



# Turning Point

TREATMENT · RESEARCH · EDUCATION

## EVIDENCE BASED PRACTICE

Prepared by Ms Shirley Gill, Turning Point in consultation with Change Agent Network members, Change Agent Network Board and relevant external advisors

JUNE 2016

Part of

  
**easternhealth**  
GREAT HEALTH AND WELLBEING

© Turning Point

Published in 2016

This work is copyrighted. Apart from any use permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from Turning Point. Requests and enquiries concerning reproduction and rights should be addressed to:

The Deputy Director

Research and Workforce Development

Turning Point

54–62 Gertrude Street

Fitzroy VIC 3065

Important disclaimer

The publisher, and the authors, consultants and editors, expressly disclaim all and any liability and responsibility to any person, whether a purchaser or reader of this publication or not, in respect of anything, and of the consequences of anything, done or omitted to be done by any such person in reliance, whether wholly or partially, upon the whole or any part of the contents of this publication. Without limiting the generality of the above, no author, consultant or editor shall have any responsibility for any act or omission of any other author, consultant or editor.

## Contents

Introduction .....	4
History of Evidence Based Practice.....	4
A Model of Evidence Based Practice.....	4
Barriers to Evidence Based Practice.....	6
Implications of Evidence Based Practice for AOD Treatment.....	7
Background to an Evidence Based Practice Approach in AOD Settings .....	8
Conclusion.....	9
References .....	10

## Introduction

The term evidence-based practice (EBP) was coined in the United Kingdom (UK) during the 1990s following the recognition that medical practices needed to be grounded in sound research evidence (Lilienfeld, Ritschel, Lynn, Cautin, & Latzman, 2013). EBP is now considered essential to effective clinical practice across health disciplines including nursing, social work and psychology (Hoffman, Bennett & Del Mar, 2013). The aim of this position paper is threefold. The first is to define EBP according to the Change Agent Network. The second is to examine in detail a model of EBP. The third is to describe an approach that works within an alcohol and other drug (AOD) setting.

## History of Evidence Based Practice

EBP involves informed clinical decision-making that is grounded in the best evidence from research (Hoffman, et al, 2013), taking into account client preferences, clinician expertise and organisational context for maximum benefit to clients. Definitions vary. In the UK, evidence-based practice was originally defined in terms of evidence-based medicine (EBM), as the conscientious and explicit attempt to use current best evidence in making decisions about the care of patients (Sackett, Rosenberg, Gray, Haynes, & Richardson, et al, 1996). This was later revised to “the integration of the best available research with clinical expertise and patient values” (Institute of Medicine, 2001, p. 147). Following the expansion of the EBM movement, this definition was elaborated upon to include clinical practice in mental health. Thus in extending Sackett’s definition to mental health and psychotherapy, the American Psychological Association (APA) Task Force on Evidence-based Practice defined evidence-based practice as “the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences” (Berke, Rozell, Hogan, Norcross, & Karpiak, 2011, p. 329). The definition adopted by the Change Agent Network is the integration of the best available research with clinical expertise and client values.

## A Model of Evidence Based Practice

Spring’s (2007) three legged stool is commonly used to conceptualise EBP whereby each leg represents one aspect of EBP. The first leg comprises the best available research concerning what works and why. Evidence-based psychological treatments such as Cognitive Behaviour Therapy and Motivational Interviewing are included in this leg. Evidence-based treatments are treatments for which there is clear efficacy compared to alternative treatments. The second leg pertains to clinicians’ clinical expertise which includes the capacity to make clinical judgements. The third leg has to do with client factors such as personal values, preferences (e.g., for a particular form of treatment) and cultural

background. Taking these three components together, EBP requires the incorporation or integration of research evidence, clinical expertise and client factors to make sound clinical decisions. The integration of these three factors, embedded within a specific environmental and organisational context, is illustrated in Figure 1, a transdisciplinary model of EBP (Satterfield et al, 2009).

