A LIFESPAN, MULTIMODAL MATRIX FOR DRUG ABUSE PREVENTION

by

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As defined by Caplan (1964), prevention involves reducing of the incidence of a problem (primary), the duration of a problem (secondary), and the impairment resulting from a problem (tertiary). Focusing on drug abuse, the levels of prevention may be specifically defined as:

Primary prevention seeks to limit the number of persons in a population who initiate drug use.

Secondary prevention seeks to reduce the number of persons in a population who become disabled by drug use.

Tertiary prevention seeks to reduce the overall level of impairment within a population due to drug use.

The National Institute on Drug Abuse (Bukoski, 1979) has developed a four modality prevention model, emphasizing a continuum of tactics: information, education, alternatives, and intervention.

Table 1 presents a synthesis of definitions and approaches to prevention, merging the traditional concepts of primary, secondary, and tertiary prevention with the NIDA model.

<table>
<thead>
<tr>
<th>Prevention Level</th>
<th>Target Population</th>
<th>Objective</th>
<th>Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>Persons with no history of drug use</td>
<td>Reduce number who initiate drug use</td>
<td>Education, Information</td>
</tr>
<tr>
<td>Secondary</td>
<td>Persons whose drug use is experimental or temperate</td>
<td>Reduce number who become disabled or reliant on drugs</td>
<td>Alternatives, Intervention</td>
</tr>
<tr>
<td>Tertiary</td>
<td>Persons disabled by drug abuse</td>
<td>Reduce number who remain disabled by drug use; reduce overall extent of disability</td>
<td>Treatment, Rehabilitation</td>
</tr>
</tbody>
</table>

TABLE 1

MATRIX OF PREVENTION COMPONENTS

PREVENTION CONCEPTS

A review of the drug abuse prevention literature reveals divergence in definition, recommended approach and presumed benefit.

SPECIFICITY

At one pole of the dimension of specificity, Kessler & Albee (1975, p. 55) state "Everything aimed at improving the human condition may be considered part of primary prevention." At the opposite pole, Klein & Goldston (1977, p. viii) contend that prevention "should not be used interchangeably with 'promotion of mental health' or 'improving the quality of life'."

Advocates of the former approach emphasize revision of major social systems, such as the educational system (e.g., Caplan, 1964) or the social welfare system (Bleichman, 1978). Those advocating the latter approaches recommend less sweeping interventions to a more finitely-defined population with a more circumscribed sphere of expected effects.

BREADTH OF FOCUS

Will the preventive focus be broad or narrow? In the health field, a "narrow" prevention program might emphasize immunizations against flu; a "broad" approach would also address diet, rest, stress avoidance, etc. In the drug abuse field, a narrow approach would focus on one prevention level with one method—e.g., primary prevention through drug information. A broad approach might also involve parent education, supply limitations, and recreational alternatives.

USE - MISUSE

It is important to distinguish between preventing initial use and preventing misuse of drugs. The incidence of experience with marijuana, for instance, is so high among late adolescents and young adults (Fishburne, Abelson, and Cisin, 1979) that attempts to prevent initial use would have to change a modal, normative behavior; programs intended to reduce the number who move from initial experimentation to regular use to significant misuse might have a different design and a greater likelihood of success.

PREVENTING - DELAYING USE

Also important is the distinction between preventing and delaying use onset. The latter may be more achievable and will have two other benefits; for example, if initial use of marijuana is delayed from age 12 to 16, the likelihood of misuse is presumably decreased due to additional maturity, and the child has experienced four years of drug-free adolescence, with presumed favorable consequences for psychological development.

USE OF SPECIFIC DRUGS

On which drug class should preventive efforts be focused? Kandel (1975) established a progression of drug involvement from "softer" to "harder" drugs, referring to "gatekeeper" drugs and citing tobacco as a common first drug in the progression. It is tempting
to conclude that the most effective way to prevent hard drug use is to prevent soft drug use, but marijuana use—not to mention tobacco and alcohol use—is so common as to present a gate perhaps too large to close. The prevention of hard drug use may be more successful than prevention of more socially acceptable drugs. While prevention of initial use of harmful substances such as tobacco or marijuana is important in its own right, there is little empirical basis for using such an approach as the major thrust of prevention for harder drugs.

