## PREVENTING EMOTIONAL

## ILLNESS

Poverty, poor housing and family adversity have long been thought to contribute to emotional and social adjustment problems among youngsters and adults who live in such conditions. Various studies have documented the obvious link between economic problems and stress (SN: 5/14/77, p. 312). A University of Miami research team has even reported a phenomenon called "falling out," which suggests that stress from an oppresive white society causes many black people in poverty areas to black out for no apparent reason.

Other observers caution against overattribution of behavioral problems to social deprivation. It is one thing to say that poverty, inadequate education and low level jobs go hand in hand, they say, and quite another to contend that poverty triggers widespread emotional illness.

While such arguments may be valid from both points of view, child psychiatrist Michael Rutter of the Institute of Psychiatry in London, England, suggests their focus is misdirected. Instead of searching for the environmental precursors of problems in adjustment, Rutter for several years has been examining well-adjusted children from disadvantaged backgrounds. His research is aimed ultimately at prevention, one of the newest and fastest-growing fields of behavioral study. Rutter was among more than 100 experts who gathered recently at the third Vermont Conference on the Primary Prevention of Psychopathology.

"There is a most regrettable tendency to focus gloomily on the ills of mankind and on all that can and does go wrong," says Rutter. "It is quite exceptional for anyone to study the development of those important individuals who overcome adversity, who survive stress and who rise above disadvantage."

Rutter and others have studied the effects of poverty and family maladjustment on British children since around 1970. They have found:

- One in six British children lives in conditions of extreme social disadvantage, characterized by poverty, poor housing and family adversity.
- Of those youngsters, nearly half are well-adjusted; one in seven has "some kind of outstanding ability"; and one in eleven shows above average attainment in mathematics.
- Of children who suffer "the constellation of disadvantages"—parental criminality, bad child rearing, poverty, low intelligence and large family size—over a quarter show no evidence of any

What does it take to overcome childhood adversity? Researchers say that for the first time they are beginning to get some answers.

## BY JOEL GREENBERG

kind of delinquent behavior.

• Children raised by mentally ill parents, most of whose marriages are extremely disruptive, experience "dreadful stress," but a sizable proportion develop without any evidence of disorder.

Although the risk of emotional disorders among children from such backgrounds is considerably higher than average, says Rutter, "some children come through unscathed. In spite of profound social deprivation some of these children not only develop adequately, but also are well above average in their educational attainments," he notes. The focus of research must be shifted "to consider the factors or circumstances that provide support, protection or amelioration for the children reared in deprivation," the psychiatrist says. "This neglect [in research] of positive influences means that we lack guides on what to do to help deprived or disadvantaged children.

'It is all very well to wish that the children should have a stable, loving family which provides emotional support, social stability and cognitive stimulation," Rutter says. "But we are almost never in a position to provide that. All we can do is alleviate a little here, modify a little there and talk to the child about coming to terms with his problems. On the whole, the benefits which follow our therapeutic endeavors are pretty modest in the case of severely deprived children. Would our results be better if we could determine the sources of social competence and identify the nature of protective influences? . . . . I think they would.'

Rutter has already begun the search for positive mental-health factors in British children from a range of deprived backgrounds. In an ongoing study of 150 deprived and 100 control families, he has identified six family variables "strongly and significantly associated with child psychiatric disorder: Severe marital discord; low social status; overcrowding or large family size; paternal criminality; maternal psychiatric disorder, and admission into the (institutional) care of local authority. Rutter and his colleagues have separated families that have none of the risk factors from those that have anywhere from one to all six. They then compared the groups in terms of rates of child psychiatric disorder.

The results, Rutter reports, are "in-

teresting and surprising." Children from families with just one risk factor were no more likely to have psychiatric disorder than children with no risk factor at all. "It appeared that even with chronic family stresses the children were not particularly at psychiatric risk so long as it was really a single stress on its own," says Rutter.