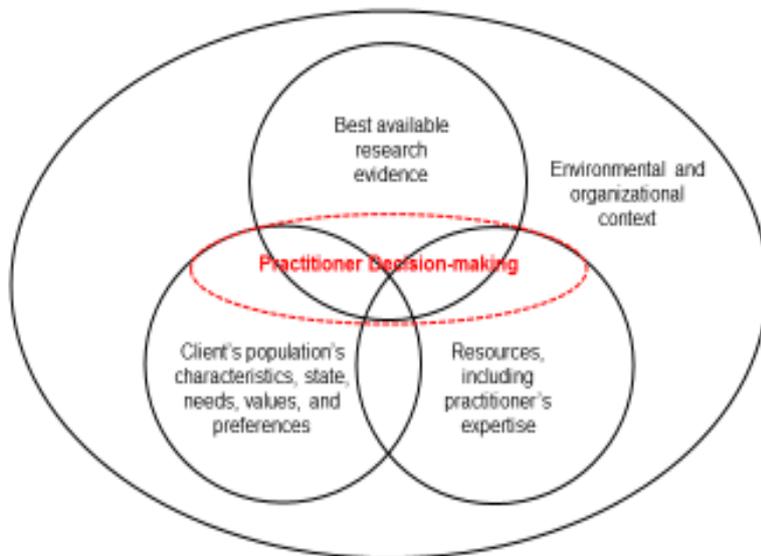


Figure 1 Transdisciplinary model of EBP (Satterfield et al, 2009)

Knowledge of evidence based treatments, and the distinction between efficacy and effectiveness studies is critical to EBP (Hoffman, et al, 2013). Noteworthy is that EBP is distinct from evidence-based treatments (EBT). Whereas the focus of EBP is clinical decision making, the focus of EBTs (one component of EBP) is the selection of therapeutic interventions for which there is robust empirical support. Empirically supported treatments are generally evaluated according to levels of empirical evidence on a treatment hierarchy. At the highest levels of evidence are meta-analyses and systematic reviews. This is followed by randomised controlled trials. Research evidence includes efficacy studies which examine how well an intervention works in controlled research settings and effectiveness studies which “examine how well a therapy works as it is conducted in ... [natural or] clinical settings” (Lilienfeld, et al, 2013, p. 885). Effectiveness studies involve aspects associated with the rigor of controlled research settings. This contrasts with practice-based evidence which refers to examination of the effects of treatments as they are delivered in clinical practice (Holmqvist, Philips, & Barkam, 2015).

Clinician factors are not unique to any particular treatment. They broadly refer to education, clinical skills and cumulative experience, and which differ somewhat between clinicians.

Clinician factors and the variability among clinicians in these non-specific factors include therapist behaviours (e.g., warmth, empathic understanding), the therapeutic relationship, clinician resources, practice wisdom and the ability to make sound clinical judgements. Yet, they also “explain substantial variance” in treatment outcomes (Spring, 2007, p. 614). That is, the outcome of treatment between clients differs greatly due to differences among clinicians.

Given that different clients require different kinds of treatment (Norcross & Wampold, 2011), accounting for client characteristics is an important component of clinical decision-making. Factors pertaining to clients include qualities that lie within the individual are independent of the research evidence, clinical expertise or clinical setting. These include treatment preferences (Spring, 2007), cultural background (Norcross & Wampold, 2011), client expectations of treatment (Westra, Aviram, Barnes & Angus, 2010), level of motivation, and previous experiences of counselling.

Environment or organisational factors refer to the practice context. Organisational factors include funding contracts, agency performance indicators, management expectations, agency collaboration, and the capacity to respond to competing organisational priorities and organisational versus professional tensions (Allsop & Stevens, 2009). Organisation cultural factors such as managerial support for evidence-based practices are also included as practice contexts. As Allsop and Stevens (2009) state, organisational factors are “critical facilitators of or barriers to the implementation of evidence” (p. 544).

