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The preceding chapters in this volume have made it clear that parental abuse of alcohol and other drugs (AOD) is a very serious risk factor for the well-being of children. While I would urge the cautionary note that these children are neither so numerous nor so severely damaged as the recent media hysteria over "crack babies" would have led us to believe (Beckett, 1995; Duncan, 1997; Norton-Hawk, in press; Reinarman & Levine, 1994; Susman, 1996), their actual numbers and their very real problems do constitute a serious challenge to our educational, welfare, and health care institutions. As with other problems that reach the proportions of a public health issue, the promotion of health and the reduction of risk factors (primary prevention) should be the organizing principle behind our activities regarding children of drug-abusing parents.

In the field of public health, prevention has traditionally been conceptualized as occurring at three levels: primary, secondary, and tertiary (Duncan, 1988). By primary prevention we mean the prevention of new instances of the problem—lessening the frequency with which it happens in the first place. By secondary prevention we mean early intervention in the course of a problem, aimed at shortening the duration of cases of the problem and thus reducing the burden of those cases on the community at any given time. The term tertiary prevention is used to describe efforts aimed at mitigating the long-term consequences of the problem.

In the case of an infectious disease, this might mean primary prevention by means of vaccination to prevent people from catching the disease. Secondary prevention might consist of active screening aimed at channeling infected persons into treatment and returning them as quickly as possible to good health, with a primary prevention benefit of reducing spread of the infection from them to others. Medical measures aimed at preventing death and disability in those afflicted with the disease would constitute tertiary prevention.

These concepts have also been applied to the prevention of drug abuse. Primary prevention measures such as drug education, strengthening families, and teaching coping skills can serve to protect individuals against the onset of drug abuse. Teaching parents, physicians, and others to recognize the signs and symptoms of drug abuse, and providing accessible and acceptable treatment services can achieve secondary prevention by bringing abusers into treatment at as early a stage as possible in their disorder. Harm reduction measures such as needle exchanges, methadone maintenance, and street outreach medical workers can reduce the incidence of such dire consequences of drug abuse as HIV and other infections, overdoses, and involvement in acquisitive crime to pay for drugs.

Prevention of the harm to children that may result from parental abuse of alcohol or other drugs is conceptually more complex. It can be difficult to identify what is primary prevention and what is secondary or tertiary in this

problem. For example, is getting a parent into an Alcoholics Anonymous (AA) program or a treatment facility an instance of secondary prevention or is it primary prevention? Or is intervention to prevent abuse of the child merely tertiary prevention of one of the long-term consequences of alcohol or other drug abuse? While at first glance these may seem to be mere semantic quibbles, on closer inspection they reflect fundamental assumptions about the problem of abuse and neglect of children by their substance-abusing parents. The soundness of those assumptions may make the difference between an effective prevention program or a waste of scarce resources.

If we view the problem solely from a drug-centered perspective, then the only interventions that make sense are those targeted at the parent's abuse of alcohol or other drugs. If such interventions are successful, then nothing more should be needed to protect the child's well-being. At the very least, such a perspective holds that nothing worthwhile can be done about an AOD-abusing parent's neglect or abuse of a child until that parent's drug problem has been resolved. The opposite view might hold that the parent's AOD abuse was a result of abuse by his or her parents early in life and can be resolved only in the context of a full confrontation with the intergenerational pattern of child maltreatment that exists in the family. While each perspective has its merits, neither alone is adequate to the task of guiding our prevention efforts in this area. I would propose that in developing preventive interventions for this problem we should be explicit in accepting that both primary and secondary prevention of parental AOD abuse often will also be primary prevention of child abuse and neglect. At the same time we should accept that prevention of parental AOD abuse is neither necessary nor sufficient to prevent child abuse and neglect at primary. secondary, or tertiary levels. AOD-abusing parents do not necessarily abuse their children; nor is the absence of AOD abuse any guarantee of proper parenting behavior.

