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ORIGINAL PAPER

Implementation of Evidence-Based Practice in Community Behavioral Health: Agency Director Perspectives

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Abstract Despite a growing supply of evidence-based mental health treatments, we have little evidence about how to implement them in real-world care. This qualitative pilot study captured the perspectives of agency directors on the challenge of implementing evidence-based practices in community mental health agencies. Directors identified challenges as limited access to research, provider resistance, and training costs. Director leadership, support to providers, and partnerships with universities were leverage points to implement evidenced-based treatments. Directors' mental models of EBP invoked such concepts as agency reputation, financial solvency, and market niche. Findings have potential to shape implementation interventions.

Keywords Implementation · Evidence-based practice · Science and service

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Introduction

While the supply of evidence-based treatments continues to grow, the mental health field lacks comparable evidence about how to implement those treatments in real-world care. Most reports of implementation processes are anecdotal or stem from either case studies or highly controlled experiments with limited generalizability. We have few "proven implementation strategies" (Glisson and Schoenwald 2005; Drake et al. 2001) for moving the products of science into services for persons who suffer from mental disorders.

This pilot study addresses the challenge of implementing evidence-based mental health treatment from two perspectives. First, it is a pilot-stage step in a research agenda to develop and test implementation interventions. We view implementation as requiring strategic action or intervention, and we believe that implementation interventions should be evidence-based, as should the core treatments being implemented. Accordingly, this study strives to identify strategies used to implement EBP's. Second, we assume that the development of implementation interventions

should be informed from the perspective of key stakeholders. Research suggests that innovations are more likely to be widely and successfully adopted when the perspectives of potential uses are captured and incorporated at the developmental stage (Greenhalgh et al. 2004). Thus we view "local knowledge" (Striker and Trierweiler 1995), that is agency participants' knowledge from their experience in the practice setting, as important in intervention development, (Proctor 2003; Proctor and Rosen 2005), in this case in implementation intervention development. Accordingly, this pilot study was designed to capture agencies directors' perceptions about evidence-based mental health practice and how to implement them in agency settings.

Stakeholder Perspectives on EBP

A growing but largely practical literature addresses the specific challenges in implementing EBP in mental health settings (Bayder et al. 2003; Blau 1964; Essock et al. 2003; Gray 1989; Herschell et al. 2004; Woolston 2005). Recent qualitative studies highlight barriers associated with stakeholders' attitudes toward EBP (Essock et al. 2003; Bader et al. 2003), largely those of front line providers (Aarons and Palinkas 2007; Aarons 2004; Hysong et al. 2005; Rubenstein et al. 2000; Walrath et al. 1998). Corrigan et al. (2001) emphasize clinicians' lack of skills and knowledge, lack of cohesive service planning, and limited training time. Davies et al. (2004) reported that providers with positive views toward practice guidelines cite system level barriers to their use: insufficient time, resource constraints, and inadequate access to guideline materials.

Less studied are the perspectives of another group of key stakeholders in EBP implementation—agency administrative and clinical leaders, whose roles are highly influential. Frontline providers' receptivity to EBP seems to be dependent on their perception of the fit between EBP and the agency's goals and values (Rosenheck 2001), and on the commitment to EBP among such agency leaders as the director, board, and senior managers (Aarons and Palinkas 2007; Klein and Sorra 1996). Moreover, agency leaders have influence over the organizational facilitators and barriers to EBP implementation. The literature suggests that agency leaders must proactively cultivate a "research-attuned culture," where evidence is valued and reinforced (Huberman 1994; Lavis et al. 2003; Roos and Shapiro 1999). In spite of the theory and research pointing to the key role of agency leaders and organizational culture and climate (Hemmelgarn et al. 2006), little empirical research has been conducted on their role or perspective in the adoption of evidence-based practice.

