

Foreword

Creating the Future of Addiction Treatment

JAMES O. PROCHASKA

This is a time of great opportunity for the field of behavioural health care generally and for the treatment of substance use problems specifically. Increasingly, society is recognizing that unhealthy behaviours such as problem substance use generate high costs—not only to the people who are affected, but also to their families, employers, communities and health care systems.

Consider a few simple statistics. In the United States, health care costs are \$1.5 trillion per year and growing. Of that total, 10 per cent is accounted for by medications, and 50 to 60 per cent is accounted for by behaviour—in other words, people’s unhealthy lifestyles.

Typically, less than five per cent of these unhealthy behaviours are treated appropriately and professionally. This means there are large unmet needs and great opportunities—but only if we change the way we do science and the ways in which we apply that science.

Leaders in the National Health Service in Great Britain, for example, have examined these simple statistics and declared that they have an “illness system” and not a health system. It is clear that behaviour change must become their number one order of business.

When such leaders look to science for evidence on how to treat high-risk and high-cost behaviours on a population basis, they can become discouraged. The biggest and best-controlled health behaviour trials ever completed on a population basis have reported in, and the results have been uniformly dismal. These studies have varied in their populations, including prevention and treatment in work sites, schools and communities (Glasgow, 1995; Ennett et al., 1994; COMMIT, 1995; Luepker et al., 1994). They have also varied in their target behaviours, which have included smoking,

alcohol and other drug use, unhealthy diet, lack of exercise and the other major killers of our time. But they have not varied in their inability to produce significant effects in the intervention populations.

This inability was not due to a lack of time, talent or resources. The treatment times of these studies ranged from two to five years; their talent included some of the best that our multidisciplinary sciences and professions had to offer; and their budgets ranged from \$20 million to \$700 million. The problem was probably more basic, concerning their scientific and professional paradigms. Applying an action-oriented paradigm to entire populations led to serious limitations.

In the Minnesota Heart Health Program, for example, action-oriented programs were offered repeatedly for five years. But in the field's most powerful change programs, individualized and interactive clinics and classes, only four per cent of smokers in the treatment communities participated. We simply cannot impact on the health of our communities if we reach only a small percentage of people with high-risk and high-cost behaviours.

Professional and scientific developments are needed to treat entire populations at risk of addiction (Prochaska, in press). A promising approach complements traditional treatment and research paradigms with comprehensive and innovative paradigms. These paradigms are outlined below.

Individual and Population Paradigms

Historically, psychology as a profession and science focused on individual patients and took responsibility only for people in treatment or clinical trials. Research was preoccupied with efficacy as measured, for example, by rates of abstinence in a treatment population. But in the general population, most substance use problems are undiagnosed and untreated. To address these problems, we need to be able to reach out to treat entire populations. In the population paradigm, the focus is on "impact," which takes participation as well as efficacy into account.

PASSIVE REACTIVE AND PROACTIVE PARADIGMS

Health professionals are generally socialized to passively wait for patients and then react. This is appropriate for acute care, where patients are sick, in pain or distressed. But to reach at-risk populations whose behaviours can cause disease or disability, proactive practices must also be put in place. With a health risk assessment, for example, populations can be assessed for behaviours such as smoking, inactivity, substance use and overeating, and for readiness to change these behaviours. This can be done by, for example, reaching out and recruiting people in primary care practices or by phone. Each person can then be proactively prescribed "behaviour medicine" that matches his or her stage of change.

ACTION AND STAGE PARADIGMS

While action-oriented public health campaigns do have impact, they reach only a small percentage of the population. In the United States, for example, action-oriented public health campaigns have targeted smoking for 40 years, yet only 20 per cent of people who smoke (and only eight per cent of those who smoke daily) are in the “action” stage or are prepared to quit. About 40 per cent are in “contemplation,” and are intending to quit in the next six months but not in the next month, and the other 40 per cent are in “precontemplation,” and are not intending to quit in the next six months (Veilicæ et al., 1995). Similarly, in countries such as China and Germany, only five per cent of people who smoke are prepared to quit, and about 70 per cent are in precontemplation (Etter et al., 1997).

To reach a larger percentage of the population, and to impact on the health of nations, action-oriented programs need to be complemented by those that match patients’ needs at each stage of change. By matching treatment to stage, people in precontemplation can complete treatment at the same rates as those in preparation.

