

HLTH 4511: Introduction to Problematic Substance Use and Approaches for its Prevention and Treatment

What Does Not Work? Expert Consensus on Discredited Treatments in the Addictions

By

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What Does Not Work? Expert Consensus on Discredited Treatments in the Addictions

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Abstract: Evidence-based practice promotes those research-supported treatments that have proven effective, but it rarely identifies discredited treatments that are to be avoided. We sought to establish a professional consensus on discredited addiction treatments using Delphi methodology. A panel of 75 experts participated in a 2-stage study, reporting familiarity with 65 treatments and rating these on a continuum from “not at all discredited” to “certainly discredited.” We report their composite opinions and significant differences that occurred as a function of the panelists’ theoretical orientation. The results require careful interpretation, but do offer a cogent first step in identifying a professional consensus of discredited treatments for addictions.

Key Words: addictions, discredited treatments, evidence-based practice, psychotherapy, substance abuse

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Evidence-based practice (EBP) constitutes an international juggernaut in healthcare, and the addictions prove no exception. The EBP movement aims to disseminate and promote research-supported treatments to increase the efficacy of services to individual patients and thereby enhance public health. The Substance Abuse and Mental Health Services Administration, for 1 prominent example, created a National Registry of Evidence-Based Programs and Practices (www.nrepp.samhsa.gov) designed to provide the public with reliable information on the scientific value and practicality of interventions that prevent and/or treat mental and substance abuse disorders. The focus of EBP falls squarely on what works (eg, Miller and Kavanaugh, 2007; Norcross et al., 2008).

But EBP largely ignores what does not work. Far less research and clinical attention has focused on establishing a consensus on ineffective methods when compared with effective methods (Miller et al., 2003).

A 2008 report of the Institute of Medicine focused on integrating clinical expertise with the best available research evidence in evidence-based medicine. That report concluded, “Technological and scientific innovations continue to expand the universe of medical interventions, treatments, and approaches to care, ushering in an era rich with potential for improving the quality of health care but also rife with increased uncertainty about what works best for whom. That uncertainty can—and does—lead to the delivery of services that may be unnecessary, unproven, and sometimes harmful...” (McClellan et al., 2008).

We believe that it will prove useful and perhaps easier to establish a professional consensus on discredited treatments for addictions. Doing so may counter the widespread tendency for professionals to practice (or repeat) what they have been taught by their mentors or authorities. Many of the treatment methods taught just 2 decades ago as “state of the art” for addictions are now regarded as contraindicated, such as confrontational therapy and certain medication regimens. Establishing an expert consensus can counter the professional equivalent of urban myths, encourage critical thinking, and allow us to educate consumers when they inquire about such methods. A consensus of multiple experts hailing from diverse theoretical orientations, professional disciplines, and employment settings will probably be regarded as more balanced and robust than a conclusion rendered by a single research reviewer with a particular theoretical commitment and treatment allegiance.

A frequent challenge to the use of expert consensus is “Why not rely on the results of randomized clinical trials?” Because most potentially discredited treatments have not (and will not) be subjected to controlled research. Because of the scientific difficulty of “proving” the null hypothesis (ie, no outcome differences between the treatment in question and a credible placebo). Because, with the exception of huge, multisite randomized clinical trials (RCTs), there are relatively few bona fide comparisons of alternative treatments; most comparative outcome research in mental health and the addictions entails structurally unequal treatments and involves the researcher allegiance effect (Wampold, 2008). Finally, because even in those instances when dispassionate RCTs are conducted, the field lacks meaningful criteria to identify discredited or ineffective treatments on the basis of those RCTs.

Most assuredly, select investigators have attempted to identify the pseudoscientific or ineffective treatments applied to a variety of mental disorders and addictions (eg, Holder

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et al., 1991; Singer and Lalich, 1996; Della Sala, 1999; Eisner, 2000; Carroll, 2003; Lilienfeld et al., 2003; Wanjek, 2003). However, these pioneering efforts suffered from 2 notable limitations. First, none of the efforts systematically relied on expert consensus to determine their contents. Either the authors assumed a professional consensus already existed or decided the criteria for ineffectiveness on their own. Second, these authors provided little differentiation between credible and noncredible treatments, leading to rather crude and dichotomous judgments.

Thus, expanding on a recent study of discredited treatments for mental health disorders (Norcross et al., 2006), we conducted a Delphi poll of addiction experts to secure a professional consensus and more refined characterization on discredited treatments for addictive disorders.