Study Focus and Aims

This study addresses that gap, attempting to capture agency directors' perspectives on the challenges of implementing of evidence-based practice. It was also to serve as a pilot for an implementation study. Specific aims were to: (1) understand what the terms and concept of evidence-based practice means within agencies and particularly to agency directors; (2) understand agency directors' perceptions of the challenges associated with implementation of evidence-based practice; and (3) identify leverage points for change, that is what it takes to introduce evidence-based practice into an agency setting. Such understanding could inform and help shape, for both researchers and for agency leaders, implementation interventions for advancing EBP.

This study approached EBP implementation as a potential innovation for agencies. Rogers' defines the innovation-decision process as "a series of choices and actions over time through which an individual or a system evaluates a new idea and decides whether or not to incorporate the innovation into ongoing practice." (Rogers 2003, p. 168) The literature on diffusion of innovation has been systematically reviewed (Greenhalgh and colleagues 2004), and Proctor (2004) synthesized the implications of this literature for implementing evidence-based mental health practices into agency settings. Key concepts in Rogers' (2003) conceptualization of innovation and Proctor's (2004) conceptualization of leverage points in EBP implementation informed the development of study aims, questions for the qualitative interviews, and the examination of major themes expressed by the study participants. The key concepts of interest to this pilot study are: meaning of evidence-based practice within agency conversations; leverage points for change; implementation strategies; and challenges and barriers in implementing evidence-based treatments.

Methods

Participants

Study participants were the clinical or administrative directors of seven mental health agencies (four were executive directors, and three were clinical directors). With agencies providing internships for the School of Social Work's M.S.W. practicum program as a sample frame, the research team studied agency profiles and selected potential agencies according to the following criteria: (a) the agency focused on mental health problems for which there exist empirically supported mental health treatments so that their implementation would be a reasonable consideration for agency directors; (b) the agency had sufficient clinical

staffs and client caseloads (providing within-provider client variation) for multilevel analysis in future studies, should the agency agree to participate EBP implementation projects; (c) the agency provided psychosocial interventions to adults with mental disorders (not pharmacological treatment only); and (d) the agency appeared to have capacity for a research partnership, given our long-range interest in implementation intervention around EBP. These criteria yielded 14 mental health service agencies, from which nine were purposively selected to balance public and private funding (for example, we chose only one of two very similar protestant affiliated counseling agencies). The remaining five would be targeted, if needed.

Via mailed letter, the agency's most senior leader responsible for clinical service (either the executive director or the agency's clinical director if the executive director had a primarily administrative role) was invited to participate in an interview. Seven agencies responded to the invitation. Each participant was offered a gift certificate of $50 to a variety store for the agency director's discretionary use. Saturation of responses was observed after seven interviews; thus, interviews with the remaining agencies were not conducted.

Procedures

Interviews

The research team comprised six members, all of whom participated in the development of the interview guide. Two team members conducted in-person semi-structured interviews, which lasted from 40 to 90 min and resulted in ninety-six pages of transcribed text. Interviewers were guided by a list of open-ended questions (with follow-up probes to clarify responses and elicit more specific information) covering four main areas: (1) "warm-up" questions about agency history; (2) awareness of, understanding of, and conversations about evidence-based practice as a concept, including general questions about the agency's experience in adopting changes (innovations) in business systems and quality assurance; (3) evidence-based practices currently used or being discussed for use in the agency; and (4) organizational pressures and needs that influence the implementation of evidence-based practice. Interview questions were based on the literature and the guiding concepts for the study noted above. The interview guide was pilot tested with administrators of different agencies (not included in the seven interviews reported here), resulting in a few minor changes. Interviews were recorded digitally or on audiotape, professionally transcribed and imported into NVivo, a qualitative data management software program for organizing and retrieving data. An interview guide is available from the first author.