Within such a schema, I would suggest that strategies for primary prevention might be organized around three different objectives: (a) preventing the onset of AOD abuse among parenting-age women; (b) early intervention for drug abuse in pregnant or parenting women; (c) preventing the onset of child abuse by women or their spouses who continue to abuse alcohol or other drugs.

These primary prevention efforts, of course, should be supplemented by secondary and tertiary prevention. Secondary prevention would provide early intervention in child abuse by drug-abusing women and their spouses. Tertiary prevention would target the long-term sequelae of the child's exposure to child abuse and parental drug abuse. In this chapter, I will be concerned with primary preventive interventions.

Primary Prevention of Drug Abuse in Parenting-Age Women

The most obvious strategy is intended to achieve primary prevention of the entire complex problem of parental AOD abuse and child abuse or neglect by preventing the drug abuse from ever occurring in the first place. The great problem with this elegantly simple approach is that we have had very little success in preventing drug abuse, as was documented by the National Research Council's Committee on Drug Abuse Prevention Research (Gerstein & Green, 1993). It seems to me that there are three major reasons for our general failure to achieve noteworthy success in preventing drug abuse. First, most efforts have been mis-targeted on preventing use rather than on preventing abuse. Second, techniques that we know don't work continue, nevertheless, to be the main techniques used in drug abuse prevention. Third, most prevention programs lie to their target audience.

Effective prevention of drug abuse by parenting-age women should be targeted precisely on abusive patterns of drug use, involving large doses, large weekly intakes, and drug taking under high-risk conditions. Occasional, low dosage use of any of the popular recreational drugs under low-risk conditions does not appear to contribute to the type of problems discussed in this book and should not be the target of prevention efforts. There is no reason to believe that the mother who drinks an occasional glass of wine with her dinner or consumes marijuana at a party is placing the health of her unborn child or the welfare of her children at risk. I believe society should not waste its time acting as morals police in trying to eliminate such behavior.

The knowledge-attitudes-behavior (KAB) model, which holds that all one need do is provide the appropriate knowledge in order to shape attitudes and ultimately change behavior, has long held sway in the field of drug abuse prevention. Unfortunately, the success of such efforts has been unimpressive (Gerstein & Green, 1993). Meta-analyses, such as those by Bangert-Drowns (1988) and by Bruvold and Rundall (1988), have found that such programs generally achieve their greatest effects on knowledge, less effect on attitudes, and virtually none on behavior.

Scare tactics have dominated drug education in America since the early efforts of the temperance movement in the late 18th and 19th centuries. This remains true today despite the fact that we have known for decades that these tactics not only don't work, but often actually have a boomerang effect in encouraging drug use and enhancing the barriers to help-seeking. This reliance on scare tactics is closely allied to the tendency to lie. Since the realities seem insufficiently frightening to discourage drug use and abuse, the scaremongers invent "prophylactic lies" the better to frighten their audiences. Soon they are telling such egregious lies as the famous television public service announcement (PSA) that likens using drugs to frying your brains like an egg.

Every proposal that I have read for educational interventions with this population has relied entirely on the KAB model and a dose of scare tactics. They have proposed nothing more than telling mothers about the possible damage to the fetus that can result from maternal alcohol, tobacco, and other drug use. Furthermore, most have given a grossly exaggerated picture of both the likelihood and the severity of damage to the developing fetus and infant. All have offered the advice that a woman should totally abstain from all drugs at all times unless she knows for certain that she isn't pregnant—one can scarcely imagine the reaction if we declared that all men must not drink a beer or take an aspirin unless they were certain their wife wasn't pregnant. From what we have

learned conducting drug education for adolescents, it seems unlikely that these programs will do any appreciable good.

