children, Graham and Meadows (1967) compared West Indian children with English children attending the same child guidance clinic. They found roughly equal numbers of West Indian boys and girls were referred in contrast to the preponderance of boys in the rest of the clinic population. West Indian boys showed less neurotic disorder and West Indian girls more conduct disorder than the controls. The authors laid emphasis on early separation experiences as being of likely aetiological importance in the disorders of the West Indian children. The best test of this hypothesis would be to compare the West Indian and English-born children of West Indian parents. This is because of the particular characteristics of the West Indian immigration where the parents usually settled in Britain for several years before sending for their children who had meanwhile been cared for in the West Indies by relatives. The children were then brought over to Britain to a strange environment and often to meet younger British-born siblings for the first time. Nicol (1971) extended Graham and Meadows' study with a larger sample, sufficient to examine the differences between West Indian and English-born groups. It was found that among the English-born group the proportion of girls was far lower than among the West Indian-born group. At the same time, a follow-up study suggested that the prognosis for both groups of West Indian children with conduct disorders was as poor as it was for English children. These findings were interpreted as suggesting that West Indian girls are particularly sensitised by their culture to break down under the stress of immigration. Cochrane (1979) has recently confirmed the finding of a high proportion of West Indian girls with high deviance scores on the Rutter B2 scale.

The matter has been further illuminated by school-based studies. The Schools Council (1970) and Bagley (1972) have carried out teacher questionnaire studies using respectively the Stott (1963) Bristol Social Adjustment Guides and the Rutter (1967) 'B' Scale. Both indicated higher rates of deviance among the West Indian children. In Bagley's study, which focusses on 7-year-old children, he confirms a higher rate of deviance among those children who have experienced separation of 6 months or more (but the type and extent of these separation experiences is not specified), both among the English and West Indian children. Even among the West Indian children who were not separated, there was a higher rate of behavioural deviance, particularly of a conduct variety. Unfortunately he does not consider the sexes separately in this analysis so that it does not help us much with the questions raised by the clinic studies. In the School Council study, West Indian-born and British-born children are contrasted at three age levels—Infants (5–7 years), Junior (8–9 years) and Secondary (12–13 years). Despite the findings of far greater differences in behavioural deviance when compared with (white) English controls at the Infant level, it is only at the Secondary level that differences appear between the West Indian and UK-born immigrant children;

this was the single scale 'hostility to peers'. As these authors did not analyse the sexes separately the sex differences found in the clinic studies cannot be compared.

Bhatnagar (1970) carried out a more intensive study in a single Secondary School, tapping information from peers and from the child itself about personal satisfaction, anxiety and objectivity of self concept. He compared English, Cypriot and West Indians over the full Secondary School age range, and reports that in all these areas of adjustment except personal satisfaction, where they tied with the Cypriots, the West Indian children are the least well adjusted of the three groups. In comparing boys with girls, the only differences were that West Indian girls were more anxious than West Indian boys. Unfortunately, the number of UK-born immigrant children in Bhatnagar's sample was too small to allow statistical comparisons of adjustment by place of birth; however he does comment that adjustment does not seem to improve with length of time spent in England. Further evidence of the special problems of the West Indians as opposed to the Cypriots was that very many fewer of these adolescents chose an English child as a friend. This tends to validate the finding of the School Council Study concerning hostility to peers in the older age group.

Rutter et al (1974) conducted an investigation of 10–11-year-old West Indian children in an inner London borough using a school screening questionnaire followed by intensive interviews of the teachers and parents of various identified subgroups. The findings confirmed the high questionnaire deviance rate of the Bagley and the Schools Council Studies but found that this was much reduced when the teachers were actually interviewed rather than merely completing a questionnaire. The excess of disorder in the West Indian children at school was of the conduct type but when parents were interviewed, the rate and type of disorder was very similar to that found in English controls. The excess of conduct disorder at school seemed therefore to be specific to this situation and, moreover, it was not accompanied by the difficulties of relationships that is usually found in English children with this type of problem. In this way the Rutter et al findings differ from those of Bhatnagar (1970) who found the West Indians to have poor peer adjustment when this was reported by the peers themselves. Like Graham and Meadows (1967) and Nicol (1971), Rutter et al (1974) found that West Indian girls showed an excess of conduct disorders and in this way were quite different from their English peers. However, the UK vs. West Indian-born differences among the West Indians that were reported by Nicol (1971) were not replicated.