Analysis

The goal of the analysis was to extract salient concepts from the data. Five members of the research team reviewed transcripts to find comments that confirmed, disconfirmed, or provided elaboration on central concepts: meaning of evidence-based practice, conversations about EBP, implementation barriers, leverage points, and innovation in agency practice. One team member, a specialist in qualitative research methodology, guided this process. The team then developed categories and sought to achieve a shared understanding of the key concepts as meaning. These categories formed the possibilities for codes. Over the course of multiple meetings, the team consolidated, eliminated, and refined the categories until consensus on categories was achieved. This yielded a coding dictionary which allowed the team to mark segments of text that related to the categories and evolved the categories into more encompassing concepts. Team differences on assigning concepts to categories were discussed until consensus was reached.

Before coding the entire data set, reliability of the coding dictionary was assessed. Two team members independently coded the same three interviews and compared results by reviewing all excerpts for each category. Coders identified sources of disagreement and resolved differences through discussion and re-reading of transcripts. The entire team discussed the proposed changes and accepted a revised coding dictionary. The coding dictionary consisted of nine main categories: (1) implementation factors, (2) change processes, (3) quality assurance, (4) conversations about EBP, (5) concept of EBP, (6) information systems, (7) macro influences, (8) priority treatment areas, and (9) other. About 21 sub-categories were created, two-thirds of which pertained to "implementation factors;" the fourteen sub-categories for implementation factors included fit, time, staff, costs, EBP information, agency's internal factors, consumer demand and workload. All seven interviews were then re-coded using the revised dictionary, which can be obtained from the first author. The coded data served as the bridge to the findings and began to illuminate the relevance of EBPs in mental health agencies. We report results around themes that emerged in the data.

Results

What EBP Means to Agency Directors

Relevant to aim one, responses of agency directors reflected three general, somewhat distinct definitions of EBP that are similar to those in published literature. First, some defined EBP as "the use of any research findings regarding human behavior, social functioning, psychosocial func-

tioning, and applying it to helping people to produce behavior change." This definition focused on the broad application of empirical evidence to practice, consistent with Sackett's writings about evidence-based medicine (Sackett et al. 1997). The second meaning of EBP is use of interventions or treatments that pass a particular threshold of evidence (e.g., cognitive-behavioral therapy and Assertive Community Treatment), a meaning consistent with identified lists of specific treatments that have met a "gold standard" or threshold of empirical support (e.g., EST's such as those recognized by the American Psychological Association's Division 12) (Nathan and Gorman 1998). The third meaning of EBP focused on outcomes, as reflected in the statement, "we got good outcomes ourselves. So...you know, to me that's evidence-based practice." This meaning is consistent with quality improvement literature (Lee et al. 2007). The agency leaders had little difficulty telling us their meaning of the term or in giving examples of evidence-based practices they were working to implement.

Agency Conversations about EBP

Clearly, the topic of EBP was on the radar screen and a focus of conversation for agency directors. They talked about EBP with their peers (directors in other agencies), their own clinical staff, agency supervisors, and/or board members. One director characterized EBP as "a big issue now," while others spoke of board approval for increasing agency training budgets to support the implementation of a new intervention. Directors' informal conversations with providers sometimes focused on particular cases:

> "An example would be maybe having had an informal conversation with one of my supervisee's over a case, and then having come across an article that fit very nicely with that. Putting the article in their box and writing a note saying, 'this is exactly what we were talking about, sounds like you're right on target. The data is supporting exactly your decision-making. Good work.'"

Provider discussions were sometimes structured through journal clubs: "Each clinician once a month is to bring an article that is an outcome article on some intervention, to discuss it, and we talk about the pros and cons of not only the research, but of how it can be applied in the clinic."

Directors also acknowledged challenges associated with implementation of EBPs:

> "Well there has been some bitching and moaning, and supportive bitching and moaning," and people talked about how difficult it has been. That they understand the research, it's a value to them, but then integrating into their day-to-day work as a therapist was difficult."

One director spoke of varying levels of linguistic competency about EBP: "Evidence-based is a hard term for people to get around. We usually use a term like Best Practices for a group like the board; they seem to understand that more. Evidence-based is more around the professional side of things. We kind of understand it but outside it's lingo."