DELPHI POLL

The 65 potentially discredited treatments were compiled through an extensive literature review that involved electronic database searches, listserv requests, and peer consultations. We searched electronic databases (eg, PubMed, PsycINFO, Cochrane Collaboration, and Google Scholar) for published literature using the keywords “discredited,” “quack,” and “harmful” placed with the words “treatment” and “addiction.” We examined journal articles and books discussing discredited, potentially harmful, and “crazy” therapies (eg, Singer and Lalich, 1996; Eisner, 2000; Lilienfeld et al., 2003). We consulted quantitative reviews published throughout the years on the effectiveness of addiction interventions (eg, Holder et al., 1991; Miller et al., 2003) to determine those that may have proved consistently ineffective. We placed requests on several addiction-related listserves (eg, American Psychological Association Division 50, Association for Behavioral and Cognitive Therapies addictive behavior special interest group) to collect nominations for such discredited treatments in the addictions. We also sent personal e-mails to known addiction experts asking them to send suggestions. Nominations for potentially discredited treatments were submitted for a variety of addictive behaviors (eg, smoking, gambling), but in the end, we decided to concentrate on those used for alcohol and drug addiction.

Nominated treatments qualified for inclusion if practitioners in the United States and Western Europe had employed them in the past 100 years for the treatment of drug and/or alcohol addiction. We excluded treatments lacking advocacy among addiction practitioners, used primarily outside the United States and Western Europe, and those concerning addictions to smoking, relationships, sex, work, chocolate, and gambling.

We arrayed 65 such treatments alphabetically with their specific purpose, for example, “acupuncture for cocaine dependence” and “biofeedback for alcohol dependence.” Panelists received the following explanation and instructions.

For the purpose of this Delphi poll of experts, we operationally define discredited as those unable to consistently generate treatment outcomes (treatments) beyond that obtained by the passage of time alone, expectancy, base rates, or credible placebo. Discredited subsumes ineffective and detrimental interventions, but

forms a broader and more inclusive characterization. We are interested in identifying disproven practices.

Please rate the extent to which you view the treatment as discredited from not at all discredited to certainly discredited. A treatment can be discredited according to several types of evidence: Controlled research, clinical practice, and/or professional consensus. Please think in terms of the criteria for expert opinions as delineated in the Daubert (1993) and Kumho Tire Co. (1999) legal standards. For example, in Daubert (1993), the Supreme Court cited factors, such as testing, peer review, error rates, and “acceptability” in the relevant scientific community, some, or all of which might prove helpful in determining the validity of a particular scientific “theory or technique.”

The response options were structured as a 5-point, Likert-type format in which 1 = not at all discredited, 2 = unlikely discredited, 3 = possibly discredited, 4 = probably discredited, and 5 = certainly discredited. Instead of providing a numerical rating, respondents could also circle: NFT, not familiar with this treatment, NFR, not familiar with its research or clinical use, or both.

Instructions advised the expert panelists that “upon completion of the enclosed Delphi poll, your replies will be pooled with those of the other experts. Subsequently, you will be asked to complete a slightly modified form of the Delphi poll containing the preliminary findings. In this manner, the panel of experts will exchange opinions and arrive at a general consensus.” The responses of individual panelists remained anonymous throughout the process.

EXPERT PANEL

The potential participants consisted of 250 addiction experts operationally defined as securing fellow status in professional organizations, serving as editorial board members of journals, and/or sitting as advisory board members of government agencies. The randomly selected participants, all residing in the United States, came from the following sources:

- Sixty-two Fellows of the American Society of Addiction Medicine,
- Sixty-three Fellows of the American Psychologic Association’s Division of Addictions,
- Twenty-five editorial board members of *Addiction*,
- Twenty-five editorial board members of the *Psychology of Addictive Behaviors*,
- Twenty-five editorial board members of the *Journal of Substance Abuse Treatment*,
- Twenty-five editorial board members of the *Journal of Studies on Alcohol*,
- Twenty-five professional members of the advisory council of National Institute of Alcoholism and Alcohol Abuse and National Institute of Drug Abuse.

We sought to recruit experts, clinicians, and nonclinicians alike, working in diverse settings and endorsing various theoretical orientations.

In January 2007, we mailed a 5-page questionnaire and a 1-page personal information survey to the 250 potential participants. After the initial mailing and a subsequent re-

minder, we received 113 responses for a total return rate of 45%. However, 38 of these returned blank questionnaires, principally because they had retired or were not working in the field, leaving 75 experts for a usable response rate of 30%.