On the other hand, when any two of the stresses occurred together, the risk went up at least fourfold, according to the study. And with the addition of more concurrent stresses, psychiatric disorder went up several times further still. "The stresses potentiated each other, so that the combination of chronic stresses provided very much more than a summation of the effects of separate stresses considered singly," he reports. While those findings apply mainly to chronic family stresses, Rutter also observes-as did several researchers prior to him—that they appear to hold for acute stresses, such as hospital admission. A single admission carried no detectable long-term effects, he says, but "multiple hospital admissions were associated with a sub-stantially (and significantly) increased risk of psychiatric disorder in later child-hood." He found further that children from deprived homes were more likely than others to have multiple admissions and were also more prone to the longterm effects of cumulative admissions.

While Rutter concedes that genetic factors "play a significant role in determining individual differences in personality characteristics and intelligence, says it is wrong to assume "that we can do little to influence development by manipulation of the environment." Environmental variables not only account for a good deal of individual variance, Rutter suggests, but frequently influence the direction of genetic predispositions. For example, he found that the children most likely to be damaged by the effects of severe family discord were those whose parents had a lifelong personality disorder. His and other studies have shown that adopted youngsters are abnormally prone to become criminals only if their biological father had a crime record. But if the adoptive father also has a criminal history, the chance of child criminality shoots up to nearly twice that of the youngster whose biological, but not adoptive, father was a criminal.

Concludes Rutter, "It seems that environmental factors have their greatest effect on people who are genetically vulnerable. This makes it more important, not less so, to do everything possi-

SCIENCE NEWS, VOL. 112

ble to improve environmental circumstances."

Rutter has also found that both temperament and sex seem to play a role in how a child responds to problems at home. Temperamentally "easy" youngsters have a rather benign impact on troubled parents and are far less likely to become the parents' scapegoat than are the difficult children. The easygoing child also avoids much of the parents' negative interchange, Rutter says.

In addition, the psychiatrist reports that boys are more likely than girls to be damaged by family discord and disruption. Although little is known about why such a difference in response exists, "it seems that one protective factor in stress circumstances is to be a girl," Rutter observes. "It is well established that males are more vulnerable to physical stresses, and it appears that in some respects boys may also be more susceptible to psychosocial traumata."

But how do these findings fit into prevention? One can hardly change a child's genetic makeup (at the moment, at least), sex or biological father. At this stage of his investigation, Rutter acknowledges that his findings are preliminary and his suggestions for positive steps toward preventive mental health are general, and occasionally obvious. Nevertheless he believes he may be on the road to establishing some definite guidelines for childhood mental hygiene.

There are ways to begin to counteract, if not eliminate, the various combinations of the half-dozen major stresses that can occur in a child's home life, Rutter says. His suggestions center around:

• Influences of school. Numerous British studies have shown extreme variations among schools on behavioral measures such as absenteeism, delinquency, psychiatric referrals and patterns of employment after leaving school. Two recent studies found that mean annual delinquency rates in secondary schools varied more than 30-fold from one school to another.

In his own seven-year study of secondary school youngsters, Rutter observes similar variation and concludes that "good schools can and do exert an important protective effect." But what makes for a good school? From his observations thus far, Rutter states that "it is clear that the answers do not lie in factors such as size, staff-pupil ratio or quality of buildings. Rather, the crucial differences are to be found in the 'atmosphere' of the schools and their qualities as a social institution." The psychiatrist admits he has yet to come up with precise criteria for the ideal atmosphere, but forthcoming data from a two and one-half year study of 12 schools will "hopefully" enable researchers to be more definitive about school standards. However, Rutter is already certain that a primary aspect of the healthy school would be his second preventive ingredient, self-esteem.

• Self-esteem. Research by Rutter in



Rutter: Successful children from disadvantaged families may hold the key.