Directors were familiar with and able to name specific evidence-based practices, including those used in their agencies. They identified as EBPs cognitive behavioral treatment, assertive community treatment, and medication management. They also named as EBP's some treatments whose evidence-bases are controversial such as EMDR; those for which an evidence-base was assumed or evoked ("the evidence on marital therapy"); and others that are popular but for which evidence has not been established such as "psychosocial rehabilitation model for treatment of the seriously mentally ill" and "community reinforcement."

These respondents' story is one of a clear "buzz" about EBP. Directors were talking within their professional networks about implementation challenges of implementation and they appeared to make deliberate use of conversation, whether structured or informal, to guide their staff toward use of evidence-based practices.

Challenges Associated with Implementing Evidence-Based Practices

Agency directors readily identified the difficulties encountered in efforts to implement evidence-based practice. One concern focuses on the supply of EBPs, particularly in relation to the agency's needs.

> "I'm hoping that the pool of evidence-based practices increases over time.
>
> And also that, that pool will get more refined tools instead of the same, you know, "here's one size that fits all." ....That we get some tools that work with different populations, so that they're more culturally tailored."

This comment reflects concern about whether EBPs are applicable to the kinds of problems and client populations served in the "real world." This comment also illustrates a principle from research on the diffusion of innovation: new practices are more likely to be accepted if they are perceived as compatible with intended adopters' needs (Greenhalgh et al. 2004; Proctor 2004).

While some respondents thought the research is "out there," "clear" and even "huge," they also noted a challenge in accessing information about EBPs, because "it's

spread all over the place." Some agencies dealt with this challenge by turning to websites such as Substance Abuse and Mental Health Services Administration (SAMHSA), which provides "just a whole series of manualized treatments that are based on panels of experts that have looked at the literature, looked at the best practice and designed their program based on the best evidence in the literature." The thing that is attractive about the SAMSHA stuff is you got these panels of real experts not only doing that, but then converting that into the clinical product." The lack of marketing for psychosocial EBPs was contrasted to the sophisticated pharmaceutical marketing:

> "The drug companies are great at presenting that in very easy to use form. We don't have people coming and saying, 'Ah, let me tell you about the best evidence-based practice for cognitive behavioral therapy for depression. There are a couple of new studies that have come out and they've shown that if you add da da da da da da... then what you will find is within your ten week time-limited group, you will get a fifteen percent improvement in outcome. Would you like us to come and demonstrate for you exactly how you implement that? Drug companies do all that. But on behavioral treatments, that's not something that's sort of easily accessible to you."

The paucity of clearing houses, practice guidelines, or auspices of evidence-based practices for mental health leaves potential users of EBPs with the tasks of finding and assessing relevant evidence on their own. Heavy caseloads, time constraints, and limitations in computer access make this a formidable challenge (Proctor and Rosen 2004; Proctor 2004). Agency staff must be able to locate and access information about evidence-based practice in order to implement them.

A third challenge identified by respondents is the difficulty in assessing the goodness of the evidence, and synthesizing its implications for practice. As one director commented, "how strong does the evidence need to be before you sort of try and get everybody to move in a different direction to learn a new set of skills, to learn new knowledge, to change what they're doing?" Particularly with regard to psychosocial treatments, agencies and providers confront the challenge of assessing the goodness of evidence without much help from "intermediaries" between producers and users of research (Huberman 1994) such as the expert bodies in medicine that review and synthesize research and formulate empirically based guidelines and best practices. Implementation of evidence-based mental health practices in agency practice may require similar infrastructure supports to access, assess, critique, and consolidate research evidence for ready use in practice (Johnson and Austin 2005; Proctor 2004).