On re-examining Nicol's finding (Nicol, 1970, provides more detailed breakdowns of the data) it seems possible that the excess of disturbed West Indian-born, as opposed to UK-born, girls could be a function of their greater average age. Although Nicol did originally analyse the over 10s and the under 10s separately, there were only eight UK-born girls in the over 10 year age group. Re-analysing the sex ratios for over 10s and under 10s, irrespective of place of birth, we arrive at the following:

$$\text{Under 10 sex ratio} \quad \frac{\text{boy}}{\text{girl}} = \frac{81}{39}$$

$$\text{Over 10 sex ratio} \quad \frac{\text{boy}}{\text{girl}} = \frac{40}{44}$$

This finding, together with that of Rutter et al's (1974) Community Study could be interpreted as a similar type of change in sex ratio as that found in studies of the indigenous population (Rutter et al, 1976), but at an earlier age. Similarly, Bhatnagar's (1970) finding of a greater amount of anxiety in the West Indian girls in his study could be an expression of adolescent turmoil in this group. Unfortunately, Bhatnagar does not give us a detailed breakdown of the ages of his samples.

Again, careful attention to the natural history of psychiatric disorders in different cultural groups may not only give us clues as to how best to help the children but may throw light on the psychological mechanisms involved. Further community studies over a wider age range would be very helpful.

Factors associated with psychiatric disorder

Intensive research over the last twenty years has increased our understanding of some of the factors associated with child psychiatric disorders. This has demonstrated that there is seldom, if ever, a single 'cause' of a disorder and it is common to be faced with a pattern of associated phenomena where cause and effect relationships are very complex. To say this is to emphasise the importance, when assessing a child with an emotional or behavioural problem, of arriving at a diagnostic formulation of the case rather than a simple diagnosis. This is, of course, as true when the patient is a disturbed immigrant child as it is of an English child. We need, therefore, to consider the factors associated with psychiatric disorder and their particular relevance in the case of the children of immigrants. Again, we are heavily dependent on research conduced on West Indian children.

Ability and attainment

Children with psychiatric disorders in general may be of any ability, but the rate of disorder is raised in children of below borderline and ESN levels of intelligence and there is an important association of conduct disorder with specific reading retardation (Rutter, Tizard and Whitmore, 1970). Most studies of the subject (Little et al, 1968; Bhatnagar, 1970; Yule et al, 1975) have found immigrant children to score low on tests of intelligence and attainment in reading. This is true of Asian, and Cypriot groups, as well as West Indians. A further trend, reported by several investigators (Little et al, 1968; McFie and Thompson, 1970; Ashby Morrison and Butcher, 1971; Yule et al, 1975) is for children born in their country of origin to perform less well on tests of ability and attainment than those born in Britain. This is as true of West Indian children, whose native language is English, as it is of other immigrant groups. Further, there is some evidence that levels of ability and attainment scores are directly related to length of time in the English School system.

Yule et al (1975) tested a group of children who had also had psychiatric screening questionnaires and interviews (Rutter et al, 1974). It seems unlikely from their findings, that the links between the cognitive tests and psychiatric disorder are of the type found in the indigenous population. Thus, whereas in English school children the association is between specific reading retardation and conduct disorder (i.e. poor reading ability in children of normal intelligence), among the

West Indian group, the children's ability seems in general to be rather better than would be expected on the basis of their IQ score. However, it may be that further analysis of their data could throw more light on these issues. The picture is, of course, confounded by the known cultural bias of psychological tests (Anastasi, 1968) which is likely to be underestimating the true potential of these children.