WHAT ARE THE TARGET GROUPS?

For any prevention program to be effective, there must be a defined target population. For preschool and early elementary ages, the recipient of prevention services will often be the caretakers—parents, teachers. Emphasis may be on promoting mother-infant bonding, identification of potentially vulnerable children, or preventive efforts aimed directly at preschoolers.

For preteens, the actual incidence of drug use is low; preventive focus is on health and mental health promotion and on providing useful knowledge and decision-making skills in order to reduce vulnerability to the risk of drug abuse in adolescence.

Early adolescent years are those of greatest risk for onset of drug use. Most writers contend that once adolescence and the early adult years have been safely traversed, drug risk sharply declines. However, there is some discontinuity in drug abuse concerns for different ages. Drug abuse in adolescence and early adulthood usually suggests use of illegal substances—marijuana, cocaine—and to a lesser extent, controlled substances illegally obtained, e.g., barbiturates or amphetamines. For adults, drug abuse is more likely to involve improper use of prescribed drugs—tranquilizers or sedatives. For the elderly, inappropriately prescribed medications and patient confusion about proper use compound the problem. Thus—for different ages—different drugs, different routes of drug access, and different bases to drug misuse are involved, requiring, in turn, different preventive strategies.

PREVENTION PRINCIPLES

Several principles and guidelines may be extrapolated from the literature.

—Unidimensional information or educational programs, particularly if fear-oriented, are seldom successful and may be counterproductive (Stuart, 1974).

—Programs which have impact on several aspects of life have the highest likelihood of success (Schaps, et al., 1980).

—The more drug use is accepted within a subculture, the more prevention should focus on social and environmental factors; the more drug use is associated with social deviance, the more the need to address psychological factors (Herrell & Herrell, 1980).

—Programs aimed at individuals may usefully focus on enhancement of self-esteem, security, and values clarification (Goodstadt, 1978).

—Programs aimed at families may usefully focus on improving parent-child relationships, reducing parental drug use, and reducing family disorganization (Shain, et al., 1977).

—Community-oriented programs may focus on economic conditions, school environments, peer norms, and creation of productive alternatives (McAlister, 1979).

—Regulation of drug supply and user consequences can have both practical and symbolic value (Bonnie, 1980).

—Regulation and education of suppliers of legal drugs is of special benefit for reduction of drug abuse among adults and elderly (DHEW, 1979).

PREVENTING DRUG ABUSE

Table 2 presents guidelines for a comprehensive, multidimensional, lifespan approach to drug abuse prevention, with four action focuses—lifestyle, environment, human services, and legal-regulatory efforts. Lifestyle programs include those aimed at promoting psychological and physical resources; environmental programs strengthen communities, address economic problems, create alternatives; human service programs include intervention-treatment services, social service programs, etc.; legal-regulatory programs concentrate on reducing and controlling supply, educating and regulating suppliers, and establishing consequences to the drug abuser.

Table 2 is a matrix of possible preventive efforts. For any given age, the matrix suggests a multimodal prevention approach. For a given strategy, a life-span approach to application is indicated.

(See Table 2 on next page)

The drug abuse prevention field gives ample cause for both optimism and caution. While guidelines for program implementation are available, nevertheless there are clearly no pump handles to remove, no immunizations to be given, nothing to put in the water. The dilemma is neatly phrased in the following quote: "Somewhere between the goals of the practical man and those of visionaries lies the area of primary prevention (DHEW, 1975)."

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BIOGRAPHICAL SKETCHES

Herrell, James M., Ph.D. — received his B.A. from the University of Texas and his M.A. and Ph.D. in Psychology from the University of Maryland. He is currently the Director, Division of Mental Health Services, Montgomery County Health Department in Rockville, Maryland. His Co-author and wife, Ileana Herrell, Ph.D. is the Hispanic Affairs Advisor to the Montgomery County Executive.

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