Worthwhile primary prevention of drug abuse by parenting-age women would be targeted on reducing the risk factors that result in drug abuse and on strengthening alternative resources for dealing with problems. Concerns of depression (Beckman, 1980; Helzer & Pryzbeck, 1988), low self-esteem (Jones, 1971), lack of social skills (Fillmore, Bacon, 8c Hyman, 1979; Jones, 1971), and previous histories of abuse (McMahon & Luthar, Chapter 6 in this volume) that play major roles in the etiology of alcohol and other drug abuse in parenting-age women would need to be confronted in realistic ways, and these women would need to be empowered to cope with these issues without reliance on drugs. The informational component of a primary prevention program would need to be accurate and presented in a balanced manner that would allow women to assess their true risks and to make choices about any drug use within the limits of reasonable safety, rather than prescribing an absolute standard of abstinence.

The largest low-impact prevention effort in this area has been the requirement for warning labels on cigarette packages and alcoholic beverage containers. In both instances, one of the labels warns women against use during pregnancy. Specific effects of the warning labels during a period of historic decline in use of both alcohol and tobacco are difficult to measure and even more difficult to specify for women of childbearing age. One ongoing study in Detroit (Hankin, 1994; Hankin et al., 1993) has attempted this difficult task. It surveyed 3,572 inner-city women who sought prenatal care at an urban clinic over a period of 28 months, beginning 5 months before the labeling law went into effect. The study found that a sharp downward trend in alcohol use by the subjects began about 8 months after the warning label was implemented. Those women who were at greatest risk due to heavy drinking were, however, the least affected by the warning labels. Thus the impact of this program on the incidence of birth defects or abused children remains uncertain and doubtful.

Another form of primary prevention that has received a high degree of publicity is the criminal prosecution of women who use illicit drugs, especially crack cocaine, during pregnancy. Such prosecutions are seen as "sending a message" that drug abuse will not be tolerated during pregnancy. This strong societal message as well as fear of imprisonment is expected to prevent pregnant women from using drugs and to encourage drug-abusing women who become pregnant to seek treatment. There is no evidence, however, that any such effects actually flow from these highly publicized but relatively rare prosecutions. Their major effect seems to have been to discourage drug-abusing women from seeking prenatal care, thus increasing the risk to the fetus far more than their drug use did (Norton-Hawk, in press).

Early Intervention for Drug Abuse in Pregnant and Parenting Women

The next level of intervention would be secondary prevention of AOD abuse among pregnant and parenting women, which would also achieve primary prevention of child maltreatment by AOD-abusing mothers. Our present efforts in

this regard are not achieving great success, apparently reaching only about 10% of all substance-abusing women (Kumpfer, 1991). In part, this is due to inadequate service provision—few programs make allowance for the child care and other special needs of parenting clients, and fewer still will admit pregnant women who may need treatment (Chavkin, 1990; Miller, 1989).

Even more of a problem is the widespread reluctance of such women to enter drug abuse treatment. Hankin points out that heavy-drinking mothers typically tend to ignore general public health warnings about the dangers of drinking during pregnancy (Hankin, 1994). Beyond this, their unwillingness to enter treatment grows out of their realistic awareness that, "Asking for help . . . puts them in real jeopardy of losing custody of their children. Paradoxically, continuing their chemical dependency without seeking help does not, in general, have this effect" (Blume, 1992, p. 803). These facts suggest that we cannot rely on mothers presenting themselves for treatment and must engage in active case-seeking.

Minor and Van Dort (1982) have emphasized the critical importance of intervention by prenatal caregivers in this process. In its recommendations regarding AOD abuse and AIDS, the Expert Panel on the Content of Prenatal Care (1989) of the U.S. Public Health Service urged as a national standard for prenatal care

- 1. offering all women tests for HIV and drug toxicology during pregnancy;
- 2. educating all women about risks of alcohol and other drugs during pregnancy;
- 3. advising abstinence from AOD during pregnancy;
- 4. increasing the ability of professionals to recognize AOD abuse; and
- 5. assuring that appropriate referrals for treatment are made.

While the Expert Panel placed emphasis on testing for drugs in the blood and urine of pregnant women, such tests cannot distinguish an abuser from a user. This is crucial, not only because there is no reason to believe that a social user of alcohol or any drug is in need of an intervention, but also because we simply could not afford to provide treatment each year to all of the 34 million women who drink some alcohol and the 6 million who use some illicit drug during their pregnancy. As Blank (1996) has pointed out, intervening with every drug using woman is a tempting proposal but entirely unfeasible.