Language development

Among younger children, there is a marked association between delays in language acquisition and behaviour disorders. This has been clearly shown in an epidemiological study by Richman and her colleagues (1974) with pre-school children and Fundudis and colleagues in Infant and Junior Schoolchildren (1979). There are also less common conditions where there is a profound defect of language acquisition and use. These would include infantile autism and developmental dysphasia.

Immigrant children may have language problems for three quite distinct reasons. First, there may be simple lack of knowledge of the English language, second there is the problem of generalised linguistic deficiency referred to above and third, there are problems of dialect and linguistic code (Rutter and Madge, 1976).

Clearly immigrant children whose parents speak a foreign language at home as is common (Bhatnagar, 1970) have to be bilingual. There is no evidence that this is particularly harmful to children of the normal range of intelligence (Rutter and Madge, 1976). On the other hand, greater difficulties are often encountered when, as in the case of West Indians, there are differences in dialect as there is an expectation that the child will understand English without special help (Schools Council, 1970).

Most serious are some suggestions that among young West Indian children there may be generalised linguistic deficiency. In a early report, Prince (1967) described a small group of young children who presented with a picture resembling infantile autism but with less social withdrawal. In investigating the social circumstances of these children, Prince came to the conclusion that gross linguistic deprivation played an important part in their problem. This finding needs to be replicated as he may well have been describing children with autistic conditions. Pollak (1972) carried out a clinical assessment of language development in a group of three-year-old West Indian children together with English controls. The results showed a consistent picture of language retardation among the West Indian children. However, these findings merit confirmation using properly validated tests of language. Attention also needs to be given to the methodological problems of comparing children from different cultural backgrounds on tests of linguistic competence.

School problems

The contribution that schools make to child disturbance has aroused great interest in recent years (Powers and Morris, 1967; Rutter, 1975; Reynolds et al, 1975). Certain school characteristics appear to be related to a high rate of psychiatric disorder. These include teacher and pupil turnover and absenteeism and number of children who had free school meals. Yule (1975) points out that the West

Indian children they studied seemed to be concentrated in schools which had high pupil but not teacher turnover, absenteeism, percentage of children who had free school meals and low pupil/staff ratio. Rutter (1975) speculates that the school based conduct disorders of these children may be related to the social environment of the school rather than being characteristics of the children themselves. Evidence for this is that the excess of conduct disorder in the West Indians occurs in the school only.

Townsend and Britten (1972) investigated cultural differences as they affected integration into school. The areas picked for discussion included school uniform which often had been modified to accommodate the needs of Muslims and Sikhs, and co-education, in which Asian boys resented the authority of young women teachers and Asian girls were reluctant to socialise with the opposite sex. Another topic discussed was discipline: problems arose when the strict controls at home conflicted with the freer atmosphere at school. Such problems were, however, reported only in a minority of the schools sampled in the study.

A separate section of Townsend and Brittan's report tackles the problem of home/school relations. As with the indigenous population, home/school contact decreases as the children move from infant through junior to secondary school. Contact is reported to be better with West Indian parents than with Asians and this is re-inforced by Rutter et al's (1975) finding that West Indian parents take a great interest in their children's school progress. The reasons given for poor contact are commonly long hours of work and language difficulty. The Select Committee on Race Relations report on Education (HMSO, 1973) recommends an expansion of contacts between families and schools by all possible means, paid or voluntary. Considerable and specialised social work skills are necessary for such activity to be really beneficial.