A fourth challenge, in the words of one director, is that "It takes longer than you would think it would take. People have to have some experience with it, they have to see it working, and they have to hear their peers talk to them about how it's working." Moreover, time equals money: "Supervision takes people off-line," and "Our clinicians don't have time to spend an hour in the library every day reading the literature, or to spend just once a week go in and spend the day in the library and catch up on what's going on in the field."

Provider resistance surfaced as another challenge. While one executive director characterized providers as "hungry for it," several others spoke about provider resistance to learning new practice methods, even those with an established efficacy base. Agency leaders emphasized the "ruts" that therapists fall into, making acceptance of new methods very difficult: "Like this has all been fine for my whole 30 year career why do I have to make a change?" Rather than "fight" this tendency, directors expressed preference to hire "professionals who are closer to their training, I think they're more malleable. They are more dynamic in their thinking. They're not as static and that would make it easier. So whether they returned to school later in life or not, age isn't an issue, just how close they are to their training." Another observed, "What they don't like is that (EBP) increases the focus on their work... There is some concern about exposing what goes (on) behind the door how they're providing treatment." At the root of some providers' resistance may be prevailing views "therapy is still an art," and manualized treatment protocols of many EBPs may compete with the "the person of the therapist." Those who hold these views may fear that practice guidelines and evidence-based practices reduce the need for creativity, clinical judgment, and interpersonal skills. The comments underscore the importance identifying how to increase provider receptivity to EBP (Aarons 2004).

Finally, consistent with the literature (Coyle et al. 2004; Kleinpeter et al. 2003), staff shortages and burdensome workloads complicate the implementation of evidence-based practice. One executive director stated, "I made a decision that until I got some additional staff, I couldn't do this. Just didn't have enough staff. We were just putting out too many fires and I decided I'm not; I can't shove this down people's throats."

The challenges to EBP implementation identified by respondents reflect several constraints related to the practice infrastructure. Too few EBP's are perceived as relevant to the problems and populations served by agencies, and there is no practice infrastructure to help make available EBP's accessible; no one is marketing evidence-based psychosocial practices to community agencies. Consequently, agencies struggle on their own with the time constraints, limitations in provider capacity and attitude,

and with burdensome workloads. These dilemmas suggest that the implementation of evidence-based practice requires resources on a variety of fronts, especially efforts to strengthen the infrastructure of agency practice (Proctor 2004).

Leverage Points: Strategies for Implementing Evidence-Based Practices

Respondents had a rich set of responses to our questions about how they introduced change, particularly evidence-based practices, into their agencies. Training was a clear theme. Agencies were bringing in experts in various evidence-based practices for workshops and "in-services;" they sent staff to conferences and sessions at local universities, and they used web-based training. Agencies' affiliations with national organizations or networks made available specific training in evidence-based practices:

> "A whole group of what I call very expensive staff are preparing to leave for San Francisco in about eight weeks to the (agency's national network) Annual Training event. They have an excellent training venue every year. And everybody is really going and pursuing additional information and implementing Evidence-based Practices in most given programs."

Training needs and costs often exceed that anticipated, in spite of good efforts to plan and allocate sufficient training funds. One respondent said, "There is a training budget and I keep exceeding it actually...if I could design an agency I would have more resources for training."

Relationships with local universities provided important leverage for introducing new practices. Student interns brought new practice knowledge to agencies. In the words of one director, "They keep us fresh, give us new eyes....We ask them to give a presentation to staff in an area that they choose, that they're interested in, that they may have been studying about. We also learn from them what's going on in the social work schools." Training was reciprocally helpful: the agencies provided training to students, while students also served a training function for the agency. Aarons (2004), who found that more positive attitudes toward EBP adoption among interns than among professional providers, suggests that new workers' more malleable knowledge structures may predispose them to acquiring new practices.

