Overview of Programs to Prevent Mental Health Problems of Children

BETTY TABLEMAN, MPA

DESPITE THE SEPARATE ORGANIZATIONAL BASES and mandates of alcoholism, drug abuse, and mental health agencies, there are good reasons for considering the agencies' common ground in designing programs to help children. First, most children exhibiting antisocial behavior and most children exhibiting symptoms of emotional disturbance are reflecting different facets of maladaptive behavior; there may be common features in the children's underlying experiences. Second, there is an overlap between the children and adults served by mental health agencies and those served by drug abuse and alcoholism agencies. Substance abuse and antisocial behavior are characteristics of some of the patients in the caseload of mental health agencies. Further, both substance abuse and mental health problems are present in some families as a result of assortive mating (schizophrenic women selecting antisocial men) or because living with an alcoholic or drug-abusing spouse or parent generates emotional disturbance. Third, children characterized by antisocial behavior have the worst prognosis of any group of children seen at mental health clinics in terms of poor adaptation, including severe mental disorder, as adults (1,2).

Fourth, mental health and substance abuse agencies share a common methodology of prevention. While the agencies of the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA) have been uneven in promoting programs of prevention, all have drawn upon the same body of research and theory. So, it might be added, have other branches of the Federal Government concerned with improving school performance, reducing juvenile delinquency, and preventing child abuse and neglect. Prevention efforts rest on the expectation that adaptive skills and behaviors can be taught and that environments (families, schools, support systems) can be changed.

I will review several directions that have been explored in the mental health and substance abuse fields to support the normal, healthy development of children, particularly those who are in situations that place them at risk for emotional, cognitive, or behavioral disorder. For many years, primary prevention activities were directed toward an undifferentiated "general" population. Recently, emphasis has shifted to more focused efforts to reach groups with a disproportionate number of persons at risk (3). In this context, interventions for general populations will be targeted at neighborhoods or schools with high rates of deviant behavior or with population characteristics, such as low income, that may indicate susceptibility to disorder.

Even more narrowly focused interventions are targeted at individual high-risk children defined by a common demographic or experimental variable that has been shown to be correlated with high rates of deviant behavior. This approach is based on a body of information derived from clinical and epidemiologic studies.

Characterized as being at high risk for emotional disorder and other social pathological outcomes are infants and children experiencing separation, conflict between parents, multiple hospitalizations, loss of parents through death or divorce as well as the children of disordered adults, teenage parents, or children experiencing difficulty in school. Such children are in situations which have the potential for generating stress and creating deficits in physical and emotional resources over an extended period. Children at risk, thus, are not subjected to a single critical event but are likely to experience continuing stress and deprivation (4). Although the probabilities for emotional disorder and antisocial behavior may be greater in these groups than in the general population, a substantial number of children at risk manage to emerge as normally functioning adults. It is important to understand the circumstances within these risk populations that differentiate the "invulnerables" from the casualties.

Mrs. Tableman is director, Prevention and Indirect Services Unit, Michigan Department of Mental Health, Lewis Cass Bldg., Walnut St., Lansing, Mich. 48926. The paper is adapted from her presentation at the First Annual Alcohol, Drug Abuse, and Mental Health Administration Conference on Prevention, held September 12–14, 1979, in Silver Spring, Md. Tearsheet requests to Mrs. Tableman.

Programs for Infants

Advocates of primary prevention have tended to gravitate toward programs for infants in high-risk populations as a logical start. For many years, this interest has been directed toward health during pregnancy with emphasis on reducing the number of impaired or constitutionally vulnerable infants. The National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse have contributed to these efforts by publicizing the impact of alcohol and drug use during pregnancy on the developing infant. Health-based programs focusing on infancy support nurturance with emphasis on guidance in infant development and linkage to health care.

As part of the 1960s' war on poverty, interest in infant development was directed toward cognitive concerns: that is, to improve I.Q. and school performance of children in low-income populations. These programs have been relevant to ADAMHA's concerns because of the resources that they provided to children from culturally deprived backgrounds and their contributions to the children's socialization and school success.

More recent service development has emphasized the psychosocial development of infants. Program interventions have been designed to establish the responsive attachment between caregiver and infant necessary for sound affective development, to avoid child abuse and neglect, to prevent or remediate aberrant development during infancy, and to avoid its consequences in subsequent emotional and behavioral disorders.