Racial prejudice

As the events surrounding immigration recede into the past, it becomes less easy to attribute the disadvantages of coloured people to the fact that they are newcomers to Britain with cultural differences, poorer educational qualifications and all the rest of it. The PEP report (Daniel, 1968) based on a study commissioned by the National Committee of Commonwealth Immigrants and the Race Relations Board, showed that racial discrimination was widespread. This was in access to employment, housing, and services such as insurance and credit facilities. Immigrants who, for reasons of culture and education, were prepared to do poorly paid and menial jobs suffered less from discrimination than those whose abilities made them eligible for jobs for which there was white competition.

White immigrants, such as Cypriots and Hungarians, whilst subject to some discrimination, were far less penalised than coloured immigrants. Similar findings were reported concerning discrimination in the housing market. Abrams (1969) in a more limited survey of British attitudes to race, reported that although there were elements of prejudice in the majority, it was only in 10 per cent of the population that hard-core prejudice was found. More optimistically, he also showed that prejudice seemed less pronounced in areas where the respondents had personal contact with immigrants and also among the younger age groups who had grown up with the idea of Britain as a multiracial society.

The Race Relations Act, 1968, was designed to remedy the social disadvantages highlighted by the PEP report. Unfortunately, it came at a time of high racial tension and it had been criticised as lacking in toughness and rigor. A recent further report from PEP suggests that racial discrimination, although less severe in some respects, is still widespread. In particular, the recent general rise in unemployment has been reflected in a disproportionate rise among young immigrants (Smith, 1975). The effect of this on the adjustment of the young immigrants concerned is unknown but merits study.

Rutter et al (1975) compare the circumstances of the families of 10–11-year-old West Indian school children with those of their non-immigrant peers. As might be expected from the above discussion of race prejudice, the West Indians were far more often employed in menial and unskilled jobs despite broadly equivalent school attainment and training when compared with the non-immigrant group. There were also marked differences in housing, the West Indians tending to own their own houses while the non-immigrant group rented council accommodation. It is noted that the houses owned are often older properties with short tenure.

Parent–child relationships and child rearing

Rutter et al (1975) compare aspects of family relationships and discipline in West Indian and non-immigrant families. The findings in the two groups are remarkably similar on measures of the warmth and involvement of family relationships, and, in particular, in the involvement of fathers in family life. There were some differences in the disciplining of the children. West Indian children seemed to be expected to take a greater part in household chores and parental discipline was in some respects rather stricter. On the other hand, Rutter et al's (1975) more reliable and valid measures did not confirm Pollak's (1972) finding of more rejection on the part of West Indian mothers. Variations in family child rearing practices and discipline such as those found have not been shown to result in any adverse effects on child development (Becker, 1964). Two respects in which child rearing did differ, both in the Pollak (1972) and Rutter et al (1975) studies was in the apparent lack of appreciation of the importance of play in young children and the use of non-relatives in caring for the children when the mother was at work. This is more common presumably because unlike the non-immigrant population, there is no extended family to care for the children under these circumstances. The question of the quality of substitute care is one which is currently receiving attention from several research groups.

In general what evidence there is confirms that West Indians have adapted rapidly to British cultural norms (Bell, 1969). This refutes racist accusations of 'aliens in our midst' which are most notable, of course, for their lack of any basis in rationality or fact.

Other immigrant groups

Two recent studies have compared British and Asian children using the Rutter 'B' scale (Cochrane, 1979; Kallarackal and Herbert, 1976). Both studies found a lower rate of deviance in the Asian children.

Conclusion

Most of the above discussion has centred on the children of West Indians. In order to uncover clues to aetiology and the natural history of child psychiatric disorder in general, the generally rather small differences between immigrant and non-immigrant groups have been over-emphasised. The general picture is of rather marked similarity in the types of problem and cultural background when compared with the non-immigrant population. Differences are confined to moderately but statistically significant variations in rates of disorder between the sexes. Further research would be worthwhile, particularly to try and pinpoint the problems of children of immigrant groups other than West Indians and to explore the impact of current and outgoing problems such as the prospect of unemployment and race prejudice.

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