We did not detect any systematic bias relating to gender or profession between those who returned the questionnaire and those who did not. However, we did not have reliable means of determining the theoretical orientations or professional activities of the nonrespondents, so it remains an open question whether these factors influenced participation in the Delphi study.

Of the responding experts (Miller and Kavanagh, 2007), 67% reported holding a PhD, 29% an MD, 3% both a PhD and MD, and 1% a DSW. Thirty-eight percent identified themselves as women and 10% as members of racial/ethnic minority groups. Table 1 summarizes the professional characteristics of the clinically experienced and theoretically diverse panel.

THE SECOND ROUND

We pooled and analyzed the experts' responses to the first questionnaire (round 1). We then redistributed the same instrument to the 75 panelists in April 2007 along with feedback on the responses of the panel as a whole. We provided feedback for each item in terms of means and standard deviations, depicted both numerically and graphically. After 2 mailings and an e-mail prompt, 57 of the original 75 (76%) panelists responded to the second round. The demographic and professional characteristics of the experts responding to the second round mirrored those of the first round.

TABLE 1. Professional Characteristics of the 75 Panelists

Characteristic	N (%)	Mean	Median	SD
Years of experience in addictions		27.1	27.0	8.6
Percent of time devoted to				
Clinical work		21.0	15.0	30.9
Teaching		16.2	10.0	16.5
Research/writing		41.5	50.0	32.2
Supervision		6.1	3.0	9.9
Administration		12.9	5.0	18.0
Primary employment setting				
University department	29 (39.2)			
Private practice	12 (16.2)			
Research organizations	6 (8.1)			
Medical school	19 (25.7)			
Other	8 (10.8)			
Primary theoretical orientation				
12-step	11 (15.3)			
Behavioral	21 (29.2)			
Biological	14 (19.4)			
Cognitive	9 (12.5)			
Eclectic/integrative	6 (8.3)			
Humanistic/existential	4 (5.6)			
Systems/family systems	2 (2.8)			
Other	5 (6.9)			

The second round questionnaire did not differ from that used in the first round in structure, directions, or items with 2 exceptions. First, as noted earlier, the second round questionnaire presented the pooled responses from the first round, which represents the standard procedure in Delphi methodology. Second, we eliminated 6 treatments (angiotensin converting enzyme inhibitor, entities therapy, moral reconnection therapy, neurotherapy, Pessio-Boyden psychomotor system, and the miracle method) on the second round questionnaire, because fewer than 25% of the experts rated these methods during the first round.

As expected, the variability among the expert ratings decreased from round 1 to round 2. In other words, the pooled feedback from the initial round led to greater consensus among the panel. The item standard deviations decreased on 57 of the 59 ratings. The mean difference was -0.213 . The mean ratings evidenced similar change: ratings on 56 of the 59 items increased (in the direction of more discredited). Mean difference from round 1 to round 2 was 0.197 .

DISCREDITED TREATMENTS

Table 2 presents, in ranked order, the experts' mean ratings of 59 potentially discredited treatments. The table presents the mean, standard deviations, and percentage of experts not familiar with (and thus not rating) each item from both rounds of data collection. For those treatments rated by at least 25% of experts, considerable convergence existed on those consensually viewed as "certainly discredited" (mean rating of 4.50 or higher on the 5-point scale). For the specific purpose listed, experts considered 11 treatments as "certainly discredited": electrical stimulation of the head for alcohol dependence; past-life therapy for drug addictions; past-life therapy for alcohol dependence; metronidazole for alcohol dependence; electric shock for alcohol dependence; psychedelic medication for alcohol dependence; ultra-rapid opioid detoxification under anesthesia for alcohol dependence; Neuro-linguistic Programming for drug and alcohol dependence; scared straight for prevention of alcohol dependence; scared straight for prevention of drug abuse; and stimulant medications for alcohol dependence. Another 10 treatments emerged as "probably discredited" (mean rating of 4.0 or greater): Drug Abuse Resistance Education programs for prevention of substance abuse; Synanon-style boot camps for alcohol dependence; apomorphine for alcohol dependence; Synanon-style boot camps for drug dependence; lithium carbonate for alcohol dependence; electrical aversion therapy for alcohol dependence; β -blocker for alcohol dependence; dopamine precursor for alcohol dependence; chlordiazepoxide for alcohol dependence; and videotape self-confrontation for alcohol dependence.