The implications of lack of mutual response between infant and caregiver for future development are beginning to be documented. For example, a study by Broussard and Hartner indicated that the children of mothers who perceived their infant negatively at 1 month in relation to the average baby had a high probability of needing psychiatric intervention at ages $41/_2$ and 11 years (5). Broussard also has compiled videotapes of infants showing early difficulties in responsiveness between mother and infant and the evolution of disturbed behavior. Massie has collected similar material retrospectively through early home movies of children subsequently diagnosed as psychotic (6).

Because the young child's physical, affective, and cognitive development are so closely linked, services for infants, regardless of perspective, seek to change the caregiving environment. Despite different emphases, health-based projects, educational projects, and psychosocial projects are beginning to show a characteristic pattern for intervention: 1. Begin intervention during the first months of life,

2. Continue week after week involvement,

3. Work with the infant through the mother to facilitate mother-infant interaction.

Bronfenbrenner, in an exhaustive review of preschool programs around the country, found that the significant ingredient for lasting change was the focus on the parent-child system and the fostering of interaction between parent and child around a common activity. If programs, whether centered-based or home-based, involved the mother with the child, gains were sustained over time. This review also indicated that greater gains were achieved if intervention was initiated before age 2 (7).

Some examples of programs for infants follow.

In Elmira, N.Y., young single, poor women are enrolled in a health-based project during pregnancy and supported with weekly home visits until the infant is 2 years old. Nurses provide health information and guidance in child development and assist in obtaining other services and in building an informal support network of family and friends. Transportation to medical services is provided. A well-articulated evaluation design will permit testing the effect of the various service components in this ecological model designed to reduce stress (8).

By observing the reaction of mothers to their infants immediately after delivery, newborns at risk of abnormal parenting practices were identified in a Denver, Colo., child abuse prevention project. Again, through weekly home visits, nurses provided support and developmental guidance, and tied families into medical services. In comparison with controls, intervention reduced the severity of injury experienced by infants during the first 17 months (9).

A Kalamazoo, Mich., project is centered around newborns in situations which place them at risk for attachment disorders. Post-delivery and in-hospital observation of mother-infant interaction as well as a checklist of situational factors related to risk are used to identify the infants. Families served range from teenage parents in need of support and guidance to disorganized multiproblem households. Home visits, spaced according to the family's needs, encourage attachment between parent and infant, provide developmental guidance, teach problem solving, and assist the families in obtaining services. Families receiving services were less likely to drop out of medical care, and no accidents or trauma to infants occurred during the first year.

Because the parent's emotional availability can change, services based on identification of newborns at risk need to be supplemented with services on referral. In some Michigan communities, a home visit model of infant mental health services has been developed, described by Fraiberg and co-workers as "psychotherapy in the kitchen" (10). These services reach pregnant women, newborns, and older infants and their mothers referred by professionals who have identified impediments to attachment or disorders of attachment expected to affect the infant's psychosocial development.

Cognitively oriented programs, focusing on stimulation of infants to enhance their social and cognitive development, with a longer track record than psychosocial programs, have had impressive evaluations (11). In several programs, paraprofessionals visited the home and worked with the mother, using a toy or task designed to enhance development (12). Mothers also have the opportunity to discuss problems and can be referred to other needed services. Gordon's project in Florida began when the infants in low-income families were 3 months old. The researchers found that 2 or 3 years of involvement with infants and families raised I.O. scores for participating children 10 points above those of control children at 6 years of age. Of the study children, only 6 percent were in special education at grade 3 compared with 30 percent of children receiving no services (13).

Similar results are reported by Weikert and coworkers for the High Scope (Ypsilanti, Mich.) Perry Preschool Project for selected 3 and 4 year olds with low measured I.Q. and economic disadvantage. Children received a daily preschool experience and they and their parents, a weekly home visit. These youngsters and comparable children not receiving services have now been followed through high school. Children receiving services showed better academic achievement (beginning at grade 5 and reaching a differential equivalent of 1 to 2 grades at grade 8). In addition, only 17 percent were in special placement (special education or retained in grade) compared to 38 percent of nonserved children. Although I.Q. differences disappeared by grade 3, this study is significant for its evidence of actual long-term gain (14). Unfortunately, measures of psychosocial adjustment, such as referrals of these children to mental health services and the extent of substance abuse, were not documented.

There are other examples, less replicable, of impressive gains by children who, if left alone, are below normal in intelligence and social functioning (15,16)and other programs supporting families and facilitating development that I have not described.

