

Psycho-social Disorders in Childhood, and their outcome in adult life

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It is a normal part of growing-up for children to encounter and usually overcome a variety of psycho-social stresses. However, for a minority, adult life is blighted by the persisting ill-effects of childhood disorders. If any impression is to be made on this toll of adult handicaps that are the sequelae of difficulties in early life, it is essential to differentiate between those disorders that are usually only temporary and those that are likely to have a persistent effect. In considering this differentiation, it is convenient to subdivide disorders into those shown by the child himself, and those he meets in his environment.

DISORDERS IN THE CHILD

(a) *Low-risk*

Numerous studies have shown that most normal children go through phases of difficult behaviour, so that little importance should be attached to isolated and transient emotional and behavioural difficulties of any kind. Furthermore, some so-called 'symptoms', even when persistent, show so little association with psychiatric disorder that they are of negligible predictive value (Rutter *et al.*, 1970a). Nail-biting and thumb-sucking fall into this category. Their association with emotional disturbance as measured in other ways is so low that they are of little use as indicators of mental health or ill-health, either present or future.

Neurotic disorder in children (i.e. a disorder characterised by unhappiness, misery, anxiety, fears, obsessions, and the like) can be very distressing and handicapping. If at all severe or persistent, neuroses undoubtedly warrant treatment. However, perhaps surprisingly, child neurosis is not usually a precursor of adult neurosis. Indeed, it may be that to some extent they constitute different sorts of disorder in spite of rather similar symptomatology. The prognosis for most neuroses in childhood is very good. The great majority of neurotic children become normal adults and, contrary to what one might expect, the risk of manic-depressive disorder or anxiety

neurosis in adult life appears to be no different in neurotic children from that in the general population (Robins, 1966). At present, little is known on how to distinguish the small minority of child neuroses that become chronic.

(b) *High-risk*

In very sharp contrast to the prognosis for neurotic children, the outlook for children with antisocial and aggressive disorders is poor. This was most convincingly shown in Robins's thirty-year follow-up study of children who had attended an American child guidance clinic (Robins, 1966). Children referred to the clinic for antisocial behaviour included a high proportion who were still antisocial as adults. More striking was the finding that the antisocial children, when adult, had more marital difficulties, poorer work records, worse social relationships, more psychiatric disorder and, to some extent, even poorer physical health. These findings referred to children with persistent and general antisocial problems and not to the many normal children who commit an isolated delinquent act. Nevertheless, the proportion of children with serious antisocial disorder is high, and many of the delinquents of today become the psychopaths of tomorrow. Antisocial disorders are peculiarly difficult to treat, but the challenge is unavoidable. If the rate of disabling psycho-social disorders in adults is to be reduced we must devise and evaluate new methods of treatment for the antisocial child.

Severe reading retardation is another high-risk disorder, both in its own right and through its strong association with delinquency. A third of children with specific reading difficulties show antisocial problems and a third of antisocial children are seriously retarded in their reading (Rutter *et al.*, 1970a). The nature of the associations between reading retardation and antisocial disorder is not entirely clear but the evidence suggests that, at least in some cases, the reading difficulties may lead to the development of antisocial and aggressive problems. Effective early treatment of reading retardation might lead to a reduction in the rate of later delinquency.

When untreated, reading retardation is a remarkably persistent disability even in children of average or above average intelligence. It also has widespread effects on children's educational progress in other subjects and on the later possibilities of training for a job. Among ten-year-olds on the Isle of Wight, one child in 25 was at least 28 months retarded in his reading skills. When re-examined 28 months later the children had made, on average, only ten months' progress (Rutter *et al.*, 1970a); relatively, they had fallen even further behind, and not one of the children had caught up in his reading. It is not known to what extent early treatment can prevent the generally poor outcome in children with reading difficulties.

All too often, reading retardation remains undiagnosed until late in childhood, when the child's (and teacher's) feelings of failure and hopelessness make remedial action difficult. Early diagnosis depends to a large extent on the teacher's knowledge of each child's progress and of his willingness to refer children for psychological and medical investigation when they are experiencing educational difficulties.

Doctors, especially paediatricians and school medical officers, also have an important role in early detection through their knowledge of disorders associated with later reading difficulties. Developmental problems of speech, language, co-ordination, and perception are of great importance in this respect (Rutter *et al.*, 1970a). Doctors are very prone to reassure mothers of children who are late in talking or in walking that all will be well in the end. It is, of course, true that most children who are late talkers eventually learn to talk normally but a delay in talking may well be followed by difficulties in learning to read (Rutter *et al.*, 1970a). A reorganisation of the medical examination at school entry to place a greater emphasis on developmental assessment might help to pick out those children likely to need special help in reading. Hospital doctors, to whom late speakers are often referred, need to be aware of the educational implications of these developmental disorders.