On the other end of the continuum, a handful of treatments consensually qualified as "unlikely discredited." The 5 treatments receiving mean scores below 2.5 were as follows: milieu/residential therapy for alcohol dependence, Minnesota Model for alcohol dependence, Antabuse (disulfiram) for alcohol dependence, Alcoholics Anonymous for alcohol dependence, and 12-step facilitation for alcohol dependence.

TABLE 2. Experts' Ratings of Addiction Treatments in Ranked Order

Treatment	Round 1			Round 2		
	Mean	SD	% Not Familiar	Mean	SD	% Not Familiar
Electrical stimulation of the head for alcohol dependence	4.57	0.67	43	4.81	0.40	33
Past-life therapy for drug addictions	4.71	0.69	49	4.79	0.48	38
Past-life therapy for alcohol dependence	4.72	0.69	47	4.78	0.48	36
Metronidazole for alcohol dependence	4.21	0.88	67	4.59	0.57	51
Electric shock for alcohol dependence	4.39	0.74	18	4.68	0.59	15
Psychedelic medication for alcohol dependence	4.49	0.84	26	4.58	0.91	23
Ultra-rapid opioid detoxification under anesthesia for alcohol dependence	4.24	0.97	39	4.56	0.75	30
Neuro-linguistic Programming for drug and alcohol dependence	4.24	1.00	71	4.52	0.51	59
Scared straight for prevention of alcohol dependence	4.37	0.84	25	4.52	0.69	16
Scared straight for prevention of drug abuse	4.32	0.91	24	4.51	0.75	15
Stimulant medications for alcohol dependence	4.16	1.09	36	4.51	0.56	30
Drug Abuse Resistance Education programs for prevention of substance abuse	4.24	1.03	8	4.45	0.92	7
Synanon-style boot camps for alcohol dependence	4.05	1.08	24	4.45	0.75	16
Apomorphine for alcohol dependence	4.00	1.08	57	4.36	1.03	49
Synanon-style boot camps for drug dependence	3.97	1.09	19	4.33	0.83	12
Lithium for alcohol dependence	3.98	1.11	29	4.31	0.77	29
Electrical aversion therapy for alcohol dependence	4.16	0.95	14	4.30	0.88	15
Beta blocker for alcohol dependence	3.73	1.18	43	4.14	0.76	50
Dopamine precursor for alcohol dependence	3.93	1.05	59	4.07	0.87	50
Chlordiazepoxide for alcohol dependence	3.64	1.46	38	4.06	0.87	36
Videotape self-confrontation for alcohol dependence	3.84	1.25	43	4.05	0.88	29
Auricular acupuncture for cocaine addiction	3.76	1.11	44	3.88	1.05	41
Confrontational counseling for alcohol dependence	3.70	1.25	7	3.88	1.07	9
Dopamine agonist (eg apomorphine) for alcohol dependence	3.51	1.21	44	3.84	0.90	43
Anxiolytic medication for alcohol dependence	3.43	1.36	12	3.83	1.03	16
Hypnosis for alcohol dependence	3.67	1.05	18	3.80	0.87	18
Confrontational interventions for alcohol dependence	3.64	1.31	8	3.71	1.18	7
Acupuncture for cocaine dependence	3.56	1.18	24	3.70	1.02	21
Acupuncture with low-level electrical stimulation for heroin addiction	3.51	1.10	37	3.67	0.98	30
Carbamazepine for cocaine dependence	3.53	1.13	49	3.64	0.96	41
Serotonin precursor for alcohol dependence	3.24	1.06	53	3.63	0.91	43
Non-SSRI antidepressant medication for alcohol dependence	3.30	1.15	28	3.60	0.89	25
Educational lectures and films for alcohol dependence	3.36	1.45	1	3.57	1.14	4
Serotonin agonist for alcohol dependence	3.15	1.13	39	3.51	0.98	38
BAC discrimination training for alcohol dependence	3.26	1.36	53	3.50	0.90	38
Acupuncture for alcohol dependence	3.47	1.17	25	3.50	0.95	21
Aversive conditioning for drug dependency	3.27	1.20	16	3.49	0.83	16
Antidipsotropic (calcium carbimide) for alcohol dependence	3.29	1.27	63	3.46	0.84	50
Providing transitory substitute gratifications for treatment of alcohol dependence	3.51	1.34	63	3.43	1.10	46
Nonbehavioral marital therapy for alcohol dependence	3.13	1.29	38	3.42	1.06	32
Insight-oriented psychotherapy for alcohol dependence	3.25	1.28	5	3.33	1.13	7
Recreational therapy for alcohol dependence	3.18	1.43	24	3.28	1.12	16
The Johnson Intervention for substance abuse	3.04	1.37	35	3.28	1.13	16
SSRI antidepressant for alcohol dependence	3.07	1.08	20	3.24	0.95	18
Biofeedback for alcohol dependence	3.10	1.12	30	3.24	0.99	27
Controlled drinking for alcohol dependence	2.96	1.40	3	3.14	1.25	4
Exercise for alcohol dependence	3.12	1.27	23	3.06	0.99	18
Moderation management/training for alcohol dependence	2.90	1.29	11	3.06	1.21	9
Chemical aversion therapy for alcohol dependence	2.93	1.22	11	3.04	1.11	14
Antidepressant medications for cocaine dependence	2.89	1.08	16	3.02	0.96	14
BAC surveillance for alcohol dependence	2.78	1.32	50	2.97	1.05	36
Relaxation training for alcohol dependence	2.82	1.17	10	2.96	1.06	9