The accumulating evidence indicates that, even though programs for infants are relatively new and all the data are not yet in, we have the tools for establishing a base for mental health and learning potential early in life. ADAMHA research could be helpful in documenting the linkage between early aberrant development and later disorder and documenting the components, costs, advantages, and disadvantages of various modes of intervention. Considerably more work needs to be done, too, in identifying effective ways of reaching and keeping contact with mobile, isolated, and problemridden families.

Children of Disordered Adults

The children of mentally ill or alcoholic parents have a substantial risk of becoming disordered as children or as adults. Such children may, in fact, contribute only a portion to the total psychopathology in a society; 10 to 15 percent of all schizophrenics come from families with histories of schizophrenia (17); 30 percent of alcoholics have an alcoholic father (18). However, study of such children may clarify the etiology of breakdown and disorder in other populations. Their accessibility as a consequence of a parent's involvement with treatment makes it possible to bring them into prevention services as an integral part of the case management process for the parent.

The incidence of schizophrenia has been more extensively studied than that of other disorders. In the general population, the incidence is estimated at 1 to 2 percent. Among children of schizophrenics, studies have indicated that the probability of repeating the parent's history of mental illness is 15 percent when one parent is schizophrenic, and 32 percent or higher when both parents are schizophrenic. As adults, an additional 35 percent of the children of schizophrenic parents can be expected to evidence some other form of deviant behavior (17).

Anthony, in a survey of the children of schizophrenic and manic depressive parents, reported that about 40 percent had significant maladjustments, 30 percent evidenced minor adjustment problems, and 30 percent were normally adjusted (19). Shanok and Lewis (20) who studied the caseloads of a New Haven juvenile court clinic and a child guidance clinic found that 15 percent of the mothers of both clinics' patients had had inpatient psychiatric treatment.

Because half of the children of one schizophrenic parent will function normally as adults, recent studies reviewing patient populations and following children selected because of high risk have centered attention on the physical, environmental, and experiental factors which distinguish between those children who later exhibit deviant behavior and those who lead a normal and even creative life. Children who become disordered later are more likely to have experienced vulnerability in infancy. Perinatal complications are more frequent than for those with a good outcome; early separation from the mother is a characteristic experience (17). The child born to the schizophrenic mother during the acute stage of her illness has a greater probability (55 percent) of becoming disordered than do children who are past infancy (38 percent), or who are born later (35 percent) (21-23). Further, children born during the acute stage of the mother's illness show more severe behavioral disorder than children born at other periods who become disturbed (21).

The character of the parental disorder and the stability and warmth of the nondisordered parent are significant. Anthony found that children (particularly young children) with a disordered parent who incorporates them into the psychotic system showed more signs of overt disturbance than do those children with more seriously disturbed but withdrawn parents (24). Rutter observed that a warm relationship with one parent reduced dramatically the proportion of children of mentally ill parents from troubled homes who evidenced antisocial behavior (25).

Children subjected to multiple stresses are more vulnerable. Rutter's epidemiologic studies of 10-year-old children on the Isle of Wight and inner London identified six variables strongly associated with psychiatric disorders: maternal psychiatric disorder, paternal criminality, severe marital discord, low social status, overcrowding or large family size, and placement in foster care. Children from families with 2 or 3 stress factors had a 6 percent rate of psychiatric disorder (4 times that of children from families with 0 or 1 stress factor) and children from families with 4 or more stress factors had a 21 percent rate of psychiatric disorder (25).

It is not unexpected that poor school performance, low acceptance by peers, and disruptive behavior are characteristic of children with depressed or schnizophrenic mothers. Watt's study of schizophrenics suggests that a third to one-half could have been identified as children by deviant behavior in school. Introverted, immature, quietly maladjusted behavior among girls was observed by teachers in early elementary grades. Negativistic, unpleasant, antisocial, actively maladjusted behavior by boys was evident in early adolescence (2).

Preventive intervention with children of disordered adults is a relatively new idea, and little information is available. Nevertheless, it is very clear that infant programs need to be emphasized. In a limited number of Michigan communities, programs for infants of disordered mothers center around establishing stable and responsive caregiving arrangements and supporting the family through maximum use of compensatory helpers such as the infant specialist, public health nurse, and parent aide. Keeping infants with their mothers who have been admitted to psychiatric care has been piloted in a general hospital in Michigan with good results for the infant and a decreased hospital stay for the mother (26). In Chicago and Pittsburgh day treatment programs for severely disturbed mothers also include their young children.