## Barriers to Evidence Based Practice

Yet, the evidence-based practice literature pertaining to AOD counselling is scant. Of the available literature, much of the research has been on clinician attitudes towards EBP and barriers to its implementation. Adherence to evidence-based practice principles is challenging for many health professionals (Thomas, Menon, Boruff, et al., 2014) and the extent to which EBP is applied varies among clinicians (Bernhardsson, et al., 2014). Perhaps not surprisingly, numerous barriers to the implementation of EBP have been identified at both clinician and organisational levels (Amodeo, et al, 2011; Smith, 2013). A significant barrier is the lack of time to consider the research evidence (Bernhardsson et al, 2014).

In a study examining clinician barriers across several health professions, Lilienfeld, et al (2013) identified several barriers to EBP. One pertained to a negative view of EBP,

particularly concerning the use of research evidence to inform clinical practice. A second barrier involved a misunderstanding of what EBP entails. The third related to the capacity of clinicians to translate evidence into practice. Consistent with this barrier, Berke, Rozell, Hogan, Norcross, & Karpiak (2011) point out that although resources such as online materials are often available for finding information, implementation of EBP requires clinicians to be able to use the available resources.

Smith (2013) ascertained attitudes towards EBP using the Evidence-Based Attitude Scale (Aarons, Cafri, Lugo, & Sawitzky, 2012). Results showed that positive perceptions of EBP among individual clinicians were influenced by higher levels of education, less experience in the field concomitant with recent exposure to EBP, and increased opportunities to apply EBP training to practice. Opportunities to participate in training were not found to correspond to more favourable attitudes. Results relating to organisational factors revealed that positive attitudes towards EBP were linked to organisational culture. That is, organisations which had “higher levels of collective responsibility and lesser focus on easily measured outcomes” (p. 386) were associated with more positive perceptions of EBP. Similarly, Amodeo, Lundgren, Beltrame, Chassler, Cohen, & D'Ippolito (2013) found that organisational factors such as organisational support were associated with favourable attitudes towards EBP.

## Implications of Evidence Based Practice for AOD Treatment

Central to the consideration of EBP and establishment of EBP resources for AOD treatment is consensus regarding a definition of EBP that can be applied to the addictions area. Also necessary is a comprehensive understanding of the components of EBP, attitudes of clinicians towards EBP (e.g., via the Evidence-Based Attitude Scale), and individual and organisational barriers concerning the implementation of EBP. Further to this, steps towards the facilitation of EBP in organisational (e.g., community) settings need to be considered. As Smith (2013) suggests, favourable perceptions of EBP and factors such as a supportive organisational culture regarding evidence based practices are more likely to facilitate the implementation of EBP.

## Background to an Evidence Based Practice Approach in AOD Settings

Barriers to the implementation of EBP raise the question of how EBP can be implemented in the AOD sector. Clinicians need to know how to access research evidence and how to apply the information to their clinical work (Barac et al, 2014). The concept of Knowledge Translation which is defined as “the exchange, synthesis and ethically sound application of knowledge to improve health and provide more effective health services” (Thomas et al, 2014, p. 2) aims to reduce gaps between research and clinical practice.

Thomas et al (2014) argue that knowledge translation interventions which are informed by theory, in particular, Social Constructivist theory are more likely to increase clinicians’ uptake and adherence to evidence based practice. The appeal of Social Constructivism in the design and implementation of knowledge translation interventions is that the clinician is viewed as “an active problem solver who creates or constructs and applies his/her own knowledge to a particular social context” (p. 2). Cognitive dissonance is considered an important component of this process. Accordingly, the incorporation of new information into existing knowledge bases and practices involves cognitive dissonance whereby “the potential for learning is greater when the new knowledge conflicts in some way with existing practices”, p. 18). Knowledge translation interventions which have Social Constructivist underpinnings have the potential to take cognitive dissonance into account (Thomas et al, 2014).