(Continued)

TABLE 2. (Continued)

Treatment	Round 1			Round 2		
	Mean	SD	% Not Familiar	Mean	SD	% Not Familiar
Cue exposure for opiate dependence	2.50	1.13	19	2.76	0.97	16
Group process psychotherapy for alcohol dependence	2.49	1.17	4	2.50	1.11	9
Milieu/residential therapy for alcohol dependence	2.26	1.20	7	2.37	1.10	5
Minnesota model for alcohol dependence	1.98	1.05	11	2.22	0.96	11
Antabuse (disulfiram) for alcohol dependence	1.81	0.90	0	1.89	0.91	0
Alcoholics Anonymous for alcohol dependence	1.51	0.90	0	1.61	0.89	0
Twelve-step facilitation for alcohol dependence	1.49	0.90	3	1.48	0.63	0

Ratings made on a 5-point, Likert-type scale, where 1 = not at all discredited, 2 = unlikely discredited, 3 = possibly discredited, 4 = probably discredited, 5 = certainly discredited.

ORIENTATION DIFFERENCES

In the context of discovery, we conducted a series of statistical analyses (univariate analysis of variances) to investigate differences in item ratings as a function of the experts' theoretical orientation. We adopted a 2-tailed alpha level of 0.05 to minimize Type I errors. We performed the analyses on the second round ratings among only those experts self-identifying their theoretical orientations as cognitive and behavioral, biologic, or 12 step. Table 3 summarizes the analysis of variance results among these groups of panelists (Student Newman-Keuls post hoc tests, bidirectional alpha of 0.05).

As seen there, we discovered only 7 differences on the 59 items. Cognitive-behavior therapists rated 2 of the treatments higher or more discredited: Educational lectures/films and metronidazole for alcohol dependence. Compared with their cognitive-behavioral colleagues, 12-step therapists rated 5 treatments as more discredited: BAC discrimination training, controlled drinking, electrical aversion therapy, and moderation management (all for alcohol dependence) and cue exposure for opiate dependence.

DISCUSSION

Cautions and Caveats

Several factors demand caution in interpreting these results. First, many of our experts lacked familiarity with the array of "unusual" or "fringe" treatments. Second, our operational definition of discredited may have merged, for some

experts, untested treatments with tested-and-found-to-be-ineffective treatments. To paraphrase Justice Oliver Wendell Holmes, the absence of evidence is not the evidence of absence. Untested procedures are not necessarily discredited procedures, merely untested procedures. Third, clinical effectiveness applies to specific disorders, purposes, and contexts. A treatment considered discredited for 1 disorder or purpose might prove credible for another. In some instances, medications may prove effective for withdrawal treatment but not for maintenance treatment (eg, benzodiazepines for alcohol withdrawal but not for maintenance). Fourth, the ratings were provided only by experts residing in the United States. Fifth, our study did not address the treatment of tobacco dependence, which should probably be the focus of a separate Delphi poll. Sixth, we did not possess data on the theoretical orientations and employment settings of the 55% of experts who did not participate in the study. This raises the possibility of a response bias among those who did participate in our study. Seventh, the treatments were presented on the questionnaire as "stand-alone" therapies when they are frequently combined in clinical practice. For example, monitored disulfiram plus contingency contracting has proven a successful treatment, as opposed to simply giving alcoholics a prescription for disulfiram. Such clinical distinctions and nuances may thus be lost.

