What the science shows, and what we should do about it (Part 2)

Professor David Clark continues to describe the main findings and recommendations from a major new book based on the views of America's leading clinicians and researchers of how treatment would look like if it were based on the best science possible.

Leading US addiction scientists met in 2004 at a 'think-tank;' conference to share research findings in their respective areas and discuss possible implications for treatment and prevention interventions.

The conference resulted in a seminal book, in which the authors draw together the wealth of scientific understanding from the range of topic areas considered to produce a set of ten cross-cutting principles, and then reflect on their implications with ten recommendations for interventions.

I continue beyond the first three principles I described in the last Briefing.

Principle 4. Motivation is central to prevention and intervention

There is abundant evidence indicating that motivational factors (in their broad sense) are central to our understanding of substance use, and also in preventing and treating substance use problems.

Motivational factors are involved in patterns of change. If people who have stopped substance use on their own, without formal treatment, are later asked how and why they did so, they will often refer to a choice or a decision point.

Life events can instigate a change in problem substance use. Reduced use or abstinence can be triggered by relatively brief interventions, the impact of which are thought to reflect the clients' motivation and commitment to change.

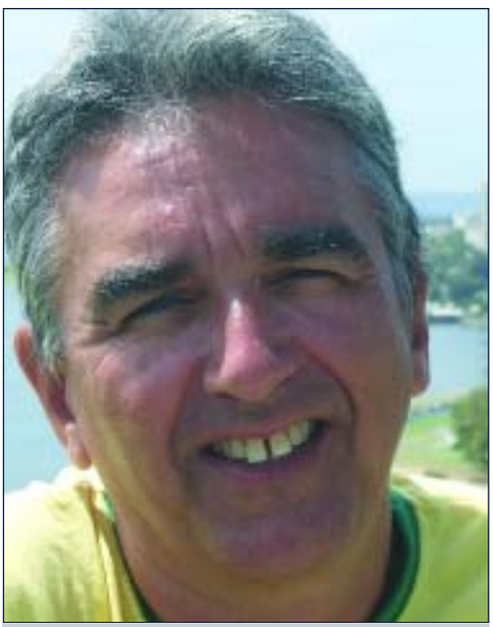
The transtheoretical model of change posits a sequences of stages through which people pass, starting with increased concern or motivation to change, decisional consideration, commitment, planning, taking action, and maintaining this change.

'The decision or commitment to change appears to represent a final common pathway through which change is instigated. Often, once personal commitment has emerged, the individual may require little additional help towards making change.'

Taking action also predicts change. Better outcomes occur when a person stays longer in treatment, attends more fellowship meetings, adheres to treatment advice, or takes their medication. It appears that actively doing something toward change may be more important than the particular actions that are taken. The traditional wisdom that 'it works if you work it' appears to be true of many routes to change.

Motivation for change is malleable, and can respond to even brief interventions. The idea that there is nothing that one can do until the person 'hits bottom' is simply wrong.

Positive reinforcement, unilateral intervention through family members, and brief motivational counselling and advice, have all been shown to instigate change in seemingly unmotivated people. It is not necessary to wait until the person has developed a serious substance use problem before trying to help.



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5. Drug and alcohol use responds to reinforcement

Preferred substances are powerful reinforcers, chosen from a range of options. However, even dependent substance use is highly responsive to immediate contingent non-drug reinforcement.

Since stopping substance use eliminates one source of positive reinforcement, long-term change typically involves finding alternative reinforcers – 'in essence, developing a rewarding life that does not rely on drug [and alcohol] use'.

One complexity is that drug use tends to be associated with a foreshortening of time perspective, so that longer-term delayed rewards are discounted in value relative to the immediate effects of the substance.

6. Substance use problems do not occur in isolation, but as part of behaviour clusters

Among adolescents, drug use often represents one part of a much larger cluster of problems, including poor school performance, precocious sexuality, mood problems and antisocial behaviour. Drug problems in adults are often linked to a variety of other health, social, employment and criminal justice issues.

Interventions that target a broader range of life functions are more successful in resolving drug and alcohol problems. Drug use occurs in the context of life problems, and abstinence is often well down on a client's list of priorities.

If recovery is promoted by having a more generally rewarding life that does not rely on drug use for reinforcement, then we must not focus solely on drug use in treatment programs.

7. There are identifiable and modifiable risk and protective factors for problem substance use

There are risk and protective factors that affect the initiation, progression and maintenance of drug use. This means that we can identify subgroups who are likely to be at higher risk for substance use problems.

Hereditary factors contribute to risk for alcohol problems, and evidence is mounting for a role of genetic predisposition in problematic drug use.

People with more access to non-drug positive reinforcement, stimulating environments, and stress-buffering resources are at lower risk. Having close, high quality relationships with people who are not involved in substance use is one protective factor. Social and other coping skills that increase access to other forms of reinforcement and modulate stress are also protective.

Substances are often used as a response to stress, but also tend to exacerbate stress in the long run. Escapist reasons for substance use and avoidant styles of coping are both associated with increased risk of substance use problems.

[to be continued]

'Rethinking Substance Abuse: What the science shows, and what we should do about It' edited by William R. Miller and Kathleen M. Carroll, Guilford Press, 2006