

Paying Patients Not to Abuse Can Prove Effective

BY ROBERT FINN
San Francisco Bureau

SAN FRANCISCO — Recent studies show that direct behavioral incentives are effective in treating substance abuse that is comorbid with psychiatric disorders. But contingency management can be difficult to implement in real-world settings, Dr. Steven L. Batki said at the annual meeting of the American Academy of Clinical Psychiatrists.

Motivational enhancement therapy, which is based on the Prochaska and DiClemente stages of change model (*J. Consulting Clin. Psychol.* 1983;51:390-5), may be a better fit to everyday clinical practice, said Dr. Batki, professor of psychiatry and behavioral sciences at the State University of New York, Syracuse.

"Many of us are old enough to remember the old token economy in schizophrenia, where you give direct behavioral incentives for behaviors," Dr. Batki said. "This stuff works." The problem is that in most institutional settings, it is difficult to bring the powers that be around to the notion of paying people not to use drugs.

Furthermore, contingency management works only if the target behavior is monitored frequently, with breath tests for alcohol or urine tests for drugs, for instance.

The "fishbowl" system, a type of contingency management, has actually demonstrated its effectiveness in substance abuse disorders, and it has the added advantage of being relatively inexpensive for the institution to implement. In this system, patients get the privilege of draw-

ing a random card from a fishbowl when they have a negative urine test or have attended a 12-step meeting, for example.

Half the cards are winners. Patients have a 50% chance of winning a \$1 prize, 1 chance in 16 of winning a \$20 prize, and 1 chance in 500 of winning a \$100 prize. Studies of the fishbowl system in alcohol abusers show a significant increase in time to the first heavy drinking episode, and studies with cocaine abusers show a significantly longer duration of cocaine abstinence than when control treatments are used.

In an outpatient setting, however, motivational enhancement therapy is more practical. It's based on several assumptions: that substance use disorders are common, that change often takes a long time, that the pace of change is variable, that knowledge is usually not sufficient to motivate change, and that relapse is the norm.

The therapy and the motivational interviewing that forms its basic technique require the therapist to recognize what stage the patient is in, in terms of readiness to change. If the patient is in the "pre-contemplation" stage, where he or she isn't even considering changing his drug or alcohol use, it's pointless for the therapist to encourage the patient to develop specific plans to change. Instead, the therapist's objectives are to help the patient identify his or her goals, provide informa-

tion about the substance use, and bolster the patient's self-efficacy.

"The bottom line is if you have somebody come into your office who has no intention of stopping drug use, it's probably a waste of time to refer [him or her] to a residential treatment program," Dr. Batki said. "Just talk about, 'Hey, what are you getting out of drugs? Are you concerned by the negatives? What are the positives for you? How do you balance those?'"

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If the patient has reached the "contemplation" stage, where he or she is considering change but remains ambivalent, the therapist's objective is to help the patient recognize

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the discrepancy between goals and behavior and to elicit self-motivational statements.

When the patient reaches the "determination" stage, where he or she is committed to change, the therapist should strengthen that commitment and help the patient plan specific strategies.

Then, when the patient has reached the "action" stage, where he or she is actively involved in implementing these plans, the therapist's job is to identify and manage new barriers that may arise and to keep alert for relapse or impending relapse.

The next stage is "maintenance," where the patient has made the change, and the therapist's objective is to ensure the stability of the change and to foster the patient's personal development. If the pa-

tient enters the "relapse" stage, where undesirable behaviors have returned, the therapist must identify the relapse when it occurs, reestablish self-efficacy and commitment, and help the patient develop behavioral strategies.

Finally, if the patient's change is very stable, he or she is said to have entered the "termination" stage, and the therapist should assure the patient of the stability of that change.

Throughout all of this, the therapist should give advice only when the patient is receptive and should target that advice to the patient's state of change. The therapist should also recognize that it's up to the individual whether to change and how to change. The therapist should also help individuals decrease the desirability of the substance abuse and help them identify other behaviors to replace the positive aspects of the substance abuse.