The rating differences due to theoretical orientation (Table 3) indicate that the panelists' epistemological commitments can materially influence the results and thus the conclusions of what constitutes a discredited treatment. The

TABLE 3. Statistically Significant Differences in Discredibility Ratings as a Function of Experts' Theoretical Orientation

Item	Orientation Differences	F	df	P
BAC discrimination training for alcohol dependence	12 step (6.36) > CB (4.50)	3.66	2.52	0.032
Controlled drinking for alcohol dependence	12 step (4.54) and Bio (3.71) > CB (2.30)	13.73	2.52	>0.001
Cue exposure for opiate dependence	12 step (4.18) > CB (2.66)	4.01	2.52	0.024
Educational lectures and films for alcohol dependence	CB (4.07) > 12 step (2.70) and Bio (2.40)	8.06	2.51	0.001
Electrical aversion therapy for alcohol dependence	12 step (5.45) > CB (4.20)	4.39	2.52	0.017
Metronidazole for alcohol dependence	CB (6.27) > Bio (4.93)	5.04	2.51	0.010
Moderation management for alcohol dependence	12 step (4.36) > CB (2.90)	3.14	2.52	0.042

The numbers in parentheses represent that group's mean rating. CB, cognitive and behavior; Bio, biological.

statistically significant differences were relatively rare (7 of 59 items), but the mean group differences were substantial when they did occur. On Moderation Management, for instance, the 12-step therapists' mean rating of 4.36 would place it near our category of "certainly discredited," whereas the cognitive-behavioral therapists' mean rating of 2.90 would place it below "possibly discredited." On ratings of controlled drinking, for another example, 12-step therapists' mean rating of 4.52 (certainly discredited) was nearly twice that of the cognitive-behavioral therapists (2.30). Such differences could alter the conclusion of whether a particular procedure might qualify as discredited for a specific purpose.

More broadly, professional consensus on a Delphi poll does not provide an epistemic warrant; even experts can be and have been wrong. Expert opinions may become widely held either because they are correct or because most experts simply share the same heuristic biases. We should take care not to threaten innovation and creativity in psychologic practice by branding all nonresearched procedures as discredited. We must avoid hubris by remembering that contemporary treatments may become viewed as discredited a few decades from now.

Practical Implications

The EBP movement endeavors to move research-supported, demonstrably effective treatments from the (laboratory) bench to the bedside, from science to service. To date, the movement has focused almost entirely on promoting what works. As a counterbalance, we suggest a complementary emphasis on discouraging the use of discredited treatments.

The results of our Delphi poll demonstrate consensus on what experts believe qualifies as psychoquackery in addictions treatment. As a field, we have made progress in differentiating science from pseudoscience, credible from discreditable in addictions treatment. As Popper (1959) would surely remind us, science learns more from its failures than from its successes. Failures eliminate unsuccessful factors; successes simply broaden the questions to include more factors.

Such a consensus will necessarily require an inclusive process and research validation. Panels and tasks forces intent on identifying discredited (and research-supported) therapies must include persons of various theoretical orientations, genders, ethnicities/races, sexual orientations, and so on if their goal involves forging a profession-wide consensus. A consensus on what the best available research tells us will probably not come easily and will probably not be regarded legitimately unless multiple consistencies and perspectives are included.

In medicine (Straus et al., 2005), psychology (APA Task Force, 2006), and substance abuse (Norcross et al., 2008), EBP rests on 3 pillars: best available research, clinical expertise, and patient values and preferences. Our Delphi study provides a first step by systematically compiling clinician expertise on credibility, based in large part on the best available research. For those treatments without any published clinical trials, the expert panelists were obviously unable to base their ratings on the weight of the scientific evidence and necessarily exercised their expertise—in accor-

dance with the tenets of EBP and just as frequently encountered in daily practice.

We believe that this study, as did its parallel on mental health treatments (Norcross et al., 2006), offers a cogent, positive first step in consensually identifying the "dark side" or "soft underbelly" of modern addiction treatments and in providing a more granular analysis of the continuum of discredited procedures. Mature sciences and professions should have the ability to collectively identify and publicly shun discredited practices. The President's New Freedom Commission on Mental Health (2003; www.mentalhealthcommission.gov) called attention to both the underuse of proven treatments and the overuse of treatments for which little empirical evidence exists. We can simultaneously use (inclusively defined) EBPs to promote what does work and avoid (consensually identified) discredited procedures to minimize what does not work.

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