Similar issues apply to chronic physical disorders, especially neuro-epileptic conditions. There is a greatly increased rate of psychiatric disorder and severe reading difficulties in children with cerebral palsy, epilepsy, and other chronic brain diseases (Graham and Rutter, 1968; Rutter *et al.*, 1970b), even when the children are of average intelligence. To what extent these psychiatric and educational complications lead to handicaps in adult life is uncertain, but if handicaps are to be prevented, paediatric care must go beyond mere medical management to include consideration of the wider implications of cerebral disorders.

Infantile psychosis or infantile autism (two terms referring to much the same condition) must also be included among the high-risk disorders, as it generally carries a rather gloomy prognosis (Rutter, 1966a; Rutter *et al.*, 1967). However, it is important to emphasise that some autistic children, especially those of normal intelligence, can improve so much that they can achieve a reasonable social adjustment and eventually hold a regular job. Moreover, there is some suggestion that modern methods of treatment may increase the proportion of patients who improve. In spite of the term 'psychosis', the condition probably has nothing to do with schizophrenia as seen in adults (Rutter, 1968). The cause of infantile autism is still unknown but the balance of the evidence suggests that its basis is a developmental disorder which particularly involves a defect in the comprehension of language.

DISORDERS OF THE ENVIRONMENT

(a) *Low-risk*

Traditionally, much emphasis has been placed on the effects of infant care practices such as breast or bottle feeding, schedule or demand feeding, and the timing of weaning and toilet training. It now seems that this emphasis has been largely misplaced (Caldwell, 1964). There is no evidence that the timing or type of any of these infant care practices has any significant association with psychological development in either childhood or adult life. The interpersonal context in which training occurs appears to be more influential than either the timing of the training or the methods used.

Much the same may be said about methods of discipline (Becker, 1964). Within surprisingly broad limits the techniques of discipline employed by parents have little effect on the pattern of the child's development. The purpose of the discipline, that is what type of behaviour is praised and what type of behaviour is punished, is important. The quality of the parent-child relationship is also influential. But otherwise there is no clear evidence that one method of discipline is any more effective than another. It is only possible to draw the banal conclusion that extremes of any kind (extreme punitiveness or complete *laissez-faire*) are undesirable and that marked inconsistency of discipline is often harmful.

In 1951, Bowlby drew attention to the distress and unhappiness of children that often followed when they were separated from parents, especially when this was associated with admission to a strange environment such as a hospital. Later work (Yarrow, 1964) has shown that this distress may be greatly reduced by enlightened hospital practice such as allowing mothers to stay with their children, by providing proper opportunities and facilities for the children to play, and by keeping unpleasant procedures such as enemas and venipunctures to a minimum.

Despite the importance of these findings, parent-child separation, as such, must be classed as a low-risk factor so far as long-term consequences are concerned. The evidence from Bowlby's own studies (Bowlby *et al.*, 1956) and those of others (Yarrow, 1964) shows that if children are given adequate care following separation (this is a crucial proviso) most children do not show long-term damage. A stable parent-child relationship is important but this is not necessarily incompatible with separation. Furthermore, both animal and human studies suggest that peer-relationships, as well as parent-child relationships, play an important role in development (Freud and Dann, 1951; Harlow and Harlow, 1969).

The last low-risk factor to be mentioned is that of the mother who goes out to work. Working mothers have come under criticism at various times in

the past, but it is now evident from numerous studies that children in such families suffer no psychological disadvantage (Yudkin and Holme, 1963). Of course, there must be good quality stable arrangements for the care of the children while the mother is at work, but, given these, the children may be expected to develop normally.

(b) *High-risk*

Whereas various patterns of child-rearing and parent-child separation are classed as low-risk factors, a child's family background is nevertheless a most important influence on his development. Of all the family variables that have been studied, discord, quarrelling, tension and disruption have been most consistently associated with disorder in the child. Children reared in homes characterised by strained relationships and hostility have a strong likelihood of developing antisocial aggressive behaviour or frank delinquency. Interestingly enough, they are not particularly likely to become neurotic. The confidence with which family discord can be identified as a high risk factor is much increased by the fact that the association has been shown repeatedly in longitudinal as well as cross-sectional studies.

In cross-sectional studies it is difficult to determine whether the family discord led to delinquency or whether the disruptive behaviour of the child led to family tensions (Bell, 1968; Robins, 1969). However, several longitudinal studies have now shown that family discord measured when the children were young can predict the development of delinquency when they are older (Craig and Glick, 1965). Furthermore, the presence of family discord and disruption measured at the time boys first come before the Courts for a delinquent act has been shown to predict whether or not the delinquency continues (Power and Shoenberg, 1967). These findings leave little doubt that it is the family situation that leads to the antisocial behaviour of the children but it is not known how it does so, nor is it known to what extent a good relationship with one parent can compensate for a bad one with the other.