Projects in Vermont and Mauritius are trying out interventions with high risk preschool children in a day-care setting. Staff of the Vermont Child Development Project are selecting children whose parents have experienced significant emotional or behavioral disturbances, children with serious developmental lags, and children with demonstrated behavioral difficulties, particularly those with unsocialized aggressive or socially withdrawn behavior. Intervention, undertaken at 3 to 5 years, involves supplementing regular day care with therapeutic and remedial services designed to bring the child up to normal functioning in motor development, self-care, receptive language, expressive language, cognitive development, graphic skills, prereading skills, social behavior, and speech. Assessment before and during intervention establishes developmental profiles that guide child-specific, educational-therapeutic plans. Interventions include monitoring services already provided, consulting with day care teachers concerning appropriate activities or behavior modification programs, referral of the child for specialized speech and other therapy, and one-to-one or small group intensive remedial work to facilitate skill development or socialization processes. Work with parents has been the weakest component. Because of lack of parental motivation in multiple problem families, Rolf and Hasazi report that the highest risk children, those who already exhibit severe behavior disorders, are least likely to show steady gains (27).

In the Mauritius project directed by S. A. Mednick, 3-year-olds are selected on the basis of psychophysiological risk (an extremely fast rate of recovery for skin conductance) and placed in nursery schools in a 3:1ratio with normally functioning children. The high-risk children were initially more fearful, more disturbing, and more aggressive than the normal children. Participation in the nursery school has changed them to normal happy children (28).

Anthony's intervention has been with older children of schizophrenic and manic-depressive parents. Four types of interventions have been used. Classic interventions provided open-ended, nondirective individual and group psychotherapy. Corrective interventions involved specific procedures to demystify the parent's illness, reduce unrealistic and magical thinking, and improve organizational competence and self-differentiation. Compensatory interventions involved nonspecific recreational and other opportunities designed to build up ego resources and provide a stable role model. Carthartic interventions were used during the acute or relapsing phases of the parent's illness to release the child's feelings concerning the parental illness.

Anthony reported that the classic interventions have generated the greatest change, that the most maladjusted children showed the greatest change, and that children in families who maintained affiliations with the outside community and were more open to intervention showed greater change than children from isolated families (24).

A Michigan project, designed to pilot communitybased services for children of disordered adults, receives referrals from inpatient, aftercare, and outpatient therapists. A home visit model is used; the knowledge gained from seeing the families in their natural environment has been helpful to the adult's therapist. The child's functioning in school, with peers, and with family is assessed: severely disturbed children are referred to treatment services. Intervention includes coordination with the adult's therapist; counseling with parents to provide support, enhance sensitivity to the child's needs, and to improve their child management skills; counseling with the child to provide for reality testing and facilitate coping; and advocacy for the child with school and other agencies. Tutoring, parent education classes, and recreational groups are also being used. Preliminary data suggest improved adjustment for boys closely involved with a male staff member.

While it was not possible to complete a similar review of programs for the children of alcoholics, there are a good many parallels. Children of alcoholics have been included in the Vermont and Michigan projects described previously. Services to children of disordered adults may be one common area in which a careful assessment by ADAMHA might suggest generalizable service models. Again, we need a great deal more information about alternative interventions and their effectiveness.

Children in Divorces

The children of divorcing parents are of special concern. More than 1 million children annually in the United States experience the disruption and stress attendant upon the dissolution and rearrangement of family relationships. Bane, viewing in 1975 the rising rate of divorces, predicted that over the next decade 40 percent of all children will have experienced the effect of marital disruption (29).

There is limited documentation of the extent that the disruption of divorce places a child at risk for emotional disturbances and chronic maladjustment. Kelly and Wallerstein's intensive study of a small number of divorcing families in Marin County, Calif., suggests that all children during the initial period of separation will react with aberrant behavior to the stress of the situation. All children can benefit from support during this transition period (30).

Some children will evidence continuing difficulties. The characteristic response to the divorce experience will vary according to the child's age, sex, and developmental stage. The initial and long-run behavior has been well described in a series of articles by Wallerstein and Kelly (31-33).

Over the long run, the impact on the child's mental health largely depends upon the nature of the parental response and recognition of the child's needs. Insufficient nurturance from an overwhelmed and depressed mother will be especially damaging to preschool children who have dependency needs. (Preschool girls are particularly vulnerable to the simultaneous diminution of paternal contact and maternal attention). Overinvolvement in parental behavior overwhelms older children, particularly elementary school age boys, who do not have the capacity to distance themselves from their parents.