Moreover, the toxicological exam will fail to detect many abusers. The abuser may escape detection by undergoing a voluntary period of abstinence before medical exams. In many cases this can also be achieved by drinking large volumes of water and urinating frequently before the exam—the latter a natural enough phenomenon in a pregnant woman anyway.

The use of screening questions to identify possible alcohol abusers has been well established. This includes screening instruments such as the T-ACE and the TWEAK that were specifically developed for use with pregnant women (Russell, 1994). Russell et al. (1996) examined the relative effectiveness of a number of widely used screening instruments for use with pregnant women. They

found that while the CAGE, MAST (Michigan Alcoholism Screening Test), TWEAK, and T-ACE were all effective in distinguishing risk drinkers from non-risk drinkers, the TWEAK and the T-ACE were more sensitive, detecting more risk drinkers among their pregnant subjects.

Once possible cases have been identified through toxicology and screening questions, a DSM diagnostic interview should be conducted to verify the presence of a substance abuse disorder. The intervention that should follow has been described by Jessup (1990) as consisting of five steps:

- 1. state the indicators of a drug or alcohol problem;
- 2. educate the mother regarding possible effects on the fetus and the benefits of abstinence;
- 3. express concern;
- 4. refer for treatment; and
- 5. offer advocacy in helping the mother to get treatment and other needed services.

One piece of good news comes from Messer, Clark, and Martin (1996), who found that those mothers who were most in need of treatment seemed to be the ones most likely to enter treatment. This gives grounds for hope that we may be doing better than our 10%-in-treatment finding would suggest.

Another positive sign for the future comes in the form of studies showing that mothers may be more willing to report indicators of excessive drinking on self-administered questionnaires or computer interviews than to their physicians (Lapham, Kring, & Skipper, 1991; Russell & Bigler, 1979). This could lead to the locating of computers in obstetrician's waiting rooms with a programmed version of the TWEAK or the T-ACE and a follow-up AOD history-taking program. As a routine feature of every obstetrician's waiting room, such an arrangement could detect many AOD abusers who currently go undetected and unaided.

Preventing Child Abuse by Drug-Abusing Mothers and Their Male Partners

Many in our society make the assumption that all AOD-abusing parents are necessarily abusive or at least neglectful in the treatment of their children. Hogarth's famous print, Gin Alley, with its depiction of an infant falling from the arms of its stuporously drunken mother and the literary images conveyed in the first chapter come readily to mind. Powell, Gabe, and Zehm (1994) assert this view in stating that,

Parents in the addicted home naturally focus their resources on the addiction, keeping it central to the family. ... In addicted families, the rules are governed by the addiction and help the family manage around the addiction. The addiction, not the family members, is central to life. (p. 1)

Under such family circumstances the needs of children, and especially the numerous needs of an infant, go unfulfilled.

There is no doubt that AOD dependence adversely affects the family system (Jackson, 1954; Moos & Billings, 1982). Active alcoholism, for instance, increases family conflict and decreases cohesiveness and expressiveness in the family (Moos & Billings, 1982). Using participant observation methods, Jackson (1954) found that families, or at least the spouse, went through predictable phases in attempting to cope with the alcoholic parent's behavior, beginning with denial and minimization and ending with reorganization once the alcoholic had achieved sobriety.

On the other hand, Clair and Genest (1987) found that while adult children of alcoholics reported greater family conflict, the conflict did not necessarily reach harmful levels. Instead they found that some families could maintain stable functions despite conflict generated by an alcoholic family member. Unquestionably, a drug abuser is not the most desirable parent, but a drug abuser is not necessarily a neglectful or abusive parent. I know of instances where children, and even infants, have been left unattended while their mother went out in search of drugs, but I also know of mothers who went through painful withdrawal because there was no one they could trust to care for their child while they sought drugs. I have known addicted mothers who were every bit as caring and attentive as June Cleaver. While they are not the norm, they show that AOD abusers need not be child abusers.