Consistent with the literature on implementation of innovation, these interviews reflect the importance of strong leadership. Executive directors are conscious of, and explicit about, making strategic use of their personal leadership and authority. One respondent addressed leadership directly: "what helped is that this was a top down; I was brought in ...do this." Another recalled top level agency meetings that prompted him to "step back and take a look at the clinical services that we provide and see if those are the appropriate clinical services for the patient population we have." And a third reflected about using evidence-based practice to meet the challenges that will confront his agency in future years:

> "So I spend a lot of time looking at, thinking about, talking to people about what's going to be happening 10, 20, 30 years from now. And what do we need to do today so we can be successful down the road? Also I have had to change, and it has been really good for the organization, to change the kind of next tier management, to get really strong people in those positions."

These comments reveal a story of agency leaders serving as key change agents in the implementation of new practices. EBP is unlikely to "evolve" into agencies without explicit and deliberate effort.

But implementation of evidence-based practice appeared to require more than top down directives. Respondents also described their provision of interpersonal support, supervision, and persuasion to clinical staff. As one respondent illustrates, "They see that I'm not picking apart their work, that I'm very supportive and that the evidence-based piece is actually more helpful than not." Such comments are consistent with theory and research on the role of organizational culture in supporting change (Glisson 2002; Henggler et al. 2002; Simpson 2002). EBP implementation presupposes that agency leaders exercise "social influence," (Rogers 1995) making explicit that services and treatments should be evidence-based (Corrigan et al. 2001; Klein and Sorra 1996; Proctor 2004). Yet Henggeler et al. (2002) caution that authoritative decisions to adopt innovation may lead to fast, but long-term unsustainable, implementation.

> Targeted funding to support evidence-based practice surfaced as another key lever:
>
> "You know, the drivers are going to be funders. That's going to be the driver. For example, um, there's not going to be a new dollar on the street that's not going to be associated with EBPs. Period. ...there's not going to be a new dollar that comes out to do non-EBPs."

Although literature on EBP implementation rarely addresses the role of service funding, it is invoked in quality improvement literature. Megivern et al. (2007) conceptualize funding as a key influence on service quality, and Fernandopulle and colleagues (2003) call for payment mechanisms that reward providers for improving care. Yet Beaulieu and Horrigan (2005) caution that financial incentives alone will not improve practice without con-

current improvements in quality improvement capacity and the kinds of infrastructure supports noted by respondents above.

The Costs and Benefits of Evidence-Based Practice

A theme emerged in these interviews beyond those elicited by our questions: agency "mental models" about changing agency practice. Consistent with the management literature, mental models refer to representations of knowledge that can be used to search for a solution to a problem (Johnson-Laird 1983). In the case of this study, agency directors seemed to use mental models of costs and benefits as they thought about implementing EBP: "It's a very expensive program in terms of staffing. But, there are very clear data that there is major decreases in hospitalization, which reduces cost." When talking about EBP, agency leaders often went directly to such economic concepts as budgets, reputation or brand, financial solvency, and marketing. Their comments about economic advantage are consistent with a central tenet of the literature on innovation diffusion, that is, a perceived advantage increases the likelihood that an innovation will be adopted (Berwick 2003). One director linked EBP to the ability to meet budget, invest in growth, and stay financially solvent:

> "It's increased revenues to the agency as well, which we have a special revenue sharing agreement with our clinicians that if we're over budget per quarter they divvy up what's there and they've seen that since they've been doing this, they've overshot budget each quarter. Prior to that, they have always been under. They've never met budget. And I think it will pay off financially, because the public, you and I, would not go to a physician who isn't working from evidence and is working from their gut, 'Well, I just think you need a heart transplant, I just feel that.' You know? And I think there is an appeal from the public for that kind of thing, and so we'll increase the numbers of people, we'll increase our profile in the community, we'll increase our revenues through doing that because people, when it comes to their kids and their family and their parents, they want to make sure they're not just throwing their money away. More and more people are paying out of pocket for these services."