The children who are caught in the conflict between the two parents are particularly vulnerable. While the divorce may terminate a damaging period of marital discord for some children, for others the divorce continues and exacerbates conflictual relationships. There are legal contests in half of the divorces involving children and, in one-sixth, intensive often hostile interaction continues between the parties for a period of 2 years after the decree (34). For those children caught in parental turbulence, the divorce is not a single crisis but an ongoing traumatic experience. The divorcing process may include not only the accommodation to the loss of one parent but also the adjustment to the step-parent.

Children in divorces are overrepresented in the caseloads of psychiatric services. In Shanok and Lewis' study of children aged 7 to 16 years, 48 percent of those referred to a juvenile court clinic and 49 percent of those referred to a child guidance clinic came from broken homes (20). Of children referred to the University of Michigan Department of Psychiatry, 41 percent had parents who were separated, divorced, or remarried; 18 percent were living with a divorced parent. The greatest proportion of these children experiencing the effects of marital disruption who came to mental health services were adolescents (41 percent), with about one-third ages 7 to 11 and one-fourth under age 7. One-third of the children experiencing the effects of separation and divorce came from step-parent families. Children of divorced parents characteristically come to mental health agencies with serious behavioral problems and

depression during the post divorce period. Aggression toward parents as a presenting symptom distinguished children of disrupted families from children of intact families. School behavior is a presenting problem for two-thirds of both groups. Adolescents from disrupted families display delinquent and antisocial behavior, with adolescent girls from step-parent families characterized by aggression toward parents and peers, sexual misbehavior, drug involvement, and school problems (35).

Interventions for children in divorces are still being developed. Although a number of communities have experimented with offerings for parents or children, or both, few have worked out systematic recruitment through lawyers or the courts in order to reach parents and children early in the divorcing process. If resources are limited, services may be designed primarily for children whose parents are contesting custody and visitation rights.

Some mental-health based programs for children in divorces essentially use a short-term crisis intervention model, working individually with each child or seeing parents and children separately and as a family (36).

Small group interventions can take several families at one time. A parent's group, a children's group, and an adolescent group meet concurrently, sometimes with a final session combining parents and children. Sessions are time-limited with defined objectives and subject matter. A Colorado program, for example, is structured around six sessions and uses illustrative videotaped episodes as a basis for discussion. The sessions are designed to provide a safe, nonthreatening atmosphere for the expression of feelings, to help parents and children develop new ways of relating to each other, to teach effective communication skills, and to provide an opportunity for constructive interaction with peers (37).

The researchers do not report to what extent these interventions attract divorcing parents and children from all social classes. These programs do not necessarily meet the needs of parents with very young children for whom referral to infant services may be more appropriate.

Whether laws can or should be changed to mandate participation of parents and children—particularly in those cases in which custody is an issue—needs to be explored. Ultimately, the divorcing process should provide some opportunity for all parents to consider the impact of divorce on their children. An informational pamphlet and a single educational session are being explored as minimal possibilities.

Broader Social Issues

ADAMHA has no direct responsibility for social policy, yet prevention programs are operating against a social milieu which, in many ways, creates disorder. Generally, high unemployment increases rates of alcoholism, child abuse, delinquency, mental illness, and other measures of social stress; and high unemployment among innercity black youth is particularly destructive. Public policy encourages mothers to work, even though the consequence may be neither time nor energy to attend to young children.

Judicial determinations, social service policies, and hospital practices may all move in directions that are destructive of children's support systems and psychological well-being. A family impact seminar at George Washington University tested the feasibility of analyzing laws in terms of their impact on families. Perhaps ADAMHA might consider a similar undertaking directed toward public and professional understanding.

Summary

This review cannot pretend to be inclusive. Other appropriate facets of prevention for children and youth—parent training, for example, or school-based competence building (affective education)—have not been discussed.

What can ADAMHA do to move prevention programs for children and youth forward as its fourth initiative? I offer four suggestions.

1. ADAMHA can promote for various areas of prevention the same kind of cross-project analysis and review that has occurred with respect to early childhood education (7,11). Competence building and education in parenting may be at a point where such an analysis and review might be productive. (38).

2. ADAMHA can lead in establishing, evaluating, and validating service models in a way that frees States and communities to incorporate prevention services into their programs without the burden of proving and reproving the effectiveness of those services.

3. ADAMHA can publicize these evaluated and validated projects in a way which provides adequate information for replication.

4. ADAMHA can join forces with other Federal agencies to accomplish mutual objectives.

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