Child abusers are typified by ignorance of child development and of effective child-rearing practices (Bays, 1990). Abusers commonly expect their child to behave in ways that are not age appropriate. Ordinary infant and toddler behaviors, such as resisting bedtime, diaper soiling (especially right after being changed), throwing food, and so on, are interpreted by abusing parents as willful misbehavior meriting punishment. A baby's persistent crying or refusal to eat may be interpreted by the abusive parent as a rejection of his or her efforts and a criticism of parenting ability. Compensating for their own inadequate childhood, such parents often look to their children as a source of emotional nurturance, expecting a smiling, happy baby to cheer them up and show that their life has meaning. When the baby is fussy and crying and smells of burped-up formula, it can seem like a betrayal to these parents who don't understand the needs and abilities of infants.

Education on human development ought to be part of every child's education, but it isn't. Even if it were, some would never learn, and others would forget the lessons. Prenatal care should include education about early child development. Well-baby visits should include education on the next phase of infant development as well as an opportunity to ask questions about the current phase. AOD-abusing mothers should be identified and targeted for such educational interventions.

Along with education about child development, these parents need to be taught parenting skills. Many were themselves reared in dysfunctional families where they learned the wrong way to raise children—often experiencing neglect and abuse themselves (Briere & Zaidi, 1989; Cohen & Densen-Gerber, 1982). They need to be taught how to care for their child properly. Once again, a variety of methods should be targeted on AOD-abusing parents to teach them these

commonly missing skills.

Child abuse is usually triggered during a period of stress, when the parent is faced with too many demands and has too few resources. AOD-abusing parents typically possess few internal resources or social supports for their performance of the maternal role (Bays, 1990). These demands may be all the greater for the alcohol-abusing mother whose child may suffer from fetal alcohol syndrome. Based on their 10-year follow-up of 11 infants, Streissguth, Clarren, and Jones (1985) conclude that even if the mother is attached to the child and well motivated to care for it, she is likely to have inadequate resources and social supports to enable her to attend to the special needs of an alcohol-affected child.

Effective prevention may include both the provision of resources, such as day care or a foster grandparent, and education about ways to access resources and to schedule demands. Self-help groups may have value for these parents by providing a support group. Enrolling them in the local YWCA or other community center may provide a connection with people who will help them care for kids instead of help them use drugs. Provision of a crisis nursery for AOD-abusing mothers could save many infants and children from injury by allowing the mother a few hours of respite when she is overwhelmed by circumstances.

For example, Rhode Island's Women and Infant's Hospital operates a model program for pregnant and postpartum substance abusers that has served more than 225 women during its 5-year history. The services of Project Link are fully integrated into the primary care system at Women and Infant's Hospital, thus assuring both that the medical needs of mother and infant are met and doing so in a fashion that avoids any public labeling of the mother as a substance abuse patient visiting a drug clinic. Each participant in Project Link is assigned both a clinical manager and a case manager. The clinical manager sees to it that the mother receives needed individual, group, and family therapy. Treatment groups in which mothers participate include: early recovery, parenting education, relapse prevention, and parenting skills. Meanwhile, the case manager sees to the nontreatment needs of the mother and infant in such vital life areas as food. housing, clothing, transportation, education, and employment. Case managers also schedule regular infant developmental assessments, conduct home visits, monitor the infant's pediatric care schedule, and provide direct personal support and encouragement to the mothers. These services act as primary prevention of abuse of the child while home visits and regular well-baby care also serve to identify any failures of primary prevention and bring quick response for any infant that is abused.

Conclusion

With well-planned and adequately financed primary prevention programs of the types outlined above, we can prevent a great deal of damage to the next generation. If we fail to invest in primary prevention now, the future costs in crime, drug abuse, mental illness, and domestic violence will be far greater in the future. If we invest our primary prevention resources unwisely, we will at bent have lost an opportunity and at worst may have contributed to i In problems we

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