Two respondents worried about sustaining the costs of implementing new practices. "We need to be financially secure. Do we have to be horribly profitable? No. But in order to be able to invest...actually back into our clients and back into our service, we need to be financially solvent. And, that sometimes in making major changes and treatment and that type of thing, if the funding stream isn't there, that makes it difficult." And, "So there has to be a demand for it, but there also has to be a way to sustain it financially. That is at the bottom of everything we have to have a way to sustain it. The program might be wonderful but we have to be able to sustain it."

Directors also forecast evidence-based practice's long-term benefits to the agency, specifically the ability to distinguish themselves among competitor agencies on the basis of achieving good outcomes. Specifically, EBP was viewed as potentially enhancing the agency's market niche, both in terms of reputation and financial solvency.

> "I think our reputation will depend in large part on how well meet the needs of the clients that we see. It used to be in our field, all we had to do was demonstrate that we were doing good work, you know 'we're seeing a bunch of people and we are providing this level of service.

One respondent was specific about using outcome data to improve care: "we'll set it up based on what the literature says is most effective for this patient population and then we'll monitor our outcomes and use those outcome data to help feed subsequent changes in the program." A third was more colorful:

> "this is a snake oil business ...there's just more crap being pushed in our industry ...I mean there's not a great difference (between) some of the shammings a hundred years ago and what some of the some people are doing now in our business. And I think I would just rather be in a position of saying...this is the research on this issue, this is what we perceive to be the quickest way to bring about "x" amount of outcome..."

Directors' comments about economic advantage are consistent with a central tenet of the literature on innovation diffusion: a perceived advantage increases the likelihood that an innovation will be adopted (Berwick 2003). Particularly in competitive markets, adoption of innovation in service delivery may be perceived as necessary to maintain, or grow, the agency's standing among competitors.

Discussion

Study limitations and strengths are acknowledged. This pilot study captured the views of a small number of executive and clinical directors, stakeholders whose perspectives are necessary but not sufficient for understanding implementation of evidenced-based practices. The agencies studied serve one urban area. While a larger sample may have yielded additional unique definitions of EBPs beyond those derived in this study, a point of saturation was clearly

established after seven interviews. Prior research suggests that basic meta-themes can be identified from as few as six interviews (Guest et al. 2006), as they did here. We did not analyze data by respondent role. Results of this qualitative study are not intended to generalize to the broader population of agency directors, but to inform further research.

Data reflect cogent observations about the adoption, implementation, and sustainability of EBPs. Theory and research on innovation consistently point to the essential role of agency leaders, but their perspectives have been under-represented in published literature. To date, this is the first study that has reported on the perspectives of directors of mental health agencies. The perspective of agency leaders probably differs from that of front line providers, particularly around costs and benefits (Henggler et al. 2002).

The topic of evidence-based practice is clearly salient to executive directors. Although their comfort level and specificity of examples varied somewhat, no respondent seemed unfamiliar with what EBP meant and the meanings they offered were consistent with published literature. These findings contrast to research demonstrating low level of familiarity with the term "evidence-based practice" among behavioral health clinical supervisors (Aarons 2004). As reported above, the sample purposively comprised agencies that were, or could be, implementing EBP; otherwise, the interviews could not have reflected actual implementation challenges. Directors' responses reflect the seriousness of their thought about EBP and the specifics of their work to implement EBP. They also convey this constituency's view that EBP is a key theme of mental health care in the future.

A recent National Institute of Mental Health Road Ahead (2006) report calls for developing better understanding of mechanisms underlying successful implementation of evidence-based interventions in varying service settings. These interviews offer agency directors' perspectives on such mechanisms. Agency directors appeared deliberate about moving their agencies from "practice as usual" to "evidence-based practice," which Aarons (2004) characterizes as a cultural shift. Consistent with the paucity of evidence about implementation, they reflected some sense of being perplexed about how to meet the training and staffing challenges of EBP. In fact, they seemed to approach EBP implementation from their own experience, intentions, and ideas. No one cited evidence-based management strategies for implementing EBP, probably because the literature offers very few "evidence-based" interventions for EBP implementation. These findings suggest that more than "buy in" from the top is needed, and underscore the importance of research to develop and test leadership strategies for implementation. These findings add to other evidence suggesting a complex relationship between attitudes about evidence-practices, leadership, and organizational culture and climate, and underscore the importance of understanding the organizational issues inherent in EBP implementation (Aarons 2006, Aarons and Sawitzky 2006; Aarons and Palinkas 2007).