1970 suggested that children who do not learn to read, or who fall behind in other schooling areas lose confidence in themselves, fail to maintain normal self-esteem and, in many cases, go on to delinquency. That study and Rutter's current survey of 10-year-olds in London also depict the "psychiatric vulnerability" of children with low scholastic attainments. "Self-esteem is very important," Rutter stresses. "It's a very rare child who doesn't have something he's good at—maybe it's washing up or helping people.

But teachers tend to ignore it when a child does well, and this happens in families too," he says. "Of course, you have to focus on some difficulties, but they shouldn't be the only emphasis. We can get families and teachers to turn around and encourage the positive qualities, so the youngster has a better chance of seeing himself as an achiever.' In school, Rutter says, teachers could insure that a wide range of behaviors are valued. "For example, you could get problem adolescents to help with the younger children-this has been done, and they [the adolescents] begin to see themselves as worthwhile.'

The psychiatrist concedes that the idea "has parallels" to the behaviorism of B. F. Skinner, and adds, "I'm a bit unhappy about them [the parallels] in a way." But he emphasizes that in his proposed learning situation, "the rewards should be real—such as teacher appreciation—not artificial." Many standard behavior-modification programs employ tokens, candy or money as incentives to encourage proper behavior or learning. Rutter adds that in a healthy classroom, "achievement will be motivating in it-self—it will be fun to do well."

• Scope of opportunities. In examining the later careers of youngsters from unhappy and disadvantaged homes, Rutter has found that such persons tend to marry young, have babies early and live with someone from a similarly deprived background. Later on, the rates of marriage breakdowns and parenting difficulties are high. However, a number of youngsters have managed to break this cycle of entrapment and have successful careers and marriages, he reports. Rutter is currently searching for the critical factors that may be involved in the upbringing of the successful children.

• Structure and control. "One of the most striking features of ... multiproblem families is the chaotic state of their patterns of supervision and discipline," says Rutter. Indications are that poor

supervision often precedes delinquency, while "strict parental supervision, [but] not extreme punitiveness, appeared to have benefits in terms of preventing delinquency," Rutter says.

• Bonds and relationships. Many of the ill effects of troubled families may be avoided if the child has a good relationship with just one parent, Rutter has found. In one study he reports that of children with such a relationship, only one-quarter showed a conduct disorder, compared to three quarters among those who had a good relationship with neither parent. Moreover, he found that even a good relationship-defined as one of 'high warmth and the absence of severe criticism"-with an adult other than either parent can also serve as a protective influence. But, he emphasizes, it is a "close, confiding relationship that is important. Frequency of contact with other people and practical support [alone] were not protective." It also appears that the development of such relationships in later childhood may have a rehabilitative effect. After years of maternal deprivation, many adopted children formed close ties with their adoptive parents and to some extent "made up for earlier lacks and ... facilitated normal development." However, studies also show that many of these children remained socially disruptive in the classroom. Rutter concludes that "whereas late adoption helps, it does not [totally] make up for the lack of early bonding.

• Coping skills. "Adaptability and malleability are among the chief temperamental characteristics which protect against psychiatric disorder in child-' Rutter says. One way to foster hood." such characteristics, his studies indicate, is through "brief, normal separation experiences, such as staying overnight with friends or relatives, having baby sitters, attending nursery school or being left all day with a familiar person," says Rutter. "It appears that brief, graded separations in happy circumstances can help protect children from the stresses of later, unhappy separations.

Because most children in disadvantaged environments suffer from numerous, interrelated stresses, Rutter says that the idealistic goal of eliminating certain stresses and leaving just one (which his research shows would produce few ill effects) "practically never" can be done. So, behavioral scientists must concentrate on finding ways to counteract and alleviate as many stresses as possible, he says. "Our failure lies not in that we are impotent in the face of damage from early experiences, but in that we fail to change environments," he says.

"Many children do not succumb to deprivation and it is important that we determine why this is so and what it is which protects them from the hazards they face," Rutter says. "The potential for prevention surely lies in increasing our knowledge and understanding of the reasons why some children are not damaged by deprivation."

SEPTEMBER 24, 1977 203