The therapist should demonstrate empathy by developing and communicating an understanding of the individual's situation and feelings about the behavior, and by helping the patient explore his or her pain related to the behavior. And the therapist should help the individual identify and understand relevant risks of the behavior and negative consequences of the behavior.

In a motivational interview, the therapist should avoid closed-end leading questions such as, "Don't you know that alcohol is bad for you?" And the therapist should practice reflective listening, mirroring what the patient says. This approach deepens the conversation, creates a sense of safety, and helps patients understand themselves. ■

Maternal Smoking Can Predict Toddlers' Bad Behavior

BY HEIDI SPLETE
Senior Writer

WASHINGTON — Two-year-olds whose mothers smoke regularly during pregnancy are significantly more likely to exhibit clinically disruptive behavior than are children of nonsmoking mothers, according to a review presented at a conference on tobacco control sponsored by the American Cancer Society.

"What we found was that nicotine exposure was linked to aggressive behavior, defiance, and lower social skills," said Lauren S. Wakschlag, Ph.D., of the University of Illinois, Chicago.

"We still don't know that there is a causal link," she said. "But the evidence that nicotine-exposed children are more likely to have behavior problems is there, and it is very consistent."

To the researchers' surprise, nicotine exposure was not associated with emotional dysregulation—for reasons that remain unclear.

Ninety-three children were involved in

the study. Overall, the 44 children exposed to nicotine in the womb were more defiant, more aggressive, and less social, compared with the 49 children who were not exposed—even after controlling for multiple variables.

The mothers were primarily non-Hispanic white and working class, which reflects the demographics of the typical pregnant smoker in the United States. Mothers of the nicotine-exposed children reported smoking consistently during at least two trimesters of their pregnancies, and 47% of them smoked more than half a pack (about 15 cigarettes) daily.

The children were assessed at 12, 18, and 24 months of age using maternal reports on the Infant-Toddler Social Emotional Assessment test. The 24-item ITSEA provides a clinical measurement of behavior in children as young as 1 year and rates traits such as peer aggression on a three-point scale. The children also were observed during a 20-minute interaction with their mothers in a laboratory setting.

Overall, nicotine-exposed children were almost 12 times as likely to have clinically significant behavior problems; 14 of 16 children with ITSEA scores in the clinical range were in the nicotine-exposed group, Dr. Wakschlag noted.

Mild behavior problems are common in toddlers, but the behavior of the nicotine-exposed toddlers was worse than that of the unexposed toddlers at the start of the study. In addition, the differences between the groups were significant by age 24 months, and the nicotine-exposed toddlers' behavior significantly worsened between ages 18 months and 24 months—the age at which some problem behaviors typically associated with the "terrible twos" start to decline, Dr. Wakschlag observed.

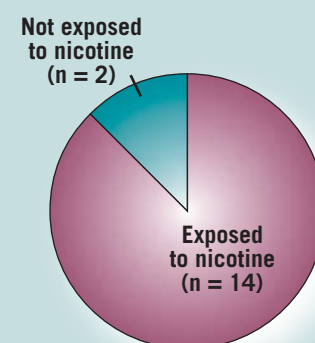
Identifying a pattern of behavior in toddlers who were prenatally exposed to nicotine could be useful in examining how other prenatal experiences affect behavior in early childhood.

"We have more work to do, but it is striking to see this level of coherence in the first year of life, and the specificity of the findings can help take the research further," Dr. Wakschlag said. The next step, she said, is to link the behavior patterns of children who have been exposed to nicotine to neuroscientific investigations and to think about how nicotine exposure

might interact with types of causal risks.

The data, which were published recently (*Child Dev.* 2006;77:893-906), support similar findings from another study. In the previous study, investigators found that maternal smoking during pregnancy was significantly associated with observed negativity in 52 toddlers whose mothers smoked throughout pregnancy, compared with 47 toddlers whose mothers did not smoke during pregnancy (*Arch. Pediatr. Adolesc. Med.* 2000;154:381-5). ■

Children With ITSEA Scores in the Clinical Range



Note: Based on a study of 93 children.
Source: Dr. Wakschlag