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A New Role for Psychology in the Treatment of Drug Abuse

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ABSTRACT. In spite of the absence of evidence of effectiveness, non-psychological disciplines and treatment modalities have provided interventions for drug abuse while psychologists have largely neglected this area. Very recently, however, controlled outcome studies have established that psychological treatments for substance abuse are substantially effective, thereby providing psychologists with a firm basis for treatment of this problem. The new methods included drug-urge interruption, competing response training, reinforcement for abstinence, and family assistance, all of which were provided in the Behavior Therapy modality. The results have shown a significant reduction of drug use within two months, enduring for long periods with intermittent treatment. These improvements were evident in youth and adults, males and females, and married and unmarried patients. These findings now provide psychologists with a validated treatment modality, lacking in the non-psychological disciplines, for dealing with this widespread problem.

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EXTENT OF DRUG USAGE PROBLEM

Illegal drug use can be considered one of the most disruptive personal and societal problems today. It has been estimated that about 23% of the inmates of prisons have been convicted of drug-related crimes (Witlers, Venturelli, & Hanson, 1992). Furthermore, roughly 1 million persons received treatment for drug use from registered facilities during a recent year, with about 105,000 in residential treatment programs (NIDA, 1989). At least 50% of school-age youth have used marijuana and 12% have tried cocaine (Johnston, Bachman, & O'Malley, 1989). Sixty-four percent of adults between the ages of 26 and 34 years have used illicit drugs, 23% within the last year (NIDA, 1989). Notably, preliminary statistics indicate that, following a brief decline, drug use is again on the rise, particularly among youth. Associated with drug usage is an increase in major psychological and social problems: depression, suicide, divorce, unemployment, lowered school achievement, violent crime, lost worker productivity, and child abuse (Harwood, Napolitano, Kristiansen, & Collins, 1984; Kandel, Davies, Karus, & Yamaguchi, 1986).

Lay Attempts at Treatment

To address this major problem, non-professional treatment modalities have emerged, notably Narcotics Anonymous (NA). NA is modelled after Alcoholics Anonymous and other 12-Step programs and seeks to provide counseling through increased social support. In addition, residential treatment programs for drug abuse have become quite common. These residential programs most commonly employ the NA or 12-Step Model which emphasizes greatly the role of peers, and typically involves little or no real participation by psychiatrists or psychologists. Indeed, non-psychologist/psychiatrist therapists have acquired licensing in many states as Certified Addiction Counselors (CAC's). Entirely cognizant of the psychological field's neglect of this population, the organization of CAC's recently attempted to modify the licensing regulations in Florida (and perhaps elsewhere) so that psychologists would be entirely excluded from treating addiction.

Pharmacological Treatment

Since the development of methadone treatment for heroin addiction in 1965 (Dole & Nyswander, 1965), methadone maintenance clinics have become a widespread modality of treatment. More recently, desipramine has shown some effectiveness for increasing treatment retention and decreasing craving for depressed cocaine users (Gawin et al., 1989), and is currently employed by medical professionals. Psychologists typically have not participated in either type of medication treatment.

Traditional Psychotherapy

Traditional psychotherapy by psychologists appears to be rarely used in the treatment of drug addicts. Consistent with this fact, there is a conspicuous absence of outcome studies demonstrating the utility of this modality. Indeed, a very recent outcome study (Kang et al., 1991) found no benefit of such treatment. Psychologists do come into contact with drug addicts since addiction is so highly correlated with many psychological problems (Tutton & Crayton, 1993), as noted above. These psychological problems are typically considered symptomatic and secondary to the addiction and the patient is referred to the aforementioned lay counselling programs or to medically oriented hospitals or physicians for direct treatment of addictions.

Recent Behavior Therapy Findings

Recently, two major psychological drug treatment research programs have been conducted, one of which was directed by the present author in Florida. The other series of studies were directed by Higgins in Vermont. Notably, both programs reported substantial effectiveness in treating drug abuse by psychological procedures in controlled outcome studies (Azrin, McMahon, Besajel, Lapinski, Donohue, 1991; Azrin, Donohue, Besajel, Kogan, Acicmo, and Gallo-way, 1993; Higgins, Budney, Bickel, Hughes, Foerg & Badger, 1993; Budney, Higgins, Delaney, Kent & Bickel, 1991; Higgins, Delaney, Budney, Bickel, Hughes, Foerg & Fenwick, 1991). Although the programs differ somewhat, both are based on the community-reinforcement model previously developed for the treatment of alcohol

abuse (Hunt & Azrin, 1973; Azrin, 1976; Azrin, Sisson, Meyers & Godley, 1982; Sisson & Azrin, 1986). Both programs followed the directive behavior therapy format of modeling, rehearsal, daily self-recording, and therapy assignments. Both programs also used the specific procedures of stimulus control, programming incompatible activities, active participation of a family member in session and at home, contracting, alteration of peer associations, drug-refusal training, marital or parent counseling, and school/employment counseling. In addition, an urge control procedure for interrupting cognitive and proprioceptive precursors to drug usage was included in the Florida program.

The results of the two programs were similar in that both produced a large reduction in drug usage relative to a non-psychologically derived treatment (supportive counseling or 12-step programs). For both psychological programs, the reduction of drug use occurred within two months and endured for at least six months with progressively greater improvements over time. Furthermore, alcohol usage also decreased, employment and/or school attendance increased, ratings of depression decreased, and family relationships improved relative to the non-psychological treatments. The subjects included youth and adults, males and females, individuals who were married and unmarried, and high school drop-outs and graduates. In addition, the treatments were found to effectively reduce the use of several types of drugs, especially cocaine/crack.