FROM CLINIC TO HOME-BASED PARADIGMS

Individual and interactive interventions have the greatest efficacy. Historically, such interventions were mainly available from clinic-based therapists. However, stigma and the cost of clinics are barriers for many. For example, obesity has increased at epidemic proportions in the United States in the past 12 years, yet participation in weight management clinics and groups has not increased appreciably. Besides being action-oriented, the clinics and groups themselves are barriers. Marketing research has revealed that five per cent of Americans want weight management programs that are clinic-based, while 50 per cent want programs that are home-based. Obesity is the number-two cause (after smoking) of preventable death in the United States, yet few overweight and obese people are reached by clinic and group programs.

Even when people do attend clinics, most of their time is spent outside of therapy. Only 10 per cent of treatment outcome can be attributed to therapy, and the other 90 per cent to what people do during the rest of the week (Lambert, 2001). Imagine primary care medicine focusing only on the interactions in the physicians’ office, without pharmaceuticals to deliver therapy in the home. Home-based behaviour medicine is clearly needed.

CLINICIAN AND COMPUTER PARADIGMS

As a complement to the traditional clinician paradigm, evidence-based treatment can be delivered at home with computers. Computers can provide individualized and interactive interventions with expert systems that model expert clinicians. A growing consensus holds that computer-generated tailored communications are the most promising approach for population-based interventions (Kreuter et al., 1999).

Computer-based tailored communications can provide expert guidance on the principles and processes of change needed to progress through the stages. In one computer-based intervention, people who smoke answer 40 questions and receive reliable and valid feedback about their stage of change, about whether they underestimate the benefits of quitting and overestimate the cons, and about the 10 change processes they are underutilizing, overutilizing or utilizing appropriately compared with peers in the same stage who progressed the most. In follow-up interactions, participants receive normative feedback compared with peers and feedback compared with their own previous assessments. Participants learn what they are doing right, what mistakes they are making and what they can concentrate on to progress the most. (A demonstration program for effective stress management can be sampled at www.prochange.com/stressdemo.) Clinicians can receive similar feedback about their clients and how they can most help particular clients. Such feedback reduced deterioration rates by 50 per cent and doubled positive outcomes (Lambert et al., 2001).

Interactive technologies are likely to be to behaviour treatments what pharmaceuticals are to biological treatments: the most cost-effective means of bringing optimal amounts of science to bear on major health problems in entire populations. For example, a reactive sample of 753 people who smoke was randomly assigned by stage to an intervention that was delivered either by computers alone or by computers plus counsellors. At 12 months, abstinence rates were the same for computers alone as for computers plus counsellors, but at 18 months the abstinence rate for people receiving treatment from computers alone was 24 per cent, while for computers plus counsellors the rate was only 18 per cent. At 18 months, computers alone were more than twice as effective at helping people to quit smoking as one of the best home-based action-oriented treatments (24 per cent versus 11 per cent abstinence; Prochaska et al., 1993).

With computer guides, populations continue to progress to abstinence long after treatment ends, rather than showing declines when treatment terminates. The use of computers may enhance self-efficacy. When intervention ends, people keep progressing from efforts based on self-change or self-reliance. For people who become dependent on therapists, one strategy is to fade out therapists like we fade out nicotine.

FROM SINGLE TO MULTIPLE BEHAVIOUR CHANGE PARADIGMS

Clinical trials have the luxury of treating one problem. In nicotine replacement therapy trials, for example, people with mental health problems were excluded. Yet 45 per cent of cigarettes in the United States are bought by people with mental health problems. In practice, most dients have multiple problems. The highest-risk and highest-cost people are those with multiple behaviour problems. If two behaviour risks are reduced, health care costs can be reduced by \$2,000 per year (Edington, 2001).

In our first multiple behaviour trial, we recruited 2,360 parents. Using expert system guides for smoking, diet and sun exposure, we produced significant impacts at

24 months (Prochaska et al., in press). Comparing across treatments for smoking alone and for multiple behaviour treatments that included smoking, the long-term abstinence rates were the same (22 to 25 per cent). This shows that we can increase impacts by treating multiple behaviours without decreasing efficacy for a single addictive behaviour such as smoking.