There are various knowledge translation interventions designed to bridge the gap between research evidence and practice. Two resources are clinical guidelines and educational toolkits. The content of toolkits varies and often includes educational materials such as audiovisual aids, published literature and workshops, (Barac et al, 2014). Yet, as Barac et al (2014) point out, the content and evaluation of most toolkits are not grounded in rigorous scientific evidence. Indeed, Barac et al’s (2014) review of 83 toolkits showed that although 70% made reference to evidence for the content, less than 50% of toolkits described their content and only 37% of toolkits had been evaluated. Nonetheless, they concluded that toolkits which are grounded in research evidence may be an effective KT resource.

Clinical guidelines are one of the existing knowledge translation strategies in the AOD sector. Clinical guidelines systematically synthesise research evidence to assist clinicians make informed decisions about appropriate client care. Yet, there is little clinician use of and adherence to guidelines (Gagliardi et al, 2015). One explanation for this finding is that planning for implementation tends to occur after the development of guidelines. Gagliardi et

al (2015) therefore suggest that successful implementation of guidelines requires implementation planning to occur in conjunction with guideline development as opposed to following guideline development. It is contended that concurrent implementation planning allows for clinician needs and preferences as well as the provision of user-friendly recommendations to be taken into account.

A related problem identified by Gagliardi et al (2014) is that implementation strategies generally fail to provide guidance on how to plan for implementation, and there is little if any evidence for many of the recommendations for planning guidelines implementation. To address this problem, Gagliardi et al's (2014) developed a multi-item plan which comprised discrete steps for implementation planning. Steps included instructions for when and how to plan; instructions for developing guideline content; implementation tools such as teaching aids and client resources; and dissemination and implementation strategies (e.g., websites, podcasts and webinars). A similar process is evident in a 5-step implementation model which was evaluated by Bernhardsson et al (2014). In this model, the implementation plan occurs at step 4 and consists of education to address misconceptions about EBP, clinical guidelines whereby interventions are linked to levels of evidence; a teaching seminar on EBP and the guidelines; and a website with links to related EBP resources. An inherent component deemed to contribute to the effectiveness of this model in increasing clinician use of guidelines, was the matching of determinants (e.g., clinician time constraints) with particular domains in the implementation guidelines.

## Conclusion

EBP involves integrating research evidence, clinical expertise and client preferences through a process of practitioner decision making. Although there are identifiable barriers to the uptake of EBP among AOD practitioners, the findings of recent knowledge translation research indicate that existing problems in the development and implementation of knowledge translation interventions and resources can be overcome. Essentially, the key to sound evidence based practices is the clear specification of EBP variables within a coherent program. An EBP approach for the AOD setting which is grounded in both theory and research evidence is therefore likely to successfully increase the adoption and adherence of EBP principles by AOD clinicians.