Psychological Nature of the Procedures

The basic procedures used in both programs are distinctive to clinical psychology and typical of those routinely employed in behavior therapy, a treatment modality with which all psychologists should be familiar by this date. Specific variations were necessary because of the special features of illegal drug use. For example, the denial of usage associated with the illegal status of the drugs required regular urinalyses at each session for both programs. The great contribution of peer associations to problematic drug-taking behavior required restructuring of these social relationships. The large influence of extrinsic motivators (e.g., crises of arrests, divorce, job dismissal, overdosing, financial impoverishment), rather than intrinsic motivation to seek treatment, required the therapist to

identify these sources of motivation and utilize reminders of them in therapy to assure continued treatment participation. Because the drug of addiction is so strong a reinforcer, procedures were needed to discover, develop, and invoke other strong reinforcers and to arrange them to be contingent on drug abstinence. Because of the physiological basis of addiction with its associated withdrawal symptoms, a procedure was needed to interrupt the proprioceptive distress stimuli associated with withdrawal. Therefore, covert sensitization and consequence rehearsal procedures were modified and combined in an urge-control procedure.

Pharmacotherapy vs. Psychological Treatment

Extensive pharmacological research is now being conducted to develop other drugs which will block the reinforcing properties of the commonly abused drugs (as had already been done for methadone as a substitute for heroin); desipramine shows restricted promise for reducing cocaine craving in depressed individuals, as noted previously. However, several limitations seem to exist for pharmacotherapy as a general solution for the following reasons: first, most drug dependent individuals are polydrug abusers and, therefore, would require several such medications, only one of which, methadone for heroin, currently has shown clinical effectiveness (Kaufman, 1976). Secondly, the types of potentially abused drugs appear almost endless (Winters, Venturilli, & Hanson, 1992), and include substances readily available for legitimate medical use such as cocaine medications, many depressants, anti-anxiety medications (Valium, Xanax, etc.) and stimulant medications (e.g., Methylphenidate). In addition, inhalant abuse occurs for common substances, such as gasoline, airplane glue, hairspray, deodorants, spray paint, freon, etc. Since polydrug use is the norm, the possible future medications which block the reinforcement effect of one abused drug cannot be expected to result in reduced abuse of other drugs or substances of the same patient. In contrast, the psychological treatments, in large measure, are not drug-specific but rather enhance competing reinforcers and behaviors which can be expected to diminish any disruptive drug abuse. Specifically, the psychological treatments structure positive marital, family, peer, social, vocational, educational

and recreational activities that are designed to serve as a deterrent to all antisocial or illegal activities, including substance abuse.

Why Validation Is Necessary

The delivery of health care services in the U.S. is currently undergoing major changes in an attempt to maximize benefits while reducing costs. In this context, reimbursement for some services rather than others will undoubtedly be based on the evidence of effectiveness of these services from controlled outcome studies rather than from "usual and customary" practice. Consistent with the anticipated mandate of the future health care system, the standards of a profession similarly require that its members use only those procedures that have been validated. Thus, the recent version of the Code of Ethics of the American Psychological Association (APA, 1992) states that the assessment and intervention procedures used by psychologists should be based on validation and outcome studies (Ethical Standard 1.06, 2.02, and 2.04). The most important consideration for using only validated procedures is of course to assure the welfare of the patient. Validation is therefore a central factor for reasons of professional ethics, current cost-benefit requirements, and the patients' welfare.

The recent development and validation of psychological treatments for drug abuse provides clinical psychology with the opportunity to justify treatment of this population and use of these interventions. Additionally, the outpatient rather than inpatient modality reduces considerably the cost element in the cost/benefit ratio. The alternative non-professional modes of treatment have no equivalent outcome validation evidence and performed poorly compared to psychological interventions when employed as comparison conditions in controlled outcome studies. Pharmacotherapy has such evidence, but for only one or two types of abused drugs—yet the potential number of abused drugs appears endless. Therefore, clinical psychologists no longer need neglect the treatment of substance abusers. Rather, members of the field can confidently and justifiably treat this population, applying procedures with proven effectiveness.

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Managed Care and the Psychometric Validity of the MMPI and MCMI Personality Disorder Scales

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ABSTRACT. In an effort to streamline the psychological testing process and reduce unnecessary testing, many managed care companies are precertifying psychological evaluations. Hence, it is incumbent upon psychologists to demonstrate the medical necessity of testing in a particular case. Oftentimes, however, reviewers will reimburse providers for either the Minnesota Multiphasic Personality Inventory (MMPI) or Millon Clinical Multiaxial Inventory (MCMI), but not both. The rationale for this cost cutting measure is that both instruments are basically equivalent and hence redundant. The present study evaluated the MMPI and MCMI personality disorder scales for convergent and discriminative validity through the use of correlational data, Hotelling's t-tests and codetype correspondence. The correlational data demonstrated a lack of convergence and discrimination between personality disorder classifications. Codetype correspondence between the two instruments was quite low. The most frequent MMPI personality disorder classifications described the sample as falling within the Dramatic Cluster, whereas the most frequent MCMI scales described it as falling within the Anxious Cluster. It is concluded that these two measures of personality disorders are not comparable nor redundant.

In the current health care crisis and our present era of cost containment, many managed care companies have begun to scrutinize

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