Another indication of high-risk may be the mother's application for therapeutic abortion. A Swedish follow-up study of children born after application for therapeutic abortion had been refused showed that the children had a higher rate of psychiatric, social, and educational disabilities than other children. The very fact that a woman applied for legal abortion meant that the prospective child was at risk, even when the grounds for the application were so slight that it was refused (Forssman and Thuwe, 1966).

Much has been made of the pathogenic effects of low social class, but there is good reason for believing that low socio-economic status in itself is not

particularly conducive to persistent delinquency or psychiatric disorder. The associations between social class and disorder in the children are present in some communities and not others, and the associations often disappear once family discord and disruption are taken into account (Conger and Miller, 1966; Langer *et al.*, 1969a,b; Rutter *et al.*, 1970a; Robins and Hill, 1966). Parents with severe personality defects often tend to sink to the lower strata of society so that psycho-social difficulties are generally more common in the families of the unskilled. However, as in the middle class, family discord is conducive to delinquency, not the fact that the father is a labourer.

On the other hand, there is no doubt that the working-class child is at a considerable educational disadvantage. Although genetic factors play an important part in this, a lack of appropriate verbal and perceptual experience, as present in many lower-class homes and even more so in many institutions, can seriously retard intellectual and educational growth (Haywood, 1967). Children in very large families are particularly at risk educationally, probably because they have limited opportunities for conversation with adults (Rutter *et al.*, 1970a).

The last high-risk factor to be mentioned is parental mental disorder. Chronic depression, neurosis or personality disorder in a parent is associated with an appreciably increased risk of psychiatric disorder, particularly of an antisocial type, in the children (Rutter, 1966b, 1970). Genetic factors may play some part in this but the family disruption associated with mental disorder is a powerful pathogenic influence. The child from a happy united family in which one parent happens to have some mental disorder probably has only a low risk of developing in a deviant direction.

MODIFYING INFLUENCES

(a) *Beneficial Effects of Stress*

Although stress of various kinds may have harmful effects, stress in itself should not necessarily be regarded as bad. It would not be in any child's interests to protect him entirely from the vicissitudes of life. The beneficial effects of stress are most easily demonstrated in animal experiments (Levine, 1962) but it is likely that there are human parallels.

(b) *The Child's Characteristics*

Children are individuals who differ greatly in their temperamental attributes (Thomas *et al.*, 1968) and, to some extent, these attributes determine whether or not the children succumb to the stresses they encounter (Rutter *et al.*, 1964; Thomas *et al.*, 1968). Whereas disorders can reasonably and reliably be divided into low-risk and high-risk conditions, the outcome in any indi-

vidual child will always be the result of an interaction between the child's own characteristics and the circumstances he meets.

(c) *Sex differences*

It is well known that boys suffer more from the effects of perinatal complications, that they more often get and more often die from infections in childhood, that they are more likely to suffer impairment of growth after irradiation, and that men die well before women. The biological weakness of the male is only too evident. Recent research now suggests that psychologically, also, boys may be more susceptible to stress than are girls (Rutter, 1970).

(d) *The Crucial Importance of Early Childhood*

Although early childhood is an important stage in development, personality is far from fixed even in adolescence. Whether the effects of early stress are persistent depends not only on the nature and severity of the stresses in early life but also on what happens to the child later (Clarke, 1969). Given good circumstances in later childhood and adult life, children can sometimes recover from the most gross deprivations experienced when they were younger (*see below*).

(e) *'Critical Periods'*

To what extent there are sensitive periods in human development is unknown, but there can be no doubt that the recent vogue for naïve analogies between imprinting in birds and various aspects of human development has been seriously misleading in suggesting that if skills are not acquired at a certain phase of development they cannot be acquired later. Perhaps the most striking example of recovery after prolonged and severe deprivation in early life is that reported by Mason (1942) and Davis (1947). For the first six and a half years of her life a girl had been locked in a room with her mother, who could not talk, read, or write. On being discovered, the girl was without speech and scored at a mentally defective level in IQ tests. Yet, 22 months later she was speaking in sentences, beginning to make scholastic progress, was affectionate, sociable, and showed a good sense of imagination. A final follow-up at fourteen years confirmed her normal development. Other examples of even later acquisition of speech also exist (Rutter *et al.*, 1967). There can be no excuse for saying it is too late to remedy the ill-effects of earlier deprivation or stress.

Nevertheless, it is probable that some types of learning are more readily acquired at certain periods of life. Similarly, although there is no reason to suppose that the young are generally more susceptible to stress than are adults, it does seem that some kinds of stress may have greater ill-effects at one

age-period than another. Distress following admission to hospital is at its peak when children are aged one to three years (Yarrow, 1964) and long-term psychological damage following bereavement seems to be most common when children are aged two to four years at the time their parent dies (Rutter, 1966b). If there are sensitive periods in human development they can be only relative, but this should encourage us to ensure the optimal conditions appropriate to each stage of a child's development.

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