Agency leaders seemed to think about their workforce in a manner consistent with a "staged view of provider development" (Aarons 2004). Students were welcome sources of information about EBP, while long-time providers often succumbed to "ruts" that made them resistant to new practices. Turnover further exacerbated the need for training. Thus, strategically, some relied on new hires or connections with universities to identify EBP's and advance their implementation. Emerging evidence on turnover in mental health agencies (e.g., Aarons and Sawitzky 2006) and interventions to reduce this problem (e.g., Glisson and Schoenwald 2005) can help agencies retain key staff and resources that are essential to successful EBP implementation.

Walter et al. (2005) propose that communication between research producers and research users are key to bolstering uptake of research findings. These findings underscore the importance of executive leadership in the adoption and implementation of EBP, as well as frequent conversation—whether structured or informal—about EBP in daily agency life. Agencies clearly struggled to assess research findings and derive their implications for practice. Some wished for help, whether in the form of marketing of effective practices, web sites that report research critiques and syntheses, or partnerships with academics and researchers.

Implementation requires access to information and training, time, and a culture supportive of trying new approaches. Directors, like providers studied elsewhere (Walrath et al. 2006), emphasized the role of training, resources for which seemed in constant short supply. This study could not establish whether training did, in fact, translate into successful implementation.

The richness of data from even this small study is apparent in the stories that went beyond our original study questions. Directors seemed to ground their implementation efforts in mental models of clear benefits and costs, thinking that is not adequately informed by current research: too few psychosocial behavioral health treatments have been subjected to cost-effectiveness studies and the "business case" for EBP remains underdeveloped, especially relative to the case for quality improvement (see, for example, Leatherman et al. 2003). Aarons (2004) observes that agencies must adapt to market demands to survive, and speculates that market-driven approaches should enhance receptivity to new and innovative technologies, including practice methods. These agency leaders clearly thought

about EBP as instrumental to enhancing market niche. These unexpected findings suggest that EBP implementation is not just about provider attitudes, but about strategic organizational planning. Implementation research needs to explore mechanisms for multi-level change, including that involving clients and providers, supervisors, and leadership at the highest levels of organizational operation. Consistent with the theory of Rogers' (1998), it is also necessary to consider the fit evidence-based practices within the organization, with re-invention or adaptation often needed (see also Proctor 2004; Greenhalgh et al. 2004).

The effects of providing evidence-based treatment are usually considered and rationalized in terms of client outcomes, such as improvement in symptoms and functioning. More recently, the Institute of Medicine (2006) has emphasized service outcomes, such as safety, effectiveness, efficiency, timeliness, patient-centeredness, and equitability. Findings from this exploratory study suggest that agency directors may also value and be pursuing, especially in relation to EBP, the agency's niche in the marketplace of behavioral health services. Still to be explored in implementation research are such issues as the actual contribution of EBP to market niche, the long-term consequences of reshaping services (even if evidence-based) for market purposes, and the relationships between client, service, and agency outcomes.

Beyond suggesting directions for research, the results of this pilot study also have implications for shaping implementation interventions, consistent with the original study purpose. The providers who will implement evidence-based practices must be carefully selected, deliberately recruited, motivated, and inevitably trained. Training must be accorded sufficient time and budget. Agency infrastructures must support accessing evidence and assessing its quality. New practices, even those with established effectiveness, must be marketed to providers and clinical supervisors. Most apparent from this study's results is the need for multi-level implementation strategies, leveraging not only key organizational resources but the agency directors' authority, interpersonal influence, and leadership.

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