## References

- Aarons, G. A., Cafri, G., Lugo, L., & Sawitzky, A. (2012). Expanding the domains of attitudes towards evidence-based practice: The Evidence Based Practice Attitude Scale-50. *Adm Policy Mental Health*, *39*, 331-340.
- Allsop, S. J., & Stevens, C. F. (2009). Evidence-based practice or imperfect seduction? Developing capacity to respond effectively to drug-related problems. *Drug and Alcohol Review*, *28*, 541-549.
- Amodeo, M., Lundgren, L., Beltrame, C. F., Chassler, D., Cohen, A., & D'Ippolito, M. (2013). Facilitating factors in implementing four evidence-based practices: Reports from addiction staff. *Substance Use & Misuse*, *48*, 600-611.
- Amodeo, M., Lundgren, L., Cohen, A., Rose, D., Chassler, D., Beltrame, C., & D'Ippolito, M. (2011). Barriers to implementing evidence-based practices in addiction treatment programs: Comparing staff reports on Motivational Interviewing, Adolescent Community Reinforcement Approach, Assertive Community Treatment, and Cognitive-behavioural Therapy. *Evaluation and Program Planning*, *34*, 382-389.
- Barac, R., Stein, S., Bruce, B., & Barwick, M. (2014). Scoping review of toolkits as a knowledge translation strategy in health. *BMC Medical Informatics and Decision Making*, *14*:121. doi 10.1186/s12911-014-1021-7
- Berke, D. M., Rozell, C. A., Hogan, T. P., Norcross, J. C., & Karpiak, C. P. (2011). What clinical psychologists know about evidence-based practice: Familiarity with online resources and research methods. *Journal of Clinical Psychology*, *67*, 329-339.
- Bernhardsson, S., Larsson, M. E. H., Eggertsen, R., Olsen, M. F., Johansson, K., Nilsen, P., Nordeman, L., van Tulder, M., & Oberg Birgitta. (2014). Evaluation of a tailored, multi-component intervention for implementation of evidence-based clinical practice guidelines in primary care physical therapy: A non-randomised controlled trial. *BMC Health Services Research*, *14*:105
- Bower, P., & Gilbody, S. (2010). The current view of evidence and evidence-based practice. In Michael Barkham, Gillian E. Hardy and John Mellor-Clark (Eds.). *Developing and Delivering Practice-Based Evidence: A Guide for the Psychological Therapies*. Wiley-Blackwell: N. J.
- Ducharme, L. J., Knudsen, H. K., Abraham, J. A., & Roman, P. M. (2010). Counselor attitudes toward the use of motivational incentives in addiction treatment. *American Journal on Addictions*, *19*, 496-503.
- Garner, B. R., Hunder, B. D., Godley, S. H., & Godley, M. D. (2012). Training and retaining staff to competently deliver and evidence-based practice: The role of staff attributes and perceptions of organisational functioning. *Journal of Substance Abuse Treatment*, *42*, 191-200.

- Gagliardi, A. R., Marshall, C., Huckson, S., James, R., & Moore, V. (2015). Developing a checklist for guideline implementation planning: Review and synthesis of guideline development and implementation advice. *Implementation Science, 10*:19.
- Holmqvist, R., Philips, B., & Barkam, M. (2015). Developing practice-based evidence: Benefits, challenges, and tensions. *Psychotherapy Research, 25*, 20-31.
- Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21<sup>st</sup> century*. Washington, DC: National Academy Press.
- Lilienfeld, S. O., Ritschel, L. A., Lynn, S. J., Cautin, R. L., & Lutzman, R. D. (2013). Why many clinical psychologists are resistant to evidence-based practice: Root causes and constructive remedies. *Clinical Psychology Review, 33*, 883-900.
- Norcross, J. C., & Wampold, B. E. (2011). What works for whom: Tailoring psychotherapy to the person. *Journal of Clinical Psychology: In session, 67*(2), 127-132.
- Parrish, D. E., & Rubin, A. (2011). An effective model for continuing education training in evidence-based practice. *Research on Social Work Practice, 21*, 77-87.
- Sackett, D. L., Rosenberg, W. M. C., Gray, J. A. M., Haynes, R. B., & Richardson, W. S. (1996). Evidence-based medicine: What it is and what it isn't. *British Medical Journal, 312*, 71-72.
- Satterfield, J. M., Spring, B., Brownson, R. C., Mullen, E. J., Newhouse, R. P., Walker, B. B., & Whitlock, E. P. (2009) Toward a Transdisciplinary Model of Evidence-based Practice. *Millbank Quarterly 87*(2), 368-390.
- Smith, B. D. (2013). Substance use treatment counselors' attitudes toward evidence-based practice: The importance of organisational context. *Substance Use & Misuse, 48*, 379-390.
- Spring, B. (2007). Evidence-based practice in clinical psychology: What it is, why it matters; what you need to know. *Journal of Clinical Psychology, 63*, 611-631.
- Thomas, A., Menon, A., Boruss, J, Rodriguez, A., & Ahmed, S. (2014). Applications of social constructivist learning theories in knowledge translation for healthcare professional: A scoping review. *Implementation Science, 9*:54.
- Westra, H. A., Aviram, A., Barnes, M., & Angus, L. (2010). Therapy was not what I expected: A preliminary qualitative analysis of concordance between client expectations and experience of cognitive-behavioural therapy. *Psychotherapy Research, 1-11*.