THE FUTURE FOR THERAPISTS

If health professionals start to proactively intervene with entire populations of people with substance use problems, what might be the consequences for counsellors who specialize in treating these problems? And how can this book help prepare them for such a future?

With proactive outreach practices, clinicians will need to be prepared to match the needs of the important parts of our populations that have traditionally been underserved by our health care systems. Women; ethnic, social and other minorities; and groups with limited resources will need to be appreciated for the special needs they have. The second section of this book addresses the needs of many understudied and underserved populations.

If we are to do justice to entire populations with problems related to alcohol and other drugs, we will need to enhance our knowledge of treating multiple problem behaviours, not just single problems. How do we respond to people with multiple diagnoses or with multiple high-risk behaviours, such as problem alcohol use, sedentary lifestyles, unhealthy diets, high-risk sexual behaviours, anxiety and depression? From an action paradigm, such people, who are quite common, could be overwhelmed by too many demands to take multiple actions and risk multiple failures. From a stage paradigm, we have found that, in populations with four high-risk behaviours, fewer than 10 per cent are in the preparation stage for two or more behaviours. So we can begin to take action on the behaviour that is most prepared, while enhancing motivation or preparation for behaviours in earlier stages. This book includes state-of-the-science information on the multiple behaviours and disorders that most often accompany addictive behaviour.

If we are to create a better future for the treatment of addiction, we must be prepared to complement our current paradigms and practices. As experts and specialists, there will be demands on us to continue to know more than we ever did before. This book can help move us forward into a more demanding but also more rewarding future that we can create together.

References

- COMMIT Research Group Intervention Trial for Smoking Cessation (COMMIT): 1. (1995). Cohort results from a four-year community intervention. *American Journal of Public Health*, 85(2), 83–192.
- Edington, D.W. (2001). Emerging research: A view from one research center. *American Journal of Health Promotion*, 15(5), 341–349.
- Ennett, S.T., Tobler, N.S., Ringwalt, C.L. & Flewelling, R.L. (1994). How effective is drug abuse resistance education? A meta-analysis of Project DARE outcome evaluations. *American Journal of Public Health*, 84(9), 1394–1401.
- Etter, J.F., Perneger, T.V. & Ronchi, A. (1997). Distributions of smokers by stage: International comparison and association with smoking prevalence. *Preventive Medicine*, 26(4), 580–585.
- Glasgow, R.E., Terborg, J.R., Hollis, J.F., Severson, H.H. & Boles, S.M. (1995). Take heart: Results from the initial phase of a work-site wellness program. *American Journal of Public Health*, 85(2), 209–216.
- Kreuter, M.K., Strecher, V.J. & Glassman, B. (1999). One size does not fit all: The case for tailoring cancer prevention materials. *Annals of Behavioral Medicine*, 21(4), 276–283.
- Lambert, M.J., Hansen, N.B. & Finch, A.E. (2001). Patient-focused research: Using patient outcome data to enhance treatment effects. *Journal of Consulting and Clinical Psychology*, 69(2), 159–172.
- Luepker, R.V., Murray, D.M., Jacobs D.R., Mittelmark, M.B., Bracht, N., Carlaw, R. et al. (1994). Community education for cardio-vascular disease prevention: Risk factor changes in the Minnesota Heart Health Program. *American Journal of Public Health*, 84(9), 1383–1393.
- Prochaska, J.O. (In press). Population treatment for addictions. *Current Directions in Psychological Science*.
- Prochaska, J.O., DiClemente, C.C., Velicer, W.F. & Rossi, J.S. (1993). Standardized, individualized, interactive and personalized self-help programs for smoking cessation. *Health Psychology*, 12(5), 399–405.
- Prochaska, J.O., Velicer, W.F., Rossi, J.S., Redding, C.A., Greene, G.W., Rossi, S.R. et al. (In press). Impact of simultaneous stage-matched expert systems for multiple behaviours in a population of parents. *Health Psychology*.
- Velicer, W.F., Fava, J.L., Prochaska, J.O., Abrams, D.B., Emmons, K.M. & Pierce, J.P. (1995). Distribution of smokers by stage in three representative samples. *Preventive Medicine*, 24(4), 401–411.